West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin, III
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:

Rain CII Carbon LLC
Moundsville Calcining Plant
R30-05100011-2009

John A. Benedict
Director

Issued: March 16, 2009 • Effective: March 30, 2009
Expiration: March 16, 2014 • Renewal Application Due: September 16, 2013

Permit Number: **R30-05100011-2009**
Permittee: **Rain CII Carbon LLC**
Facility Name: **Moundsville Calcining Plant**
Permittee Mailing Address: **3 Energy Road Moundsville, WV 26041**

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: Moundsville, Marshall County, West Virginia
Telephone Number: 304-843-0245
Type of Business Entity: Corporation
Facility Description: Petroleum coke calcining
SIC Codes: 2999
UTM Coordinates: 515.30 km Easting • 4409.20 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

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	Design Capacity	Control Device*
RK-01	S-01	Kiln 1	1956	50 TPH raw coke feed	Incinerator 1 I-01
RK-02	S-02	Kiln 2	1968	50 TPH raw coke feed	Incinerator 2 I-02
Cooler 1	S-06	Cooler 1	1956	50 TPH kiln feed	Multiclone CY-01; Scrubber S-06
Cooler 2	S-06	Cooler 2	1968	50 TPH kiln feed	Multiclone CY-02; Scrubber S-06
BL-01	DC-07	ZigZag Blender 1	1975	50 TPH raw coke feed	DC-07
BL-02	DC-08	ZigZag Blender 2	1975	50 TPH raw coke feed	DC-08
Conveying Systems					
Calcined Coke					
OBC1	BH1 (TP-5) BH2 (TP-6)	Outbound conveyor belt to OC1 (TP-5 and TP-6)	1997	150 TPH	CS, PE, BH1, BH2
OC1	NDV	Outbound chute to product coke barges (TP-7)	1997	150 TPH	CS, FE, TC
FC-01	DC-07	Flight conveyor to BL-01	1956	38 TPH	DC-07
FC-02	DC-08	Flight conveyor to BL-02	1968	38 TPH	DC-08
BC-07	No Direct Vent (NDV)	Conveyor belt to CC-14	1956	38 TPH	None
BC-08		Conveyor belt to BC-09 & CCS-01	1956	38 TPH	None
BC-09		Conveyor belt to BC-13 & CCS-03	1956	38 TPH	None
BC-11	DC-31	Conveyor belt to CCS-05 & CCS-07	1956	38 TPH	DC-31
BC-12	DC-04 DC-20	Conveyor belt to Rail, BC-12A, & Dock	1956	150 TPH	DC-04 DC-20
BC-12A	NDV	Conveyor belt to CB-04	1987	160 TPH	None
BC-13	NDV	Conveyor belt to BC-11, BC-32, BC-24, & CCS-06	1956	38 TPH	None
BC-16	NDV	Conveyor belt to BC-17	1956	38 TPH	None
BC-17	NDV	Conveyor belt to BC-11, BC-26, BC-42, & CCS-05	1956	38 TPH	None
BC-18	NDV	Conveyor belt to CB-02	1956	38 TPH	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
BC-21	NDV	Conveyor belt to BC-23 & BC-07	1967	38 TPH	None
BC-22	NDV	Conveyor belt to BC-23 & SCR-03	1967	38 TPH	None
BC-23	NDV	Conveyor belt to BC-16 & BC-27	1967	38 TPH	None
BC-24	NDV	Conveyor belt BC-25 & CCS-07	1967	38 TPH	None
BC-25	NDV	Conveyor belt to CCS-08	1967	38 TPH	None
BC-26	NDV	Conveyor belt to BC-11, BC-24, BC-32, & CCS-06	1967	38 TPH	None
BC-27	NDV	Conveyor belt to BE-14 & CCS-09	1967	38 TPH	None
BC-28	NDV	Conveyor belt to BC-29, CCS-01, & CCS-02	1973	21 TPH	None
BC-29	NDV	Conveyor belt to CCS-03	1973	21 TPH	None
BC-32	NDV	Conveyor belt to BC-33	1983	38 TPH	None
BC-33	NDV	Conveyor belt to BC-34	1983	38 TPH	None
BC-34	DC-24 DC-18	Conveyor belt to BC-35 & BC-36	1983	38 TPH	DC-24 DC-18
BC-35	DC-19 DC-24	Conveyor belt to CCS-11 & CCS-13	1983	38 TPH	DC-19 DC-24
BC-36	DC-18 DC-23	Conveyor belt to CCS-10 & CCS-12	1983	38 TPH	DC-18 DC-23
BC-37	DC-25 DC-25	Conveyor belt to BC-41 & BC-39	1983	175 TPH	DC-25 DC-25
BC-38	DC-26 DC-26	Conveyor belt to BC-40 & BC-41	1983	175 TPH	DC-26 DC-26
BC-39	NDV	Conveyor belt to BC-40	1983	175 TPH	None
BC-40	NDV	Conveyor belt to BC-12	1983	175 TPH	None
BC-41	NDV	Conveyor belt to BC-42	1983	175 TPH	None
BC-42	DC-09	Conveyor belt to CB-04	1983	175 TPH	DC-09
BC-43	NDV	Conveyor belt to BC-44	1983	38 TPH	None
BC-44	DC-24 DC-18	Conveyor belt to BC-35 & BC-36	1983	38 TPH	DC-24 DC-18
BC-46	NDV	Conveyor belt to BC-47	1983	150 TPH	None
BC-47	DC-09	Conveyor belt to CB-14	1983	150 TPH	DC-09
BC-49	NDV	Conveyor belt to BC-27 & BC-16	1983	38 TPH	None
BC-50	NDV	Conveyor belt to BC-25 and CCS-07	1995	38 TPH	None
BC-51	NDV	Conveyor belt to BC-52	1995	60 TPH	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
BC-52	NDV	Conveyor belt to CC-13	1995	60 TPH	None
BE-03	DC-03	Bucket elevator to BC-28	1973	21 TPH	DC-03
BE-04	DC-03	Bucket elevator to CC-02	1973	3 TPH	DC-03
BE-09	DC-03	Bucket elevator to AS-01 & CCS-04	1973	7.5 TPH	DC-03
BE-10	DC-03	Bucket elevator to SCR-01 & BC-08	1973	50 TPH	DC-03
BE-11	NDV	Bucket elevators (Not in use)	1973	4 TPH	None
BE-12	NDV		1973	2 TPH	None
BE-14	DC-31	Bucket elevator to BC-50	1995	38 TPH	DC-31
WF-07	DC-03	Weigh feeder to BE-10	1974	50 TPH	DC-03
WF-08	DC-03	Weigh feeder to WF-07	1993	50 TPH	DC-03
Green Coke					
HOP1	NDV	Green coke hopper (TP-1, TP-1A)	1997	125 tons	PE
IFB1	NDV	Inbound feeder belt to IBC1 (TP-2)	1997	300 TPH	PE
IBC1	NDV	Inbound conveyor belt 1 to IBC2 (TP-3)	1997	300 TPH	PE
