



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

September 23, 2015

CERTIFIED MAIL

91 7199 9991 7034 1378 6201

Mr. Lawrence R. Hermes
Vice President and CFO
Mountain State Carbon, LLC
1851 Main Street
Follansbee, WV 26037

Re: Mountain State Carbon, LLC
Follansbee Coke Plant
Permit No. R13-1939B
Plant ID No. 009-00002

Dear Mr. Hermes:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R13-1939B is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

In accordance with 45CSR30- Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

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.

Promoting a healthy environment.

Permit Cover Letter to Mr. Hermes
September 23, 2015
Page 2 of 2

Should you have any questions or comments, please contact me at (304) 926-0499,
extension 1214.

Sincerely,



Edward S. Andrews, P.E.
Engineer

Enclosures

c: WVDEP - Division of Air Quality, NRPO
Patrick Smith, Environmental Manager

West Virginia Department of Environmental Protection
Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Administratively Update



R13-1939B

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

**Mountain State Carbon LLC
Follansbee Coke Plant
009-00002**

A handwritten signature in blue ink, appearing to read "William F. Durham", written over a horizontal line.

William F. Durham
Director

Issued: September 23, 2015

This permit will supercede and replace Permit R13-1939A.

Facility Location: 1851 Main Street (State Route 2)
Follansbee, Brooke County, West Virginia

Mailing Address: P.O. Box 670
Follansbee, WV 26037

Facility Description: Metallurgical Coke Manufacturing Plant

NAICS Codes: 324199

UTM Coordinates: 553.4 km Easting • 4,465.8 km Northing • Zone 17

Permit Type: Class II Administrative Update

Description of Change: This action is to insert the term “block” average for the Rule 10 hydrogen sulfide limit and replace the term “thermal oxidizer” with “flare”.

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.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

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APPENDIX A

APPENDIX B

CERTIFICATION OF DATA ACCURACY

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
P024-1	Stack 14	Excess Coke Oven Gas (COG) Flare	1993		None
P017	Stack 11	Boiler #6	1951	90 MMBtu/hr	None
P018	Stack 12	Boiler #7	1951	90 MMBtu/hr	None

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.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{2.5}	Particulate Matter less than 2.5 µm in diameter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10µm in diameter
CO	Carbon Monoxide	Ppb	Pounds per Batch
C.S.R. or CSR	Codes of State Rules	Pph	Pounds per Hour
DAQ	Division of Air Quality	Ppm	Parts per Million
DEP	Department of Environmental Protection	Ppm_v or ppmv	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	Psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/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
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

2.4. Term and Renewal

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-1939A. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-1939, R13-1939A, R13-1939B, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]
- 2.5.2. 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;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

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 administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records 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.

2.7. Duty to Supplement and Correct Information

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.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

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; and
- 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.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable 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.

- 2.12.2. 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 Section 2.12.3 are met.
- 2.12.3. 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. 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 must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should 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.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

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

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

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 defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency 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, suffer, allow or permit 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.
[40CFR§61.145(b) and 45CSR§34]
- 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. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **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.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as 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. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- 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 sixty (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; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

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

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support

information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

- 3.4.2. **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§4. *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.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** 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, or mailed first class 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
Charleston, WV 25304-2345

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. Operating Fee

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. Maximum emissions to the atmosphere from the Excess COG Flare (Emission Point Stack 14) shall not exceed the following limits:

Pollutant	Hourly Emissions (lb/hr)	Maximum Hourly Emissions during the Desulfurization Outage (lb/hr)	Annual Emissions* (tpy)
Carbon Monoxide	62.2	62.2	273.3
Nitrogen Oxides	11.4	11.4	50.1
Particulate Matter	2.0	2.0	8.8
PM-10	2.0	2.0	8.8
Sulfur Dioxide	39.8	396*	294.0
Volatile Organic Compounds	23.5	23.5	103.0

* Annual Emission accounts for the desulfurization unit being down 672 hours per year for schedule maintenance and maximum hydrogen sulfide concentration of 479 grains per 100 cu. ft. of COG.

