

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Monongahela Power Company
Harrison Power Station
R30-03300015-2014

William F. Durham
Deputy Director

Issued: [Date of issuance] • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]

Permit Number: R30-03300015-2014
Permittee: Monongahela Power Company
Facility Name: Harrison Power Station
Permittee Mailing Address: 800 Cabin Hill Drive, Greensburg, PA 15601

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

Facility Location:	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: Beena Modi

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

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

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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
Combustion Sources					
Unit B1	Stack1	Harrison Unit 1	1972	6325 MMBtu/hr	ESP-1, FGD-1, SCR-1, LNB
Unit B2	Stack2	Harrison Unit 2	1973	6325 MMBtu/hr	ESP-2, FGD-2, SCR-2, LNB
Unit B3	Stack3	Harrison Unit 2	1974	6325 MMBtu/hr	ESP-3, FGD-3, SCR-3, LNB
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	1000 kW	N/A
EDG2	EDG2	Emergency Generator No. 2	1971	1000 kW	N/A
EDG3	EDG3	Emergency Generator No. 3	1994	350 kW	N/A
EG-1	EG-1	Emergency Generator	2012	108.2 kW	N/A
Control Devices					
ESP-1	ESP-1	Dry Plate Electrostatic Precipitator	1972	2.26x10 ⁶ ACFM	FGD-1
ESP-2	ESP-2	Dry Plate Electrostatic Precipitator	1973	2.26x10 ⁶ ACFM	FGD-2
ESP-3	ESP-3	Dry Plate Electrostatic Precipitator	1974	2.26x10 ⁶ ACFM	FGD-3
FGD-1	FGD-1	Wet Scrubbing System for Stack1 (105,000 gpm)	1994	2.26x10 ⁶ ACFM	SCR-1
FGD-2	FGD-2	Wet Scrubbing System for Stack2 (105,000 gpm)	1995	2.26x10 ⁶ ACFM	SCR-2
FGD-3	FGD-3	Wet Scrubbing System for Stack3 (105,000 gpm)	1995	2.26x10 ⁶ ACFM	SCR-3
SCR-1	SCR-1	Selective Catalytic Reduction	2003	2.26x10 ⁶ ACFM	N/A
SCR-2	SCR-2	Selective Catalytic Reduction	2003	2.26x10 ⁶ ACFM	N/A
SCR-3	SCR-3	Selective Catalytic Reduction	2003	2.26x10 ⁶ ACFM	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device
Material Handling Sources					
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
21va, 22va, 23va	21va, 22va, 23va	Solid Waste Processing Fly Ash Screw Conveyors	1994	70 TPH	Full Enclosure

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device
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
C-11	C-11	Internal Crusher House Conveyor from Surge Bin	1979	1500 TPH	Partial Enclosure

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device
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
RDRU	EP-1	Rapid Discharge Rail Unloader to Belt Feeder	To be installed	3,000 TPH	Chemical Fogging System (CFS)
BF-01	EP-2	Unloading Belt Feeder	To be installed	3,000 TPH	Enclosure/CFS
CV-01	EP-3	Load -out Conveyor	To be installed	3,000 TPH	Enclosure/CFS
CV-02	EP-4	Conveyor	To be installed	3,000 TPH	Enclosure/CFS
CV-03	EP-5	Conveyor to Transfer Tower	To be installed	3,000 TPH	Enclosure/CFS
CV-04	EP-6	Conveyor to Stacking Tubes	To be installed	3,000 TPH	Enclosure/CFS
ST-003	EP-7	Stacking Tube/Coal Pile	To be installed	3,000 TPH	None
Control Devices					
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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device
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
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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
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
Miscellaneous Sources					
COOL-01	Cooling Towers (2)	Natural Draft Cooling Towers (2)	1971	585,000 gpm	N/A
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
T01	T01	Propane Storage/Feed Tank	2012	1000 gallons	N/A
T02	T02	Propane Storage/Feed Tank	2012	1000 gallons	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
G60-C049	11/28/12
R13-2988	11/9/12

2.0 General Conditions

2.1. Definitions

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

2.2. Acronyms

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

2.3. Permit Expiration and Renewal

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

2.4. Permit Actions

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

2.5. Reopening for Cause

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

- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

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

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

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

[45CSR§30-6.5.b.]

2.9. Emissions Trading

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

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.

- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

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

[45CSR§30-5.8]

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

[45CSR§30-5.8.a.]