IBC2	NDV	Inbound conveyor belt 2 to IC1 (TP-4)	1997	300 TPH	PE
IC1	NDV	Inbound chute to green coke storage pad	1997	300 TPH	PE, TC
BC-01A	NDV	Conveyor belt to BC-01	1970	120 TPH	None
BC-02	NDV	Conveyor belt to CC-01	1956	120 TPH	None
BC-03	NDV	Conveyor belt to BC-04 & BC-19	1956	120 TPH	None
BC-04	NDV	Conveyor belt to BC-14, BC-30, & GCS-05	1956	160 TPH	None
BC-05	NDV	Conveyor belt to GCS-01	1956	120 TPH	None
BC-06	NDV	Conveyor belt to BE-01 & BE-02	1956	50 TPH	None
BC-14	NDV	Conveyor belt to CGS-02 & BC-05	1956	160 TPH	None
BC-19	NDV	Conveyor belt to Stockpile	1979	200 TPH	None
BC-20	NDV	Conveyor belt to BE-02 & BE-06	1967	50 TPH	None
BC-30	DC-21	Conveyor belt to GCS-06	1983	160 TPH	DC-21
BC-31	NDV	Conveyor blet to BC-04	1981	160 TPH	None
BC-61	NDV	Conveyor belt to GCS-06, BC-03 & Stockpile	1998	250 TPH	None
BE-01	NDV	Bucket elevators to BF-01 & BF-02	1956	50 TPH	None
BE-02	NDV		1956	50 TPH	None
BE-06	NDV		1967	50 TPH	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
BE-07	NDV	Bucket elevator to WF-01	1967	10 TPH	None
BE-08	NDV	Bucket elevator to WF-02	1967	10 TPH	None
BF-01	NDV	Belt feeder to RK-01	1956	50 TPH	None
BF-02	NDV	Belt feeder to RK-02	1967	50 TPH	None
WF-01	NDV	Weigh feeders to BC-06 & BG-20	1956	50 TPH	None
WF-02	NDV		1956	50 TPH	None
WF-03	NDV		1956	50 TPH	None
WF-05	NDV		1956	50 TPH	None
WF-06	NDV	Weigh feeder to BFC-06 & BG-20	1983	50 TPH	None
Scrubber					
S-06	DC-13	Scrubber	1980	100 TPH	DC-13
FTS-06	DC-17	Scrubber fines transport	1980	<5 TPH	DC-17
BE-13	NDV	Scrubber hopper bucket elevator	1979	<5 TPH	None
Storage					
Calcined Coke Silos					
CCS-01	DC-20 DC-12	Calcined coke silos to Railcar & BC-46	1956	800 Tons	DC-20, DC-12
CCS-02			1956	800 Tons	
CCS-03			1956	800 Tons	
CCS-04	DC-10	Calcined coke silo to CB-08, CB-09, CCS-08, CCS-09, CCS-05, CCS-10, CCS-11 & CCS-12 via FTS-02	1956	210 Tons	DC-10
CCS-05	NDV	Calcined coke silo to BC-12	1956	2100 Tons	None
CCS-06	NDV	Calcined coke silo to WF-07	1956	2200 Tons	None
CCS-07	NDV	Calcined coke silo to BC-12 & WF-08	1956	2200 Tons	None
CCS-08	NDV	Calcined coke silo to BC-12	1967	2200 Tons	None
CCS-09	NDV	Calcined coke silo to BC-12	1967	650 Tons	None
CCS-10	DC-18	Calcined coke silo to BC-38	1983	2700 Tons	DC-18
CCS-11	DC-19	Calcined coke silo to BC-37	1983	2700 Tons	DC-19
CCS-12	DC-23	Calcined coke silo to BC-38	1983	2700 Tons	DC-23
CCS-13	DC-24	Calcined coke silo to BC-37	1983	2700 Tons	DC-24
Green Coke Silos					
GCS-01	NDV	Green coke silo to WF-01	1956	650 Tons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
GCS-02	NDV	Green cole silo to WF-02	1956	650 Tons	None
GCS-03	NDV	Green coke silo to WF-03	1956	750 Tons	None
GCS-05	NDV	Green coke silo to WF-05	1956	850 Tons	None
GCS-06	DC-21	Green coke silo to WF-06	1983	2500 Tons	DC-21
Coke Bins					
CB-01	NDV	Coke bin to Railcar	1956	210 Tons	None
CB-02	NDV	Coke bin to Railcar	1956	96 Tons	None
CB-04	DC-09	Coke bin to Truck	1983	18 Tons	DC-09
CB-05	DC-15	Coke bin/SC to pneumatic truck loading & CB-11	1980	65 Tons	DC-15
CB-06	DC-15	Coke bins/Screw Conveyors (SC) to truck loading & CB-11	1980	65 Tons	DC-15
CB-07	DC-15		1980	130 Tons	DC-15
CB-08	DC-16		1980	130 Tons	DC-16
CB-09	DC-17		1980	75 Tons	DC-17
CB-10	DC-18		1980	75 Tons	DC-18
CB-11	NDV	Agglomeration coke bin (Not in use)	1980	8 Tons	None
CB-12	NDV	Agglomeration coke bin (Not in use)	1980	2 Tons	None
CB-14	DC-09	Coke bin to truck	1983	5 Tons	DC-09
Stockpiles					
North pad	NDV	Storage pad	1982	4500 Tons	None
Pad	NDV	Storage pad	1956	14000 Tons	None
Sizing					
CC-01	NDV	Coke crusher to BC-03	1953	120 TPH	None
CC-02	DC-03	Cage Mill to SCR-02	1974	35 TPH	DC-03
CC-03	NDV	Traveling hammer mill to BC-01A	1970	120 TPH	None
CC-08	NDV	Reclaim crusher to BC-31	1981	160 TPH	None
CC-09	NDV	Feeder breaker to BC-61	1998	200 TPH	None
CC-13	DC-30	Coke crusher to BC-27 & BC-16	1998	32 TPH	DC-30
CC-14	NDV	Coke crusher to BC-08	1998	32 TPH	None
SCR-01	DC-03	Screener scalper to CC-01, SCR-02, & BC-28	1974	35 TPH	DC-03
SCR-02	DC-03	Screener (Rotex) to BE-04, BE-09, & BE-03	1972	35 TPH	DC-03
SCR-03	NDV	Screener to BC-18 & BC-23	1974	35 TPH	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
AS-01	DC-03	Air Separator to CCS-04, BE-11, BE-03 FTS to CB-01	1974	N/A	DC-03
PEL-01	DC-14	Pelletizer	1980	6 TPH	DC-14
Unloading					
RCD	NDV	Rotary car dumper to CC-03	1970	120 TPH	None
Truck Unload	NDV	Trucks unloading	1980	N/A	None
Emergency Engines					
EN-01	EN-01	Kiln #1 Auxiliary Emergency Engine, diesel-fired	1981	52 HP	None
EN-02	EN-02	Kiln #2 Auxiliary Emergency Engine, diesel-fired	1992	88 HP	None
EN-03	EN-03	Glycol Emergency Engine, diesel-fired	1981	36 HP	None
EN-04	EN-04	WW-2 Emergency Engine, diesel-fired	1977	49 HP	None
EN-05	EN-05	WW-3 Emergency Engine, diesel-fired	1993	130 HP	None