4.1.2. For the purposes of maintaining compliance with the annual emission limits in Condition 4.1.1, the daily flow rate of COG to the excess COG flare (Emission Point Stack 14) shall not exceed 7.1 MM standard cubic feet per day over a thirty day rolling average. The permittee shall keep daily records of flow rate of COG to the flare and correct the measured flow rate to a standard temperature of 68°F. Compliance shall be determined using a thirty day rolling average.

4.1.3. Maximum sulfur dioxide emissions to the atmosphere from boilers #6, and #7 (Emission Point) shall not exceed the following limits:

	Boiler #6	Boiler #7
Hourly SO ₂ Rate (lb/hr)	20.4	20.4
Hourly SO ₂ Rate during Desulfurization Outage (lb/hr)	203.1*	203.1*
Annual SO ₂ Rate* (TPY)	150.7	150.7

* Annual Emission accounts for the desulfurization unit being down 672 hours per year for schedule maintenance and maximum hydrogen sulfide concentration of 479 grains per 100 cu. ft. of COG.

4.1.4. The boilers #5, #6, and #7 shall only combust COG.

4.1.5. For the purposes of maintaining compliance with the sulfur dioxide emission limits in Conditions 4.1.1. and 4.1.3., the hydrogen sulfide concentration level in the COG stream from the by-products plant shall not exceed 50 grains of hydrogen sulfide per one hundred (100) cubic feet of COG except as noted in Condition 4.1.6. Compliance with the allowable hydrogen sulfide concentration level shall be based on three (3) hour averaging periods.

- 4.1.6. For the purpose of maintaining compliance with the sulfur dioxide emission limits in Conditions 4.1.1 and 4.1.3, while the desulfurization unit is down for scheduled maintenance, the permittee shall calculate and record the hourly sulfur dioxide emission rate of the flare and Boilers #6 and #7 over a 24-hour period using the recorded mean hydrogen sulfide concentration level and the recorded standard flow rate for the respective day. Such records shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
- 4.1.7. The permittee shall be limited to a maximum of twenty-eight (28) days in any calendar year for planned maintenance outages of the desulfurization unit in the coke by-products recovery plant. No single scheduled outage period shall extend beyond 336 hours. The start of a planned maintenance shall begin at the time of the first hour of a three-hour block average concentration that is greater than 50 grains of H₂S/100 cubic feet of COG. The planned maintenance shall be concluded when at the time of the first hour of a three-hour block average concentration that is less than or equal to 50 grains of H₂S/100 cubic feet of COG.
- 4.1.8. The permittee shall notify the Director in writing thirty (30) days prior to undertaking any planned maintenance outage of the desulfurization unit. Such notice shall include, at a minimum, a detailed explanation of each and every maintenance and/or repair activity intended to be undertaken and a schedule for completion of each such activity, as well as evidence of compliance with the Conditions 4.1.9. and 4.1.10.
- 4.1.9. The permittee shall select the period for the planned maintenance outage that would prevent to the greatest extent practicable any violation of the National Ambient Air Quality Standard ("NAAQS") for sulfur dioxide, utilizing, at a minimum, air quality dispersion modeling to determine what periods represent the most favorable dispersion of excess sulfur dioxide emissions. To ensure maintenance of the 24-hour NAAQS for SO₂, a modeling target for SO₂ concentration for the high 24-hour value of 265 µg/m³ shall be used to provide a margin of 100 µg/m³ for other source impacts within the immediate vicinity of this facility.
- 4.1.10. Prior to any planned maintenance outage of the desulfurization unit, the permittee shall prepare and submit a SO₂ mitigation plan to the Director outlining what measures the permittee will employ during the outage to ensure continued attainment of the NAAQS. This plan shall include the employment of all feasible control measures and process changes at the Follansbee Facility to reduce SO₂ emissions from the Follansbee Facility, including, but not limited to reduction of the coke production rate at the Coke Oven Batteries #1, #2, #3 and #8.
- 4.1.11. No later than thirty (30) days after completing a planned maintenance outage of the desulfurization unit, the permittee shall submit a report identifying the sulfur dioxide impacts associated with the planned maintenance outage of the desulfurization unit. This report shall include any deviation of the SO₂ mitigation plan that was submitted for the respective outage period.
- 4.1.12. Visible emissions from the excess COG flare (Emission Point Stack 14) shall not exceed twenty percent (20%) opacity except upon the first eight (8) minutes of starting the flare then the visible emissions from this emission point shall not exceed forty percent (40%) opacity for this time period. The permittee shall demonstrate compliance with this condition by taking visual observations using U.S. EPA Method 22 once a month. Should the permittee observe visible emissions from the flare using Method 22, then the permittee shall conduct an additional observation within 24-hours of the Method 22 using U.S. EPA Method 9 to determine the opacity of the visible emissions being emitted from the flare.
- 4.1.13. The Sinter Plant shall not be operated by the permittee unless the permittee obtain the proper permit from the Director prior to restarting the Sinter Plant.