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

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

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements. [45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

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

[45CSR§30-5.1.i.]

2.13. Duty to Comply

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

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

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

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

[45CSR§30-5.7.b.]
- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

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

[45CSR§30-5.7.d.]

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

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

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

[45CSR§30-5.2.a.]

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

2.19. Duty to Provide Information

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

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

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

[45CSR§30-4.2.]

2.21. Permit Shield

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

[45CSR§30-5.6.a.]

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

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

[45CSR§30-5.6.c.]

2.22. Credible Evidence

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

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

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

[45CSR§30-5.1.e.]

2.24. Property Rights

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

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

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

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

[45CSR§30-5.1.d.]

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

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1 Limitations and Standards

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

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

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

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

[40 C.F.R. 68]

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

- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.1.]

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

[45CSR§§39-6.1.b. and 20.1.]

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

[45CSR§39-23.2.]

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

[45CSR§39-24.1.]

- 3.1.11. **CAIR NO_x Ozone Season Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix B) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO_x Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.

[45CSR§§40-6.1.b. and 20.1.]

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

[45CSR§40-23.2.]

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

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

- a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§41-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from the compliance account of the CAIR SO₂ source covered by the permit.
[45CSR§41-23.2.]
- b. Except as provided in 45CSR§41-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.
[45CSR§41-24.1.]

3.2. Monitoring Requirements

- 3.2.1. 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.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

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

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - 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.; 45CSR13, R13-2988 (Condition 4.3.1)]

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

by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

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

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

- 3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated 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. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

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

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

If to the US EPA:

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

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

[45CSR§30-5.1.c.3.C.]

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

[45CSR§30-5.1.c.3.B.]

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

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. 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.

45CSR27: *To prevent and control the emissions of Toxic Air Pollutants.* Although this facility has emissions of Toxic Air Pollutants in excess of the thresholds listed in 45CSR27 Table A, it does not meet the definition of a Chemical Processing Unit. There is not an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, and/or other equipment used to treat, store, manufacture, or use toxic air pollutants. Therefore the facility is not subject to the requirements of Rule 27.

40 C.F.R. 60, Subpart K & Ka: All tanks are below 40,000 gallons in capacity.

40 C.F.R. 60, Subpart Kb: All new tanks constructed after July 23, 1984 are less than the capacity threshold of 19,813 gallons and/or have a vapor pressure less than 2.2 psi.

40 C.F.R. 60, Subpart D: Harrison Power Station boilers (B1, B2, & B3) were constructed prior to August 17, 1971.

40 C.F.R. 60, Subpart Da: Harrison Power Station boilers (B1, B2, & B3) were constructed before September 18, 1978.

40 C.F.R. 60, Subpart Db: Harrison Power Station Auxiliary boilers (A, B) were constructed prior to June 19, 1984.

40 C.F.R. 60, Subpart OOO: The definition of limestone states that it is a sedimentary rock consisting of at least 80% calcium or magnesium carbonates. Lime is defined as calcium oxide, which can be produced by subjecting calcium carbonate to

high temperature baking in kilns to drive off carbon dioxide. Therefore, lime is not equivalent to limestone and the Harrison lime handling operation is not subject to Subpart OOO.

40 C.F.R. 63, Subpart Q:

The existing Cooling Towers will not use any chromium based water treatment chemicals and therefore, are exempt from the referenced regulation.

45CSR5:

The Rule to Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations, and Coal Disposal Areas is not applicable to the facility since 45CSR2 applies.

45CSR17:

The Rule to Prevent and Control Particulate Matter Air Pollution from Material Handling Preparation, Storage, and Other Sources of Fugitive Particulate Matter is not applicable to the facility because 45CSR2 is applicable

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 A) 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. Unit B1, Unit B2, and Unit B3 shall not be operated without a flue gas desulfurization system (scrubber).

[45CSR§30-12.7]

Nitrogen Oxides (NO₂)

- 4.1.14. Nitrogen oxides emissions from *Stack1*, *Stack2* & *Stack3* shall not exceed NO_x limits specified in the Acid Rain Permit.

[45CSR33]

Sulfur Dioxide (SO₂)

- 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 1A* and *Aux Boiler Stack PB*) shall not exceed 1,294.08 lb/hr.

[45CSR§10-3.3.f.]

- 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;
 - 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.]