*DC - dust collector, CS - de-dusting chemical solution, PE - partial enclosure, FE - full enclosure, BH - baghouse, TC - telescoping chute

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
R13-0563	**July 16, 1980**
R13-0588	**November 18, 1980**
R13-0662	**June 25, 1982**
R13-2095R	**May 27, 1997**
R13-2612A	**July 31, 2008**

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10µm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

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 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 and 45CSR15]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1. State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

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. 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.
[45CSR§7-5.2. and 45CSR13 - R13-2095, Condition B.3.]

3.1.10. Reserved. ~~When emissions on an annual basis of one or more of the greenhouse gases listed below are greater than the *de minimis* amounts listed below, all greenhouse gases emitted above the *de minimis* amounts shall be reported to the Secretary under 45CSR§42-4. (see Section 3.5.).~~

~~Greenhouse Gas Compound~~	~~tons/year~~
~~carbon dioxide~~	~~10,000~~
~~methane~~	~~476~~
~~nitrous oxide~~	~~32.6~~
~~hydrofluorocarbons~~	~~0.855~~
~~perfluorocarbons~~	~~1.09~~
~~sulfur hexafluoride~~	~~0.42~~

~~**[45CSR§42-3.1., State-Enforceable only]**~~

3.1.11. The Permittee shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines by May 3, 2013.
[40 C.F.R. § 63.6595 (a) (1); 45CSR34 (EN-01, EN-02, EN-03, EN-04, EN-05)]

3.2. Monitoring Requirements

3.2.1. 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 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. These records shall state any maintenance or corrective actions taken as a result of the inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

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

[45CSR§30-5.1.c.2.B.]

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

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

3.5. 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:	**If to the US EPA:**
Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0475 FAX: 304/926-0478	Associate Director ~~Office of Enforcement and Permits Review (3AP12)~~ 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.]

3.5.10. Reserved. ~~**Greenhouse Gas Reporting Requirements.** When applicable, as determined in permit section 3.1., greenhouse gas emissions shall be reported pursuant to 45CSR§42-4. as follows:~~

~~a. In accordance with a reporting cycle provided by the Secretary, affected sources shall report to the Secretary the quantity of all greenhouse gases emitted above de minimis amounts in the years specified by the Secretary.~~
~~**[45CSR§42-4.1., State-Enforceable only.]**~~

~~b. Affected sources shall only be required to report annual quantities of anthropogenic non-mobile source greenhouse gases emitted at the stationary source, and shall not be required to report biogenic emissions of greenhouse gases.~~
~~**[45CSR§42-4.2., State-Enforceable only.]**~~

~~c. Reports of greenhouse gas emissions submitted to the Secretary under 45CSR§42-4. shall be signed by a responsible official and shall include the following certification statement: "I, the undersigned, hereby certify that the data transmitted to the West Virginia Department of Environmental Protection is true, accurate, and complete, based upon information and belief formed after reasonable inquiry."~~
~~**[45CSR§42-4.5., State-Enforceable only.]**~~

