Division of Air Quality
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West Virginia Department of Environmental Protection

Bob Wise
Governor

Stephane R. Timmermeyer
Cabinet Secretary

PERMIT TO ADMINISTRATIVE UPDATE
AN BY-PRODUCTS COKE PLANT

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (W. Va. Code §§22-5-1 et seq.), AND REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT, SUBJECT TO THE TERMS AND CONDITIONS OF THIS PERMIT, THE SOURCE DESCRIBED BELOW.

This permit will supersede and replace Permit R13-1939 issued on March 31, 2003.

Name of Permittee:	Wheeling-Pittsburgh Steel Corporation
Name of Facility:	Follansbee Coke Plant
Permit No.:	R13-1939A
Plant ID No.:	009-00002
Effective Date of Permit:	August 19, 2003
Permit Writer:	Edward Andrews
Facility Mailing Address:	P.O. Box 670, Main Street Follansbee, WV 26037
County:	Brooke
Nearest City or Town:	Follansbee
UTM Coordinates:	Easting: 533.9 km Northing: 4464.6 km Zone: 17
Directions to Exact Location:	Approximately one mile north of Follansbee, WV on WV State Route 2.
Type of Facility or Modification:	This update is incorporate voluntary emission limitations into Permit R13-1939

THE SOURCE IS SUBJECT TO 45CSR30. THE PERMITTEE HAS THE DUTY TO UPDATE THE FACILITY'S TITLE V (45CSR30) APPLICATION TO REFLECT THE CHANGES PERMITTED HEREIN.

IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS, THIS PERMIT IS LIMITED AS FOLLOWS:

A. SPECIFIC REQUIREMENTS

1. Maximum emissions to the atmosphere from the Excess COG Flare (Emission Point 1EF) 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.

2. For the purposes of maintaining compliance with the annual emission limits in **SPECIFIC REQUIREMENT A.1**, the daily flow rate of COG to the excess COG flare (Emission Point 1EF) 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^{0}F. Compliance shall be determine using a the thirty day rolling average.

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

5. For the purposes of maintaining compliance with the sulfur dioxide emission limits in **SPECIFIC REQUIREMENT A.1** and **A.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 **SPECIFIC REQUIREMENT A.6**. Compliance with the allowable hydrogen sulfide concentration level shall be based on three (3) hour averaging periods.

6. For the purpose of maintaining compliance with the sulfur dioxide emission limits in **SPECIFIC REQUIREMENT A.1** and **A.3** while the desulfurization unit is down for scheduled maintenance, the permittee shall calculate and recorded 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.

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 a of three-hour average concentration that is greater than 50 grains of H_2S/100 cubic feet of COG. The planned maintenance shall be concluded when at the time of the first hour of a three-hour average concentration that is less than or equal to 50 grains of H_2S/100 cubic feet of COG.

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 **SPECIFIC REQUIREMENT A.9** and **A.10**.

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 SO_2, a modeling target for SO_2 concentration for the high 24-hour value of 265 $\mu g/m^3$ shall be used to provide a margin of 100 $\mu g/m^3$ for other source impacts within the immediate vicinity of this facility.

10. Prior to any planned maintenance outage of the desulfurization unit, the permittee shall prepare and submit a SO_2 mitigation plan to the Director outlining

what measures the permittee will employment 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 SO_2 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.

11. No latter 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 SO_2 mitigation plan that was submitted for the respective outage period.

12. Visible emissions from the excess COG flare (Emission Point 1EF) shall not exceed twenty percent (20%) opacity except upon the first eight (8) minutes of starting the thermal oxidizer then the visible emissions from this emission point shall not exceed forty percent (40%) opacity for this time period. The permittee shall demonstration 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 a additional observation with 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.

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.

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.

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.

16. The permittee shall maintain the automatic re-ignition system in accordance with the manufacture's specifications.

17. The permittee shall not vent any un-combusted COG into the open atmosphere through excess COG flare (Emission Point 1EF). 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 1EF. 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.

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.

19. Compliance with the allowable emission limits stated in **SPECIFIC REQUIREMENTS A.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.

20. The following condition only applies when the permittee is conducting a approved planned maintenance outage as permitted in **SPECIFIC REQUIREMENT A.8** of this permit. In the event of unforeseen circumstance beyond the control of the permittee, the permittee may exceedance the SO_2 emission limit for the flare as stated in A.1 of this permit in order to prevent a anticipated excursion of the SO_2 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, SO_2 emissions rate calculation, and modeling results to document the necessity of the temporary increase in the flare's SO_2 allowable emissions rate.

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.

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.

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).

24. Sulfur dioxide emissions from pushing at Coke Oven Battery #8 shall not exceed 15.72 pounds per hour (Emission Point S06).

25. Compliance with the allowable emission limits stated in **SPECIFIC REQUIREMENTS A.23 and A.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.

B. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of 45CSR4, 45CSR6, 45CSR10, 45CSR13, 45CSR14, and 45CSR30, provided that the permittee shall comply with any more stringent requirements as may be forth under **SPECIFIC REQUIREMENTS**, Section (A) of this permit.

2. The pertinent section of 45CSR4 applicable to this facility include, but are 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.

3. 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. 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.

5. 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 **Specific Requirements A.23 and A.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.

6. All records required by this permit must be signed by a 'Responsible Official" within fifteen (15) working days after the end of the calendar month utilizing the CERTIFICATION OF DATA ACCURACY statement (See Attachment A) which is to be attached to, or copied to the reverse side of each reporting form or will reference the data files stored on electronic media.

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

8. All reports required under the terms and conditions of this permit shall be forwarded to:

Director WV DEP Division of Air Quality 7012 MacCorkle Ave., SE Charleston, WV 25304-2943	And	WV DEP Division of Air Quality NPRO 1911 Warwood Avenue Wheeling, WV 26003

9. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

§45-13-6.1
At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance.

§45-13-10.2
The Secretary may suspend or revoke a permit if, after six (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the permit.

§45-13-10.3
The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the

provisions of W.Va Code § 22-5-5 to show cause why the permit should not be suspended, modified or revoked.

C. GENERAL REQUIREMENTS

1. In accordance with 45CSR30 - "Operating Permit Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first filing a Certified Emissions Statement (CES) and paying the appropriate fee. Such Certified Emissions Statement (CES) shall be filed and the appropriate fee paid annually. 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.

2. 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.

3. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-1939A, R13-1939 and any 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.

4. At such reasonable time(s) as the Secretary may designate, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in the permit application and/or applicable regulations. Test(s) shall be conducted in such a manner as the Secretary may specify or approve and shall be filed in a manner acceptable to the Secretary. The Secretary, or his/her duly authorized representative, may at his option witness or conduct such test. Should the Secretary exercise his option to conduct such test(s), the permittee shall provide all the 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. For any tests to be conducted by the permittee, a test protocol shall be submitted to the DAQ by the permittee at least thirty (30) days prior to the test and shall be approved by the Secretary. The Secretary shall be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.

5. In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations, either in whole or in part, 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.

6. 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.

7. This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.

8. 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.

9. At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous calendar 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 submittal frequency other than on an annual basis.

ISSUED BY: _____

JOHN A. BENEDICT, DIRECTOR
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

DATE SIGNED: August 19, 2003

ATTACHMENT A

CERTIFICATION OF DATA ACCURACY

CERTIFICATION OF DATA ACCURACY

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

Name (Type or Print): _____

Signature[1]: _____

Title: _____

Date: _____

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 Chief;

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.