- 4.1.19 **Electric Utility Steam Generating Units (EGU) MACT, 40 CFR 63, Subpart UUUUU:**
- a. The coal-fired Electric Utility Steam Generating Units B1, B2, and B3 shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart UUUUU "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units" no later than April 16, 2016, in accordance with the one-year compliance extension approved by WV DEP via letter dated December 28, 2012 to Mr. Ray Evans, or as amended by US EPA.
 - b. If required to conduct an initial compliance demonstration by performance testing as specified in §63.10011(a), you must submit a Notification of Compliance Status (NOCS) report according to §63.9(h)(2)(ii). The NOCS report must contain all of the information specified in §63.10030(e)(1)-(7), as applicable. If required to submit a Notification of Compliance Status pursuant to 40 CFR 63, Subpart UUUUU, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.10030(e). If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR34; 40CFR63 Subpart UUUUU; 45CSR§30-6.5.b]

4.1.20 **Industrial, Commercial, and Institutional Boilers and Process Heaters MACT, 40 CFR 63, Subpart DDDDD:**

- a. The oil/natural gas fired auxiliary boilers (*Boiler 1A and AuxBlr PB*), shall comply with all applicable requirements for existing affected sources pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source compliance date of January 31, 2016.
[45CSR34; 40 CFR §63.7495(b).]
- b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR34; 40 CFR §63.7545(e); 45CSR§30-6.5.b.]

4.2. Monitoring Requirements

- 4.2.1. Compliance with the visible emission requirements for *Stack1, Stack2 & Stack3, Aux Boiler Stack 1A, and Aux Boiler Stack PB* shall be determined as outlined in section I.A. of the *Revision 3* "Monitoring and Recordkeeping Plan 45CSR2 and 45CSR10" submitted on March 26, 2014 and which is attached in A of this permit. (Monitoring Plan Approval Date—4-3-14)

Method 9 testing for *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 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 SO₂, NO_x, and CO₂ 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. *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 C.F.R. § 64.7(b) and 45CSR§30-5.1.c]
- 4.2.7. *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 C.F.R. § 64.7(c) and 45CSR§30-5.1.c]
- 4.2.8. *Response to excursions or exceedances.*
- (1) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - (2) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
[40 C.F.R. § 64.7(d) and 45CSR§30-5.1.c]
- 4.2.9. *Documentation of need for improved monitoring.* After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or

designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

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

4.2.10. The permittee is subject to the quality improvement plan (QIP) requirements of 40 C.F.R. §64.8.

[40 C.F.R. §64.8 and 45CSR§30-5.1.c]

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.

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 A 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)]

- 4.4.4 *General recordkeeping requirements.*

(1) The owner or operator shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 C.F.R. §64.9(b)]

4.5. Reporting Requirements

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

[45CSR33, 40 C.F.R. § 75.64]

- 4.5.2. Compliance with the periodic exception reporting of permit condition 4.1.9 shall be demonstrated as outlined in “45CSR2 Monitoring Plan” attached as Appendix A 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.]

4.5.4 *General reporting requirements.*

- a. On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii).
- b. A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) and the following information, as applicable:
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

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

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 ⁽¹⁾	Maximum Air Flow (acfm) ⁽²⁾
6ca,6cb,6cd	Baghouses	6e ⁽³⁾	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)]

- 5.2.3 a. Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 CFR Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this permit condition (5.2.3.a.) if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.
- b. If the visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 CFR Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of permit condition 5.2.3.a. above, in lieu of those established in this condition.

[45CSR§30-5.1.c.]

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. 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. § 60.254(a)]

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 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]

6.3. Testing Requirements

N/A

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

7.0. Source-Specific Requirements [Emergency Diesel Generators]

7.1 Limitations and Standards

- 7.1.1 Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 C.F.R. §§63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 C.F.R. §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
[45CSR34; 40 C.F.R. §63.6604(b)](EDG1, EDG2 and EDG3)
- 7.1.2 If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
 - (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency

situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34; 40 C.F.R. §§63.6640(f) (1) through (3)] (EDG1, EDG2 and EDG3)

- 7.1.3 For the existing emergency stationary CI RICE \leq 500hp located at a major source of HAP emissions, the permittee shall comply with the following requirements from Table 2c of 40 C.F.R. 63 Subpart ZZZZ.
- a. Change oil and filter every 500 hours of operation or annually, whichever comes first.
 - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - c. Insect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
 - d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