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. 45CSR2 does not apply because this plant is not a fuel burning unit. The new heat exchangers are not defined as indirect heat exchangers or fuel burning units since they do not combust fuel.

b. 45CSR5 does not apply because this plant is not a coal prep plant.

c. 40 CFR Part 60, Subpart Dc does not apply to the new heat exchangers because the emission limitations are based on heat input. The definition of heat input in Subpart Dc exempts exhaust gases from kilns.

d. 40 CFR 64 - Compliance Assurance Monitoring. Incinerators I-01 and I-02, and Coolers 1 and 2 have potential pre-control device emissions of PM greater than 100 tons per year, are subject to an emission limitation or standard for PM, and use a control device to achieve compliance with the standard. However, in accordance with 40 CFR § 64.2(b)(vi), these sources are exempt because the existing Title V permit requires continuous compliance determination method. For Incinerators I-01 and I-02, the permittee must continuously monitor and record on a computerized system the temperature of the incinerators. For Coolers 1 and 2, the permittee must monitor the pressure drops across the multiclones and record the data with the plant data logging system.

4.0. Source-Specific Requirements [Kiln incinerators (afterburners I-01 and I-02) and their associated stacks (S-01 and S-02)]

4.1. Limitations and Standards

4.1.1. Emission of Visible Particulate Matter -- No person shall cause or allow emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR§6-4.3. *and* 45CSR13 - R13-2612, Condition 4.1.7.]

4.1.2. The provisions of Section 4.1.1. of this permit shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR§6-4.4. *and* 45CSR13 - R13-2612, Condition 4.1.8.]

4.1.3. No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5.]

4.1.4. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6. *and* 45CSR13 - R13-2612, Condition 4.1.9.]

4.1.5. The provisions of 45CSR§§7-4.1, 4.4 and 4.8 shall not apply to petroleum coke calcining kilns in existence on April 1, 1982, provided that particulate matter vented into the open air from each kiln, measured in pounds per hour, shall not exceed the amounts as determined by the following formulas:

a. When manufacturing regular (amorphous) coke: $E = 3.64P^{0.67}$
Where E = allowable emission rate and P = the process weight rate in tons per hour, provided, however, that no kiln manufacturing regular (amorphous) coke shall exceed a maximum emission rate of fifty (50) pounds per hour. Compliance with this emission limit shall demonstrate compliance with the emission limit from Section 4.1.1. of this permit.

b. When manufacturing graphite (crystalline) coke: $E = 16.89P^{0.67}$
Where E = allowable emission rate in pounds per hour, and P = process weight rate in tons per hour, provided, however, that no kiln manufacturing graphite (crystalline) coke shall exceed a maximum emissions rate of 200 pounds per hour.

Compliance with these emission limits demonstrates compliance with 45CSR§6-4.1. and 45CSR13 - R13-2612, Condition 4.1.6.
[45CSR§§7-4.11. a. and b., 45CSR§6-4.1. and 45CSR13 - R13-2612, Conditions 4.1.6. and 4.1.10.]

4.1.6. Particulate Matter emissions for the stacks from each kiln (Emission Point IDs S-01 and S-02), shall not exceed the following:

a. When manufacturing regular (amorphous) coke - 50 pounds per hour and 219 tons per year.
b. When manufacturing shot coke - 200 pounds per hour and 876 tons per year.

Compliance with the annual emission limits shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of the emissions at any given time for the previous twelve (12) consecutive months.
[45CSR13 - R13-2612, Condition 4.1.1.]

4.1.7. Emissions from the stacks from each kiln (Emission Point IDs S-01 and S-02) shall be vented to and controlled by an incinerator (afterburner) (Control Device IDs I-01 and I-02) prior to release to the atmosphere. Each kiln is equipped with an incinerator (Control Device IDs I-01 and I-02) operating at a temperature of not less than 1600° F (as averaged on a rolling three hour basis) and having a combustion chamber residence time of twelve

(12) seconds or longer when calcining regular coke and twenty-four (24) seconds or longer when calcining graphite coke. Only one (1) kiln shall calcine shot coke at any time.
[45CSR§7-4.11.c. *and* 45CSR13 - R13-2612, Condition 4.1.2.]

4.1.8. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12.]

4.1.9. No person shall cause, suffer, allow or permit any manufacturing process 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.
[45CSR§7-5.1.]

4.1.10. The maximum throughput of amorphous coke to either of the kilns shall not exceed 50 tons/hour.
[45CSR13 - R13-2612, Condition 4.1.3.]

4.1.11. The maximum throughput of shot coke to either of the kilns shall not exceed 50 tons/hour.
[45CSR13 - R13-2612, Condition 4.1.4.]

4.1.12. Coke supplier changes must follow the testing schedule outlined in 4.3.3. However, if "spot shipments" of coke are necessary, the permittee must notify the Director within fifteen (15) days of receiving the "spot shipment". If it will be necessary to process the coke received in the "spot shipment" for more than sixty (60) days, then this will be considered a coke supplier change, and the testing schedule outlined in 4.3.3. must be adhered to.
[45CSR13 - R13-2612, Condition 4.1.5.]

4.1.13. SO_2 emissions from each kiln (S-01 and S-02) shall not exceed 2000 parts per million by volume.
[45CSR§10-4.1. and 45CSR13 - R13-2612, Condition 4.1.11.]

4.1.14. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the incinerators (I-01 and I-02) 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. and 45CSR13 - R13-2162, Condition 4.1.14.]