- 4.1.14. The permittee shall operate and maintain a continuous hydrogen sulfide monitor and recorder for the purpose of monitoring the hydrogen sulfide concentration of the sweetened COG before being routed to any combustion unit or source utilizing COG. This monitor shall be install and maintain in accordance with Performance Specification 7-Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring System in Stationary Sources of Appendix B of 40CFR60. The permittee shall develop and implement quality assurance measures and procedures in ensure the accuracy of this monitor in accordance with Appendix F to Part 60-Quality Assurance Procedures of Chapter 40 of the Code of Federal Regulations. Such records of the measurements and calibration reports shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
- 4.1.15. The permittee shall maintain in accordance with the manufacture's instructions flow-measuring devices for the purpose of measuring and recording the amount of COG consumed by the excess COG flare and Boilers #6 and #7. The permittee shall keep daily records of the amount of COG consumed by the above mentioned units. Such records shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
- 4.1.16. The permittee shall maintain the automatic re-ignition system in accordance with the manufacture's specifications.
- 4.1.17. The permittee shall not vent any un-combusted COG into the open atmosphere through excess COG flare (Emission Point Stack 14). The permittee shall record the date and time of an event when the flare was not in operation and COG was being emitted to the atmosphere at Emission Point Stack 14. The permittee shall submit a report explaining this event and measures the permittee is taking to prevent the event from re-occurring. Such records shall be maintained on site for a period of at least five years and be made available to the Director or his/her duly authorized representative upon request.
- 4.1.18. By no later than ninety (90) days after issuance of this permit, the permittee shall continuously maintain a system around this permitted facility to prevent the general public from accessing the facility.
- 4.1.19. Compliance with the allowable emission limits stated in Condition 4.1.1 of this permit shall be calculated using the appropriate amount of COG combustion by the excess COG flare on a volumetric basis, higher heat value of 568 Btu/cu. ft. for COG, and the following factors: Carbon Monoxide (0.37 lb/MM Btu), Nitrogen oxides (0.068 lb/MM Btu),Particulate Matter (0.012 lb/MM Btu) Particulate Matter 10 microns (0.012 lb/MM Btu), Volatile Organic Compounds (0.14 lb/MM Btu). The permittee shall determine the amount of each pollutant emitted on monthly basis using the above mention information and appropriate engineering calculations. The permittee shall keep a 12 month rolling total for each of above mention pollutants.
- 4.1.20. The following condition only applies when the permittee is conducting a approved planned maintenance outage as permitted in Condition 4.1.8 of this permit. In the event of unforeseen circumstance beyond the control of the permittee, the permittee may exceedance the SO2 emission limit for the flare as stated in A.1 of this permit in order to prevent a anticipated excursion of the SO2 NAAQS from occurring in the local area, which include the city of Weirton, WV. The permittee shall document in the Desulfurization System Outage Report the unforeseen circumstances, SO2 emissions rate calculation, and modeling results to document the necessity of the temporary increase in the flare's SO2 allowable emissions rate.
- 4.1.21. Boiler #5 (Emission Point ID S11) shall not be operated unless the permittee obtain the proper permit from the Director prior to restarting the boiler.
- 4.1.22. The permittee shall fire only natural gas at coke plant boiler #8 (Emission Point ID S11), unless an applicable permit is obtained from the Director.