[45CSR34; 40 C.F.R. §63.6602; Table 2c of 40 C.F.R. 63 Subpart ZZZZ] (EDG3)

- 7.1.4 The permittee must demonstrate continuous compliance with each emission limitation or operating limitation in Table 2c of 40 C.F.R. 63 Subpart ZZZZ that apply according to the following methods from Table 6 of 40 C.F.R. 63 Subpart ZZZZ.
- a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
 - b. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34; 40 C.F.R. §63.6640(a), Table 6 of 40 C.F.R. 63 Subpart ZZZZ] (EDG3)

- 7.1.5 The permittee must comply with the general compliance requirements of 40 C.F.R. §63.6605.
[45CSR34; 40 C.F.R. §63.6605] (EDG1, EDG2 and EDG3)
- 7.1.6 The permittee must comply with the general provisions of 40 C.F.R. 63 as shown in Table 8 of 40 C.F.R. 63 Subpart ZZZZ except for the following which do not apply as per 40 C.F.R. §63.6645(a)(5): 40 C.F.R. §§ 63.7(b) and (c), 40 C.F.R. §§ 63.8(e), (f)(4), and (f)(6), and 40 C.F.R. §§ 63.9(b)-(e), (g) and (h).
[45CSR34; 40 C.F.R. §63.6665, 40 C.F.R. §63.6645(a)(5), Table 8 of 40 C.F.R. 63 Subpart ZZZZ] (EDG3)

- 7.1.7 **Regulated Pollutant Limitation.** The registrant shall not cause, suffer, allow or permit emissions of VOC, NO_x, and CO, from any registered reciprocating internal combustion engine to exceed the potential to emit (pounds per hour and tons per year) listed in the General Permit Registration:

Emission Unit	Pollutant	Maximum Hourly Emissions (lb/hr)	⁽¹⁾ Maximum Annual Emissions (tpy)
EG-1 Kohler 100 REZGD, Lean Burn Four Stroke, Liquid Propane Gas (145 HP; 108.2 kW)	Nitrogen Oxides (NO _x)	0.32	0.10
	Carbon Monoxide (CO)	1.41	0.40
	Volatile Organic Compounds (VOC)	0.23	0.10

¹Based on operating the engine 500 hours per year.

[45CSR13, G60-C049 General Permit Registration, Emission Limitations; and G60-C, condition 5.1.2.] (EG-1)

- 7.1.8 The engine is registered under Class II General Permit G60-C (Appendix C) and is subject to Sections 1.0, 2.0, 3.0, and 4.0 of the General Permit.

The following sections of Class II General Permit G60-C (Appendix C) apply to the registrant:

Section 5 Reciprocating Internal Combustion Engines (R.I.C.E.)

Section 8 Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 C.F.R. 60 Subpart JJJJ)

[45CSR13, G60-C049 General Permit Registration] (EG-1)

7.2 Monitoring Requirements

- 7.2.1 The permittee must comply with the following applicable monitoring requirements of 40 C.F.R. 63 Subpart ZZZZ: 40 C.F.R. §§ 63.6625(e), (f), (h), and (i).
[45CSR34; 40 C.F.R. § 63.6625] (EDG3)

- 7.2.2 For EG-1, see Sections 5 and 8 of Class II Emergency Generator General Permit G60-C (Appendix C).

7.3 Testing Requirements

- 7.3.1 For EG-1, see Sections 5 and 8 of Class II Emergency Generator General Permit G60-C (Appendix C).

7.4 Recordkeeping Requirements

- 7.4.1 The permittee must comply with the recordkeeping requirements of 40 C.F.R. §63.6655 with the exception of 40 C.F.R. §63.6655(c) which does not apply.
[45CSR34; 40 C.F.R. §§63.6655 (a), (b), (d), (e), & (f)] (EDG3)

- 7.4.2 For EG-1, see Sections 5 and 8 of Class II Emergency Generator General Permit G60-C (Appendix C).