4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the opacity limits set forth in Sections 4.1.1. and 4.1.2. of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR60, Appendix A, Method 22 or from the lecture portion of the 40CFR60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at stacks S-01 and S-02, for a sufficient

time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are identified at stacks S-01 and S-02 during the monthly survey, or at any other time, the permittee shall conduct an opacity evaluation as outlined in 45CSR7A or Method 9 within three (3) days, unless an extension is granted by the Director. An opacity evaluation shall not be required if the visible emission condition is corrected within three (3) days after the visible emission was identified and the units are operated at normal operating conditions. A record of each visible emissions check or opacity evaluation required above shall be maintained on site for a period of no less than five (5) years stating the date and time of each visible emission or opacity check, the visible emissions or opacity survey results and, if appropriate, all corrective actions taken.
[45CSR13 - R13-2612, Conditions 4.2.1., 4.2.2., 4.2.3., and 4.2.4.]

4.2.2. Compliance with the SO_2 limits for these stacks shall be demonstrated by following the revised Rule 10 Monitoring Plan, submitted on ~~April 25, 2007~~ January 10, 2012. (See Attachment A)
[45CSR§10-8.2.c]

4.2.3. Continual compliance with PM emission limits shall be demonstrated by maintaining the temperature of the incinerator Zone 2 at or above 1600° F, except during the first 16 hours of feed introduction after a shutdown. The temperature reading of Zone 3 shall be monitored in the event that the Zone 2 temperature indication is lost for any reason, in which case the temperature of Zone 3 shall be maintained at or above 1600° F.
[45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. Testing once per permit term or at the request of the Director shall be performed to demonstrate compliance with the weight based PM emission limits.
[45CSR§7-8.1. *and* 45CSR§30-5.1.c.]

4.3.2. To determine compliance with mass emission limits for particulate matter set forth under Section 4.1.6. of this permit, the permittee shall conduct tests at any such time as may be required by the USEPA Administrator or the Director. The results of these tests are to be forwarded to the Director within 60 days of completion of the test. These records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or a duly authorized representative of the Director upon request.
[45CSR13 - R13-2612, Condition 4.3.1.]

4.3.3. To determine compliance with mass emission limits for particulate matter set forth under Section 4.1.6. of this permit, in the event of a coke supplier change, the permittee shall conduct tests within one hundred eighty (180) days after coke supplier change. The results of these tests are to be forwarded to the Director within 60 days of completion of the test. These records shall be certified by a "responsible official" and maintained on site for a period of not less than five (5) years and shall be made available to the Director or a duly authorized representative of the Director upon request.
[45CSR13 - R13-2612, Condition 4.3.2.]

4.4. Recordkeeping Requirements

4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For the incinerators (I-01 and I-02), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13 - R13-2612, Condition 4.4.2.]

4.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For the incinerators (I-01 and I-02), 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 - R13-2612, Condition 4.4.3.]

4.4.3. For the purpose of demonstrating compliance with the incinerator operations, and coke throughput (amorphous coke and shot coke) to the kilns (RK-01 and RK-02), set forth in Sections 4.1.7., 4.1.10., and 4.1.11. of this permit, the permittee shall maintain accurate records of the incinerator operation, and coke throughput (amorphous coke and shot coke) to the kilns (RK-01 and RK-02). Said records shall be maintained on site for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request and shall be certified by a responsible official upon the submittal.

[45CSR13 - R13-2612, Condition 4.4.4.]

4.4.4. The permittee shall maintain records of all monitoring data required by Section 4.2.1. of this permit, documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80° F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A or Method 9, the data records of each observation shall be maintained per the requirements of 45CSR7A or Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR13 - R13-2612, Condition 4.4.5.]

4.4.6. The Permittee shall keep records of each test for weight based particulate matter emissions.

[45CSR§30-5.1.c.]

4.4.7. The temperature of the incinerator (Zone 2 as primary temperature reading and Zone 3 as the alternative, in accordance with Section 4.2.3. of this permit) shall be monitored and recorded with a computerized system.

[45CSR§30-5.1.c.]

4.5. Reporting Requirements

4.5.1. None.

4.6. Compliance Plan

4.6.1. None.

5.0. Source-Specific Requirements [Scrubber stack (S-06)]

5.1. Limitations and Standards

5.1.1. 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 Sections 5.1.2. of this permit.
[45CSR§7-3.1.]

5.1.2. The provisions of Section 5.1.1. 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.
[45CSR§7-3.2.]

5.1.3. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from the scrubber stack (S-06) in excess of 37 pph.
[45CSR§7-4.1.]

5.2. Monitoring Requirements

5.2.1. Visual emission checks shall be conducted monthly. For the purpose of these checks, excess visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within three (3) days unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site stating the date and time of each emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

5.2.2. The permittee shall monitor the pressure drop across the scrubber and the pressure drop across the multiclones, this data will be recorded with the plant data logging system as averaged on a three-hour basis during all periods of operation of the product coolers.

a. Continual compliance with PM emission limits shall be demonstrated by maintaining the pressure drop across the scrubber between 0.5 and 10 inches of water, as averaged on a three-hour basis, and

b. The pressure drop across the multiclones target is 0.5 – 8 inches of water, as averaged on a three-hour basis.

[45CSR§30-5.1.c.]

5.3. Testing Requirements

5.3.1. Testing once per permit term or at the request of the Director shall be performed to demonstrate compliance with the weight based PM emission limits.
[45CSR§7-8.1. *and* 45CSR§30-5.1.c.]

5.4. Recordkeeping Requirements

5.4.1. The Permittee shall keep records of each test for weight based particulate matter emissions. **[45CSR§30-5.1.c.]**

5.4.2. In accordance with Section 5.2.2. of this permit, the Permittee shall keep records of scrubber and multiclone operating conditions on a computerized data system. **[45CSR§30-5.1.c.]**

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0. Source-Specific Requirements [Storage silos (CCS-10, CCS-11, CCS-12, CCS-13, and GCS-06, and Storage Bins CB-05, CB-06, CB-07, CB-08, and CB-09)]

6.1. Limitations and Standards

6.1.1. 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.
[45CSR§7-3.7.]