- 4.1.23. Sulfur dioxide emissions from pushing at Coke Oven Batteries #1, #2 and #3 shall not exceed 10.48 pounds per hour (Emission Point S05).
- 4.1.24. Sulfur dioxide emissions from pushing at Coke Oven Battery #8 shall not exceed 15.72 pounds per hour (Emission Point S06).
- 4.1.25. Compliance with the allowable emission limits stated in Conditions 4.1.23. and 4.1.24. of this permit shall be calculated using a emission factor of 0.1078 pounds per tons of coal charged and multiplied by the hourly average tons of coal charged to the batteries each month.
- 4.1.26. The pertinent section of 45CSR4 applicable to this facility includes, but is not limited to, the following:
- §45-4.3.1.
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.
- 4.1.27. The pertinent sections of 45CSR6 applicable to this facility include, but are not limited to, the following:
- §45-6.4.6.
Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
- 4.1.28. The pertinent sections of 45CSR10 applicable to this facility include, but are not limited to, the following:
- §45-10-5.2.
Any owner or operator of a by-product coke production facility in existence on the effective date of this rule who can demonstrate to the Director that there is no practical alternative to scheduled maintenance (including shutdown) of desulfurization equipment may request the approval of an enforceable, temporary sulfur dioxide emissions control and mitigation plan for such maintenance period. In order for a plan under this paragraph to be approved the plan must meet the following conditions:
- 5.2.b.
Provide for a definitive reduction in sulfur dioxide emissions by the establishment of unit-specific allowable emission rates for all emissions units of the stationary source sufficient to prevent any violation of federal and state ambient air quality standards or applicable air quality increments for sulfur dioxide.
- 5.2.c.
Provide that system down-time and excess sulfur dioxide emissions be reduced to the greatest extent possible by use of increased or contract maintenance personnel, maximized maintenance labor shifts and optimization of available spare parts inventories.
- 5.2.g.
Provide for annual review, if necessary, modification or termination of the plan by the Director.
- 5.2.h.
Provide that the Director may impose limitations on emission units that are more restrictive than those provided for in the plan as necessary to assure attainment of air quality standards for sulfur dioxide in light of data provided pursuant to subdivision 5.2.f, or any other information available to the Director.

§45-10-5.3.

The Director shall, in making a determination concerning plan modification or termination, review the plant's compliance history and records to determine whether the plan has prevented or minimized, to the extent feasible, desulfurization system outages and excess emissions. The initial approval of the plan and any modification of the plan shall be accomplished as a revision to the State Implementation Plan.

§45-10-9.1.

Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

- 4.1.29. **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.]

4.2. Monitoring Requirements

- 4.2.1. The permittee shall maintain records of tons of coal charged to each of the coke oven batteries to be used in determining compliance with the requirements set forth in Conditions 4.1.23. and 4.1.24. of this permit. Records shall be expressed in tons of coal charged per day and be total at the end of each month. The permittee shall maintain these records for a period of 5 years.

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** 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.

- 4.4.2. **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.
- 4.4.3. **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.

4.5. Reporting Requirements

- 4.5.1. The permittee shall review and determine on a monthly basis if there were any exceedance of the conditions set forth under Section 4.1. of this permit. Should the permittee determine that an exceedance occurred, then the permittee shall submit a written report describing what was exceedance and what measures the permittee is taken to prevent the exceedance from re-occurring.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.