7.5 Reporting Requirements

- 7.5.1 The permittee must comply with the reporting requirements of 40 C.F.R. §63.6650(h).
[45CSR34; 40 C.F.R. §63.6650(h)] (EDG1, EDG 2 and EDG3)
- 7.5.2 If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 C.F.R. 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.
[45CSR34; Footnote 1 of Table 2c of 40 C.F.R. 63 Subpart ZZZZ] (EDG1, EDG2 and EDG3)
- 7.5.3 The permittee must report each instance in which each applicable emission limitation or operating limitation in Table 2c of 40 C.F.R 63 Subpart ZZZZ was not met. These instances are deviations from the emission and operating limitations of 40 C.F.R 63 Subpart ZZZZ. These deviations must be reported according to the requirements of 40 C.F.R § 63.6650.
[45CSR34; 40 C.F.R. §63.6640(b)] (EDG3)
- 7.5.4 The permittee must report each instance in which the applicable requirements in Table 8 of 40 C.F.R. 63 Subpart ZZZZ were not met.
[45CSR34; 40 C.F.R. §63.6640(e)] (EDG3)
- 7.5.5 For EG-1, see Sections 5 and 8 of Class II Emergency Generator General Permit G60-C (Appendix C).

7.6 Compliance Plan

N/A

8.0. Source-Specific Requirements [Emission Unit IDs- RDRU, BF-01, CV-01 to CV-04 and ST-003]

8.1. Limitations and Standards

8.1.1. Emissions from activities permitted herein shall not exceed the following when handling Powder River Basin Coal:

	PM		PM ₁₀		PM _{2.5}	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Railcar Unloading	0.66	0.45	0.31	0.22	0.05	0.04
Coal Load-in	3.27	2.25	1.55	1.07	0.24	0.17
Coal Storage Pile	0.43	0.06	0.22	0.03	0.09	0.01
Coal Load-out	9.14	6.28	2.12	1.46	0.21	0.14
Conv. Transfer Points	1.31	1.35	0.62	0.64	0.10	0.10
Total	14.81	10.39	4.82	3.42	0.69	0.46

[45CSR13, R13-2988 (Condition 4.1.1)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.1.2. Emissions from activities permitted herein shall not exceed the following when handling Illinois Basin Coal:

	PM		PM ₁₀		PM _{2.5}	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Railcar Unloading	0.80	0.55	0.38	0.26	0.06	0.04
Coal Load-in	3.97	2.74	1.88	1.30	0.29	0.20
Coal Storage Pile	0.21	0.06	0.11	0.03	0.05	0.01
Coal Load-out	4.52	3.11	0.86	0.59	0.10	0.07
Conv. Transfer Points	1.59	1.64	0.76	0.78	0.12	0.12
Total	11.09	8.1	3.99	2.96	0.62	0.44

[45CSR13, R13-2988 (Condition 4.1.2)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.1.3. In no case shall annual emissions exceed the following:

	PM	PM ₁₀	PM _{2.5}
	TPY	TPY	TPY
Total	10.39	3.42	0.46

[45CSR13, R13-2988 (Condition 4.1.3)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.1.4. The facility's annual throughput of total coal shall not exceed 5,000,000 tons per year. Compliance with this limit shall be based on a 12 month rolling total.

[45CSR13, R13-2988 (Condition 4.1.4)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.1.5. 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.

[45CSR§2-5.1, 45CSR13, R13-2988 (Condition 4.1.5)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.1.6. On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of 40 C.F.R. §60.254, as applicable to the affected facility.

[40CFR§60.254(b); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

(1) Except as provided in paragraph (b)(3) of 40 C.F.R. §60.254, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

[40CFR§60.254(b)(1); 45CSR16] (RDRU, BF-01, CV-01 to CV-04)

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

[40CFR§60.254(b)(2); 45CSR16] (RDRU)

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of 40 C.F.R. §60.254.

[40CFR§60.254(b)(3); 45CSR16] (RDRU, BF-01, CV-01 to CV-04)

[45CSR13, R13-2988 (Condition 4.1.6)]

8.1.7. **Fugitive Coal Dust Emissions Control Plan for Subpart Y - Fugitive Coal Dust Emissions Control Plan.**

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of 40 C.F.R. §60.254.