6.1.2 No person shall cause, suffer, allow or permit any 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.
[45CSR§7-5.1.]

6.2. Monitoring Requirements

6.2.1. Visual emission checks shall be conducted monthly. For the purpose of these checks, excess visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within three (3) days unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site stating the date and time of each emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

6.2.2. The permittee shall maintain a pressure gauge on all dust collectors for pressure drop observations. If the pressure drop is outside of the acceptable range (3 to 7 inches of water column), as averaged on a monthly basis during all periods of operation of the storage silos, then the permittee shall perform maintenance on the dust collector to bring the pressure drop back into the acceptable range. If the pressure drop on inspection is below the minimum acceptable level, and records show that the dust collector has had new bags installed and that the dust collector has not been operated for a minimum of 60 hours after the installation of the new bags, the permittee is exempt from this maintenance. Records shall state the date and time of each dust collector inspection, the inspection results and corrective actions taken, if any, and reference to the work order number and date under which dust collector bags were replaced if the permittee is claiming this exemption.
[45CSR§30-5.1.c.]

6.3. Testing Requirements

6.3.1. None

6.4. Recordkeeping Requirements

6.4.1. Records shall be maintained on site stating the date and time of each baghouse's annual preventative maintenance activity, the results of the annual preventative maintenance activity, and all corrective actions taken.
[45CSR§30-5.1.c.]

6.5. Reporting Requirements

6.5.1. None.

6.6. Compliance Plan

6.6.1. None.

7.0. Source-Specific Requirements [Fines Pelletizer PEL-01]

7.1. Limitations and Standards

7.1.1. 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 Sections 7.1.2. of this permit.
[45CSR§7-3.1.]

7.1.2. The provisions of Section 7.1.1. 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.
[45CSR§7-3.2.]

7.1.3. If the fines pelletizer is restarted, particulate emissions from the Coke Fines Pelletizer, Equipment ID No. PEL-01 shall be vented to and controlled by the Baghouse designated as Control Device DC-14 and limited to 8.00 pounds per hour. Compliance with this emission limit shall demonstrate compliance with the emission limit from 45CSR§7-4.1.
[45CSR§7-4.1. *and* 45CSR13 - R13-0563, Permit Application]

7.2. Monitoring Requirements

7.2.1. If the fines pelletizer is restarted, then visual emissions checks of the emission point specified shall be conducted monthly. For the purpose of these checks, excess visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within three (3) days unless the permittee can demonstrate a valid reason that the time frame should be extended. An opacity evaluation shall not be required if the visible emission condition is corrected within three (3) days after the visible emission was identified and the units are operated at normal operating conditions.
[45CSR§30-5.1.c.]

7.3. Testing Requirements

7.3.1. If the Fines Pelletizer is restarted, then testing once per permit term or at the request of the Director shall be performed to demonstrate compliance with the weight based PM emission limits.
[45CSR§30-5.1.c.]

7.4. Recordkeeping Requirements

7.4.1. If the fines pelletizer is restarted, then the permittee shall keep records of each visible emission check required in 7.2.1. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the result of the check, what action(s), if any, was/were taken, and the name of the observer.
[45CSR§30-5.1.c.]

7.4.2. Records shall be maintained on site stating the date and time of each baghouse's annual preventative maintenance activity, the results of the annual preventative maintenance activity, and all corrective actions taken.
[45CSR§30-5.1.c.]

7.5. Reporting Requirements

7.5.1. None.

7.6. Compliance Plan

7.6.1. None.

8.0. Source-Specific Requirements [Barge Unloading/Barge Loading Operations (HOP1, IFB1, IBC1, IBC2, IC1, OBC1, OC1)]

8.1. Limitations and Standards

8.1.1. The throughput of green petroleum coke shall not exceed 1,761,000 tons per year.
[45CSR13 - R13-2095, Condition A.1.]

8.1.2. The throughput of calcined petroleum coke shall not exceed 433,500 tons per year.
[45CSR13 - R13-2095, Condition A.2.]

8.1.3. Partial Enclosures (PE) shall be used on green coke transfer points TP-1 and TP-1A.
[45CSR13 - R13-2095, Condition A.4.]

8.1.4. Manual water sprays shall be used, as needed to minimize atmospheric entrainment of dust into the air, on green coke transfer points TP-2, TP-3, and TP-4.
[45CSR13 - R13-2095, Condition A.5.]

8.1.5. Baghouses (BH1 and BH2) shall be used on calcined coke transfer points TP-5 & TP-6.
[45CSR13 - R13-2095, Condition A.6.]

8.1.6. A choke feed spout shall be used on calcined coke transfer point TP-7.
[45CSR13 - R13-2095, Condition A.7.]

8.1.7. The permitted facility shall comply with all applicable requirements of 45CSR7 and any more stringent requirements set forth under Source-Specific Requirements 8.0 of this permit.

The pertinent sections of 45CSR7 applicable to this facility include, but are not limited to, the following:

§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 darker in shade or appearance than that designated as No. 1 Ringelmann or twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

§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 subsection 5.1 is required to have a full enclosure and be equipped with a particulate matter control device.

§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.

§45-7-8.1
At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director 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.

§45-7-8.2
The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

[45CSR13 - R13-2095, Condition B.2 and B.3]

8.2. Monitoring Requirements

8.2.1. Visual emission checks shall be conducted monthly. For the purpose of these checks, excess visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within three (3) days unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner (within 48 hours) and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site stating the date and time of each emission check, the visible emissions survey results and, if appropriate, all corrective actions taken.
[45CSR§30-5.1.c.]