[40CFR§60.254(c); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

(1) The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

[40CFR§60.254(c)(1); 45CSR16] (ST-003)

- (2) For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of 40 C.F.R. §60.254 are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measures or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.
[40CFR§60.254(c)(2); 45CSR16] (ST-003)
- (3) Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of 40 C.F.R. §60.254 as specified in paragraphs (c)(3)(i) through (iv) of 40 C.F.R. §60.254.
[40CFR§60.254(c)(3); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of 40 C.F.R. §60.254.
[40CFR§60.254(c)(3)(i); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternative control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).
[40CFR§60.254(c)(3)(ii); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of 40 C.F.R. §60.254 while the petition is pending.
[40CFR§60.254(c)(3)(iii); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.
[40CFR§60.254(c)(3)(iv); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (4) The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority prior to the startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.
[40CFR§60.254(c)(4); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- (5) The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) of 40 C.F.R. §60.254.
[40CFR§60.254(c)(5); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of 40 C.F.R. §60.254.
[40CFR§60.254(c)(5)(i); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegate authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of 40 C.F.R. §60.254, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of 40 C.F.R. §60.254.
[40CFR§60.254(c)(5)(ii); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- (6) Where appropriate chemical dust suppressant agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.
[40CFR§60.254(c)(6); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

[45CSR13, R13-2988 (Condition 4.1.7)]

- 8.1.8 The process rates contained in Table 1.0 of this permit shall not be exceeded. Additionally, the permittee shall install, maintain and operate all control devices listed in Table 1.0 of this permit.
[45CSR13, R13-2988 (Condition 4.1.8)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)
- 8.1.9 **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11, 45CSR13, R13-2988 (Condition 4.1.9)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.2. Monitoring Requirements

N/A

8.3. Testing Requirements

- 8.3.1. The permittee shall comply with all applicable standards of 40 CFR 60 Subpart Y including but not limited to the following:
Performance Tests and Other Compliance Requirements for Subpart Y - Performance Tests. An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emission standards in Subpart Y as specified in paragraphs (b)(1) and (b)(2) of 40 C.F.R. §60.255.
[40CFR§60.255(b); 45CSR16]

- (2) For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of 40 C.F.R. §60.255, as applicable, except as provided for in paragraphs (e) and (f) of 40 C.F.R. §60.255. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of 40 C.F.R. §60.255.

[40CFR§60.255(b)(2); 45CSR16]

- (i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

[40CFR§60.255(b)(2)(i); 45CSR16]

- (ii) If all 6-minute average opacity readings in the most recent performance are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

[40CFR§60.255(b)(2)(ii); 45CSR16]

[45CSR13, R13-2988 (Condition 4.2.1)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.3.2 **Performance Tests and Other Compliance Requirements for Subpart Y - Monitoring Visible Emissions or Digital Opacity Compliance System.** As an alternative to meeting the requirements in paragraph (b)(2) of 40 C.F.R. §60.255, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of 40 C.F.R. §60.255.

[40CFR§60.255(f); 45CSR16]

- (1) Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of 40 C.F.R. §60.255.

[40CFR§60.255(f)(1); 45CSR16]

- (i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A-7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of this part, performance test must be conducted within 45 operating days.

[40CFR§60.255(f)(1)(i); 45CSR16]

- (ii) Conduct monthly visual observations of all processes and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

[40CFR§60.255(f)(1)(ii); 45CSR16]

- (iii) Conduct a performance test using Method 9 of Appendix A-4 of this part at least once every 5 calendar years for each affected facility.

[40CFR§60.255(f)(1)(iii); 45CSR16]

- (2) Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administration or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of

5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator delegated authority shall be implemented by the owner or operator.
[40CFR§60.255(f)(2); 45CSR16]

[45CSR13, R13-2988 (Condition 4.2.2)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4. Recordkeeping Requirements

8.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2988 (Condition 4.3.2)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

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

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

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

[45CSR13, R13-2988 (Condition 4.3.3)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.3. In order to determine compliance with the throughput requirement of section 8.1.4 of this permit the permittee shall monitor and record the amount of total coal processed through the facility on a monthly basis.

[45CSR13, R13-2988 (Condition 4.3.4)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.4.4. In order to determine compliance with the requirements of sections 8.3.1 and 8.3.2 of this permit, records of the Method 22 and/or Method 9 testing shall be retained on site by the permittee for at least five (5) years. Upon request the records shall be certified and made available to the Director or his/her duly authorized representative.

[45CSR13, R13-2988 (Condition 4.3.5)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

- 8.4.5 The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:
- (1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.
 - (2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.
 - (3) The amount and type of coal processed each calendar month.
 - (4) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.
 - (5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.
 - (6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, e.g., objections, to the plan and any actions relative to the alternative control measures, e.g., approvals, shall be noted in the logbook as well.
 - (7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.
 - (i) Records of the bag leak detection system output;
 - (ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and
 - (iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.
 - (8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.
 - (9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.
 - (10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.
- [40CFR§60.258(a); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)**

8.5. Reporting Requirements

- 8.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- [45CSR13, R13-2988 (Condition 4.4.1)] (RDRU, BF-01, CV-01 to CV-04 and ST-003)**

8.5.2 §60.258 Reporting and recordkeeping.