8.2.2. The permittee shall maintain a pressure gauge on all dust collectors (BH1 and BH2) for pressure drop observations. If the pressure drop is outside of the acceptable range (3 to 7 inches of water column), as averaged on a monthly basis during all periods of operation of dust collectors, then the permittee shall perform maintenance on the dust collector to bring the pressure drop back into the acceptable range. If the pressure drop on inspection is below the minimum acceptable level, and records show that the dust collector has had new bags installed and that the dust collector has not been operated for a minimum of 60 hours after the installation of the new bags, the permittee is exempt from this maintenance. Records shall state the date and time of each dust collector inspection, the inspection results and corrective actions taken, if any, and reference to the work order number and date under which dust collector bags were replaced if the permittee is claiming this exemption.
[45CSR§30-5.1.c.]

8.3. Testing Requirements

8.3.1. None

8.4. Recordkeeping Requirements

8.4.1. Records shall be maintained on site stating the date and time of each baghouse's annual preventative maintenance activity, the results of the annual preventative maintenance activity, and all corrective actions taken.
[45CSR§30-5.1.c.]

8.4.2. The permittee shall maintain a certifiable record of the total throughput of coke through the facility on a monthly basis. The company shall use the forms supplied in Attachments B & C of this permit. This record is to be maintained onsite for a period not less than five (5) years. It shall be certified by a responsible official and made available, upon request, to the Director or his (her) authorized representative.
[45CSR13 - R13-2095, Condition A.3.]

8.5. Reporting Requirements

8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

ATTACHMENT A
Rule 10 - SO_2 MONITORING PLAN

SO_2 EMISSIONS MONITORING PLAN
RAIN CII CARBON LLC CALCINING PLANT
MOUNDSVILLE, WEST VIRGINIA

This SO_2 Emissions Monitoring Plan is prepared in accordance with the requirements of 45 CSR 10A, § 6.4, as amended effective January 25, 2002.

1. Parameters monitored. During the calcining process, sulfur contained in feedstock ~~c~~ is oxidized. This process results in emission of sulfur dioxide (SO_2), a pollutant regulated under the federal Clean Air Act. The West Virginia Department of Environmental Protection (WVDEP) has established emissions limitations of 2000 parts per million (ppm) of SO_2 from manufacturing process sources stacks. In order to determine compliance with this emissions limitation, ~~stack testing will be conducted~~ Continuous Emission Monitoring Systems (CEMS) will be installed and operated on each kiln/incinerator stack to directly measure emissions of SO_2. ~~In addition, emissions of sulfur dioxide (SO_2) will be calculated based on the sulfur content of the various feedstocks and products of the kilns. Analysis of sulfur content is a conservative indicator of compliance because it provides a maximum measure of how much sulfur is available to be combusted into SO_2.~~

2. Monitoring method and frequency.

   a. ~~Stack testing~~ Continuous Emission Monitoring Systems (CEMS) to determine SO_2 emissions. CEMS means all equipment required for the determination of SO2 gas concentration or emission rate, installed, calibrated, operated and maintained as specified in 40 CFR Part 60, Appendix B, Performance Specification 2 or Performance Specification 7 and 40 CFR Part 60, Appendix F. The CEMS shall be installed, operational and certified within twelve (12) months of the date of approval of this revised SO2 monitoring plan. ~~Stack tests will be performed annually for each unit beginning no later than March 15, 2002. Each annual SO_2 stack test regime will include one shot coke product and one anode coke product; the facility will determine which product type is tested in each kiln/incinerator unit each year. Stack testing will be performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Method 6 or other EPA and Division of Air Quality approved methods.~~

   b. Fuel sampling/analysis for sulfur content. ~~Sampling and analysis to determine sulfur content will be conducted as follows: *See Table 1.*~~ If the CEMS ceases to operate, begin collecting representative, uncalcined and calcined coke samples within one hour of the CEMS failure to operate. Sample collection of uncalcined and calcined coke samples can end when the CEMS returns to operation. Develop daily composite uncalcined and calcined sample. Calculate S emissions using mass balance equation: (%S dry feed x tons of dry feed)-(%S dry product x tons of dry product) = Tons S emissions. Calculate SO2 emissions: Tons S x 2 = Tons of SO2. Calculate daily average SO2 emissions concentration in ppm SO2.

3. Compliance Range: Based upon CEMS output for each kiln/incinerator and, if CEMS is not functioning, based on coke sampling and material balance. ~~annual stack test results and any required daily average SO_2 concentration mass balance calculations.~~

4. Operation of equipment: Operate the CEMS for each kiln/incinerator stack at all times during the calcining process for each kiln. ~~automatic sampler on BC61 prior to Green Coke Silo 6 (GSC-6)~~.

5. Response Plan. When ~~data from daily average SO_2 calculations~~ the CEMS indicates that the SO_2 emissions are within 99% of the 2000 ppm emissions limit, sulfur fed to the kiln will be reduced as necessary to bring the estimated emissions to 97% of the 2000 ppm limit.

6. Reporting. In accordance with 45CSR10A (effective 1/25/02), Section 7.2.~~b.~~ a. ~~Non-~~CEMS ~~Based Monitoring~~, the facility will submit ~~any required reports~~ the "CEMS Summary Report" and/or a "CEMS Excursion and Monitoring System Performance Report" to the Secretary on a quarterly basis, to the extent required under paragraphs 7.2.~~b.~~ a.1. through 7.2.~~b.~~ a.4. All reports shall be postmarked ~~by the thirtieth (30th) day~~ no later than forty-five (45) days following the end of each calendar quarter.