(b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

(c) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

(d) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main>. For performance tests that cannot be entered into WebFIRE (*i.e.*, Method 9 of appendix A-4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

[40CFR§60.258(b), (c), (d); 45CSR16] (RDRU, BF-01, CV-01 to CV-04 and ST-003)

8.6. Compliance Plan

N/A

APPENDIX A

**HARRISON POWER STATION
REVISION 3**

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

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: James E. Graf
Director, Harrison Plant
Telephone: (304) 584-2233
Fax: (304) 584-2408

Supervisor, Air Permitting: Mark A. Sowa
800 Cabin Hill Drive
Greensburg, PA 15601
Telephone (724) 838-6133

Facility Description: (Plant ID #3300015)

The Harrison Power Station is a coal-fired electric generating facility with three (3) main combustion units (Units 1, 2 & 3) with in-service dates of 1972, 1973, and 1974 respectively, discharging through three (3) scrubbed stacks (1, 2, and 3) housed within a single concrete 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 feet each, with an outlet diameter of approximately 26 feet. Each combustion unit is also equipped with an electrostatic precipitator (ESP) with 99.5% removal efficiency. There are two (2) hyperbolic cooling towers that service the three units. The Harrison Power Station also has two (2) auxiliary boilers (1A and 1B) that discharge to a separate (auxiliary) stack. Each unit has a design heat input greater than 10 MMBtu/hr making them subject to 45 CSR 2 and 45 CSR 10.

I. 45 CSR 2 Monitoring Plan:

In accordance with §45-2-8.2.a., the following proposed plan is for monitoring compliance with the opacity limits found in §45-2-3:

A. Scrubbed Stacks 1, 2 and 3

1. Applicable Standards:

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

2. Monitoring Methods

- a. Per 45 CFR Part 75 (Acid Rain), the scrubbed stacks are exempt from the COMS requirement. The alternative monitoring method will be the approved Compliance Assurance Monitoring

(CAM) plan developed in accordance with 40 CFR Part 64. The testing to determine the CAM indicators for each specific emission unit/stack configuration was conducted at the Harrison Station between April 20 and April 22, 2009. Testing was performed in accordance with the WVDEP-approved CAM test protocol. The CAM emissions test program measured particulate emissions using a TEOM 7000 Continuous Source Particulate Sampler. Given the fact that all three Harrison units employ a wet FGD system that, by design, create a saturated flue gas stream, the TEOM 7000 sampler was configured to run in a testing mode equivalent to EPA Reference Method 5B. Particulate matter emissions and ESP power input (in kW) were measured simultaneously during each test to determine the minimum acceptable ESP power levels that still demonstrated compliance with the 316.25 lb/hr particulate matter limit for each unit. Secondary current and voltage for each ESP field are directly measured using instrumentation integrated into the ESP unit. These parameters are measured continuously and recorded no less than four (4) times each hour, and in turn are used to calculate 3-hour block averages for ESP power input. Other appropriate monitoring methods that would produce credible data may be used, but will generally only be used in the absence of CAM Plan monitoring data, or as credible evidence used in conjunction with the CAM Plan 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 (24) 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 was requested (correspondence 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 45 CSR 2, Harrison Power Station will monitor, calculate and record 3-hour block average ESP power levels to ensure that each unit remains above the minimum power levels as determined during the aforementioned CAM testing. As summarized in the final submitted CAM testing report, these levels were determined to be:

Unit 1 = 127 kW Unit 2 = 118 kW Unit 3 = 104 kW

In addition to the CAM monitoring, each unit will continue to be periodically tested for particulate matter using the prescribed schedule as outlined in 45CSR§2-8.1 and 45CSR§2A-5.2. At the time of this 45CSR2 Monitoring Plan Revision 4 (October 2013), all three units at Harrison are in Cycle 3, i.e., testing required once every three (3) years.

B. Auxiliary Stack

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

The Harrison Power Station petitioned 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 45CSR2 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 totaled 0.0 hours of oil-fired operation over the 2010-2012 three-year time period. Similarly, Aux Boiler 1A averaged 9.8 hours, and Aux Boiler 1B averaged 8.2 hours of natural gas-firing over the same three-year period. Thus, the average total hours of operation for auxiliary boilers is approximately 9 hours per boiler per year, or approximately 0.1% of the 8,760 available hours for each boiler. Based on these limited actual operating hours, Harrison still believes that the requirement for COMS installation per 45 CSR2A Section 6.2.a is overly burdensome and sufficient reason for the continuation of the alternative monitoring methods proposed here. The Harrison Power Station will continue, as an alternative to COMS monitoring, to conduct Method 9 (visible emission) readings, with a minimum duration of thirty (30) minutes, 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.

II. 45 CSR 10 Monitoring Plan:

In accordance with 45CSR§10-8.2.c., the following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in 45CSR§10-3:

A. Scrubbed Stacks 1, 2 and 3

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 SO₂ limit is based on a continuous 24-hour averaging time; 45CSR§10-3.3a.
2. Primary Monitoring Method: The primary method of monitoring SO₂ mass emissions from Stacks 1, 2 and 3 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, Harrison reserves 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 SO₂ limit is based on a continuous 24-hour averaging time. Ref: 45CSR§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 45CSR§10-8 in accordance with 45 CSR§10-10.3 because the fuel burning sources combust a combination of distillate oil and natural gas. 45CSR§10-3.8 also contains the requirement for the development of a monitoring plan. Because the burning of distillate oil results in an SO₂ 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 SO₂ 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 SO₂ 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 45CSR§2A-7.1.a.
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 45CSR§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 45CSR§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 45CSR§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 45CSR§2A-7.1.a.5.
6. Combination of fuels: the owner or operator shall comply with the applicable recordkeeping requirements of 45CSR§2A-7.1.a.1 through 7.1.a.5 for each fuel burned as determined in 45CSR§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. A semi-annual CAM report will be submitted for the main boilers by March 15 and September 15 as an attachment to the Title V 6-Month Monitoring Report and Annual Compliance Certification report. The report shall include the following:

45 CSR 2A §7.2.c.3.A - The starting and ending times of each excursion (ESP power below minimum level)

45 CSR 2A §7.2.c.3.B - Specific identification of each excursion that occurs during startups, shutdowns and malfunctions.

45 CSR 2A §7.2.c.3.C - The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any).

45 CSR 2A §7.2.c.3.D - The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken.

45 CSR 2A §7.2.c.3.E - When no excursions have occurred or there were no periods of data unavailability, such information shall be stated in the report.

To the extent that that an excursion is due to a malfunction, the reporting requirements in section 9 of 45 CSR 2 shall be followed. Ref: 45CSR§2A-7.2.d.

2. Pursuant to 45 CSR 2, Section 8.4.a and 8.4.a.1, the Harrison Power Station petitioned and was granted approval by 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 petition was “infrequent operation.”
 - a. As an alternative to the testing and exception reporting requirements for particulate mass emissions from the auxiliary boilers, Harrison proposed 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 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 45CSR§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 calculated particulate mass emissions of approximately 90% of the applicable 45 CSR 2 weight emission standard. Ref: 45CSR§2-4.1.b.
 - b. As an alternative to the exception reporting requirements for opacity emissions from the auxiliary boilers, Harrison will 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: 45CSR§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: 45CSR §10A-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: 45CSR§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: 45CSR§10A-7.1.c.

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: 45CSR§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: 45CSR§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: 45CSR§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: 45CSR§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: 45CSR§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: 45CSR10A-7.2.a.4.
 - a. The magnitude of each excursion, and the date and time, including starting and ending times of each excursion. Ref: 45CSR§10A-7.2.a.4.A.
 - b. Specific identification of each excursion that occurs during startups, shutdowns, and malfunctions of the facility. Ref: 45CSR§10A-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: 45CSR§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: 45CSR§10A-7.2.a.4.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: 45CSR§10A-7.2.a.4.E.

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 45CSR§10-8 because the fuel burning unit(s) combust natural gas and/or distillate oil. Ref: 45CSR§10-10.

APPENDIX B

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_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) with the CAIR NO_x Annual emissions limitation, CAIR NO_x Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_x Annual allowances available for compliance deductions for the control period under 45CSR§39-6.3.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.

(4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO_x Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from a CAIR NO_x Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-6.3.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_x Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(e) Sulfur dioxide annual emission requirements.

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO₂ unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source.

APPENDIX C

Class II Emergency Generator General Permit G60-C