~~SO_2 EMISSIONS MONITORING PLAN~~

		~~*Method*~~	~~*Frequency*~~	~~*Records*~~
~~Anode Coke~~	~~Mass balance analysis based on:~~	~~• Feedstock sulfur content will be based upon supplier sulfur content data and CH product specifications for each Anode Coke product blend.~~ ~~• Sulfur feed to kiln calculated for each run based on blend of cokes in the run.~~ ~~• Sulfur content of product analyzed using the ASTM XRF method for petroleum coke.~~	~~• A Stack Test Results Table will be developed after the initial stack test and modified after the yearly compliance test. The Stack Test Results Table will give us the stack concentration of SO_2 for each Anode Coke product stack test completed, along with feed rate and sulfur content of green coke and product coke during the stack test.~~ ~~• This Stack Test Results Table will demonstrate when average SO_2 emissions from stack testing for a particular Anode Coke product blend exceeds 75% of the 2000 ppm limit. When this 75% triggering threshold is reached, daily mass balance analysis is required for each production run of that Anode Coke product as described below.~~ ~~• For any new Anode Coke product blend produced at the plant, CH will obtain the average emitted SO_2 concentration in the next scheduled annual stack test, and will then update the Stack Test Results Table with those stack test results for the new product blend.~~	~~• The Stack Test Results Table developed after the initial stack test will be retained for a period of 5 years, and will be updated with each annual stack test.~~
	~~When mass balance is not needed:~~		~~• Each Anode Coke product blend with average stack test results demonstrating average SO_2 concentration below 75% of the 2000 ppm limit does not require mass balance calculations.~~	~~• The stack test results demonstrating average SO_2 concentration for each Anode Coke product blend will be maintained for a period of 5 years. Notation on this form that the Sulfur concentration for the Anode Coke product blend did or did not exceed the 75% trigger based on the average of all stack test results for that Anode Coke product blend during the past five years.~~
	~~When mass balance calculations are needed:~~	~~using standard mass balance equations~~ ~~• $Sulfur_{in} - Sulfur_{out} = Sulfur_{stack}$~~ ~~($\%S_{dry}$ feed * feed $tons_{dry}$ – $\%S_{dry}$ product * product $tons_{dry}$ = Tons S)~~ ~~• Tons S * 2 = Tons SO_2~~ ~~• Tons SO_2/ACF = PPM~~	~~• Daily mass balance analysis conducted when average SO2 emissions from an Anode Coke product blend exceeds 75% of the standard.~~ ~~• Analyzed during normal Lab operating hours.~~ ~~• Daily composite taken.~~ ~~• Calculation on a daily (or run) basis after lab analysisi for Sulfur and Moisture are finalized.~~	~~• Mass balance calculations will be retained for a period of 5 years.~~
~~Shot Coke~~	~~Mass balance analysis based on:~~	~~• Kiln feed sulfur content will be analyzed using the ASTM XRF method for petroleum coke.~~ ~~• Daily composite analysis of green and calcined coke (or by run if run changes during the day)~~ ~~• Samples taken by shift with multiple portions taken per shift~~ ~~• Sulfur content of product measured analyzed using the ASTM XRF method for petroleum coke.~~	~~• Daily composite taken~~ ~~• Analyzed during normal Lab operating hours.~~	
	~~Daily average SO_2 concentrations calculated~~	~~using standard mass balance equations~~ ~~• $Sulfur_{in} - Sulfur_{out} = Sulfur_{stack}$~~ ~~($\%S_{dry}$ feed * feed $tons_{dry}$ – $\%S_{dry}$ product * product $tons_{dry}$ = Tons S)~~ ~~• Tons S * 2 = Tons SO_2~~ ~~• Tons SO_2/ACF = PPM~~	~~• Calculation on a daily (or run) basis after lab analysis for Sulfur and Moisture are finalized.~~	~~• Mass balance calculations will be retained for a period of 5 years.~~
	~~Response to high SO_2 emissions~~	~~• When the average daily SO_2 concentration equals 99% of the SO_2 limit the sulfur fed to the unit will be reduced to bring the estimated average daily SO_2 concentration to below 97% of the standard.~~	~~• As needed~~	

~~Other Feed Stocks~~		~~• Other feedstocks that may become available will be evaluated for the potential to produce SO_2~~ ~~• based on the evaluation, either the anode or the shot coke plan will be used.~~	~~• As needed~~	~~• Retained for 5 years.~~
~~Other~~	~~Scales~~		~~• As required in the ISO 9000 Plan~~	~~• Retained for 5 years.~~
	~~XRay fluorescence unit~~	~~• Calibration curves generated.~~ ~~• Control charts maintained.~~	~~• Calibrated as required in the ISO 9000 plan~~ ~~• Control charts run on samples as required in the ISO 9000 Plan.~~	~~• Calibration and QA/QC documentation retained for 5 years.~~
	~~Air flows calculation~~	~~• CIMP or a similar program will be used to calculate air flows.~~	~~• Daily for shot coke and when needed to do a mass balance calculation on anode~~	~~• Records of the calculations will be retained for 5 years.~~

ATTACHMENT B

Daily throughput of green coke into facility

Month_____ Year_____

Day	Throughput (Tons)[1]	Initials[2]
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
Total		

Note: [1]Maximum permitted throughput is and 1,761,000 TPY.
[2]At the conclusion of filling in the required information each entry must be initialed by the individual entering the information

Rolling Yearly Total_____ tons

* The Certification of Data Accuracy statement on the reverse side of this form must be completed and signed by a responsible official within fifteen (15) days after the end of the calender month. This record shall be maintained on site for a period of five (5) years for the date of certification. It shall be made available, upon request, to the Chief or his/her authorized representative.

ATTACHMENT C

Daily throughput of calcined coke into facility

Month_____ Year_____

Day	Throughput (Tons)[1]	Initials[2]
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
Total		

Note: [1]Maximum permitted throughput is and 432,500 TPY.
[2]At the conclusion of filling in the required information each entry must be initialed by the individual entering the information

Rolling Yearly Total_____ tons

* The Certification of Data Accuracy statement on the reverse side of this form must be completed and signed by a responsible official within fifteen (15) days after the end of the calender month. This record shall be maintained on site for a period of five (5) years for the date of certification. It shall be made available, upon request, to the Chief or his/her authorized representative.