



Division of Air Quality

7012 MacCorkle Avenue, SE

Charleston, WV 25304-2943

Telephone Number: (304) 926-3647

Fax Number: (304) 926-3739

West Virginia Department of Environmental Protection

Bob Wise
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

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OFFICE OF AIR QUALITY
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WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
7012 MacCorkle Avenue, S.E.
Charleston, WV 25304

CO-SIP-C-2003-28
Plant ID# 029-00001

v.
WEIRTON STEEL CORPORATION
c/o Mark Vignovic
Director, Environmental Control
400 Three Springs Drive
Weirton, WV 26062

CONSENT ORDER

I. AUTHORITY

This Consent Order is entered into under the authority and direction of West Virginia Code § 22-1-7 and -8 and West Virginia Code § 22-5-4 which authorizes the Chief of the Office of Air Quality, now Director of the Division of Air Quality ("DAQ"), acting on behalf of the Director of the Division of Environmental Protection, now the Secretary of the Department of Environmental Protection ("DEP"), to enter Orders requiring compliance with the provisions of the West Virginia Air Pollution Control Act to regulate and control air pollution in the State of West Virginia.

II. FINDINGS OF FACT

1. Weirton Steel Corporation, hereinafter referred to as the "Company," and the DEP agree to the following Findings of Fact for the purposes of this Consent Order:
2. The Company owns and operates an integrated steel-making facility ("Facility") located in Weirton, Hancock County, West Virginia. Sulfur dioxide ("SO₂") is emitted from several emission sources at the Facility, mainly from the oil-fired boilers.
3. (a) In 1978, the New Manchester-Grant Magisterial District of Hancock County was designated by the United States Environmental Protection Agency ("EPA") as a non-attainment area with respect to the National Ambient Air Quality Standards



West Virginia Department
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"Promoting a healthy environment."

("NAAQS" for SO₂ pursuant to section 107 of the federal Clean Air Act as amended in 1977. Upon passage of the Clean Air Act Amendments of 1990, the New Manchester-Grant Magisterial District, by operation of law, was considered to be a non-attainment area with respect to the SO₂ NAAQS.

- (b) The Company and DEP entered into a Consent Order on January 10, 1995 ("1995 Consent Order") to address the SO₂ non-attainment issue with respect to the New Manchester-Grant Magisterial District. The EPA approved the 1995 Consent Order as part of the West Virginia State Implementation Plan ("SIP") on November 27, 1996 (61 Fed. Reg. 60191).
4. (a) EPA designated the remaining portion of Hancock County, consisting of Clay and Butler Magisterial Districts, as a non-attainment area for the SO₂ NAAQS on December 21, 1993. *See* 58 Fed. Reg. 67334 (December 21, 1993).
 - (b) Results of dispersion modeling runs historically have shown non-attainment with the SO₂ NAAQS in the Clay and Butler Magisterial Districts.
 - (c) Ambient air quality monitors have not shown an exceedance of the SO₂ NAAQS in the Clay or Butler Magisterial Districts since at least the 1995 Consent Order.
 - (d) Additional restrictions beyond those imposed in the 1995 Consent Order will ensure that attainment with the SO₂ NAAQS in the Clay and Butler Magisterial Districts can be modeled.
 - (e) Dispersion modeling runs utilizing inputs based on the compliance provisions of this Consent Order demonstrate attainment of the SO₂ NAAQS.
5. The Company and DEP have developed and entered this Consent Order to establish SO₂ control requirements applicable to the Company sufficient to prevent violations of the SO₂ NAAQS within the Clay and Butler Magisterial Districts. The control requirements of this Consent Order are as stringent as, or more stringent than, those contained in the 1995 Consent Order addressing the New Manchester-Grant Magisterial District.
 6. The DEP shall submit this Consent Order upon entry to the EPA and request its incorporation into the West Virginia SIP for the purpose of federal enforceability and to carry out its responsibility under the West Virginia Code and the federal Clean Air Act.

III. CONCLUSIONS OF LAW

1. The DEP's Division of Air Quality ("DAQ") is the agency empowered and authorized to regulate and control pollution of the air in the State of West Virginia under the supervision of the Secretary of the DEP as provided in W Va. Code §22-1-7(3) and W. Va. Code §§22-5-1 *et seq.*
2. In developing and entering this Consent Order, the DAQ has acted in accordance with West Virginia law and the rules that it administers.
3. The DAQ has provided notice and opportunity for public comment and a hearing in accordance with the West Virginia Code and the federal Clean Air Act, as amended.

IV. COMPLIANCE PROGRAM

1. The Company shall comply with all applicable provisions of 45 CSR 10 - "To Prevent and Control Air Pollution from the Emission of Sulfur Oxides" and 45 CSR 10A - "Testing, Monitoring, Recordkeeping and Reporting Requirements under 45CSR10" along with any more stringent limitations or requirements as set forth in this Consent Order.
2. The Company agrees that at all times, including periods of start-up, shutdown, and malfunction, that it will, to the extent practicable, maintain and operate all sources of SO₂ emissions, including any associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.
3. On and after the date upon which this Consent Order becomes effective, the Company agrees to comply with the following SO₂ control requirements:
 - (a) The Sinter Plant shall not be operated by the Company.
 - (b) High Pressure Boilers 1 and 2 shall not be operated by the Company.
 - (c) Low Pressure Boilers LP1, LP2, LP3, LP4, and LP15 shall not be operated by the Company.
 - (d) Coal shall not be fired at any boiler operated by the Company.
 - (e)
 - (1) SO₂ emissions from High Pressure Boilers 3, 4, and 5 shall be limited by restricting the firing of fuel oil to a rate dependent upon the sulfur content of the fuel oil fired as described in Appendix A to this Consent Order. The allowable fuel oil firing rate shall be the 3-hour block average derived from Appendix A expressed in total gallons of fuel oil fired at High Pressure Boilers 3, 4, and 5 over a 3-hour block period.
 - (2) The percentage of sulfur contained in the fuel oil purchased to be fired at the company's high pressure boilers shall not exceed 3%.
 - (3) Total fuel oil and sulfur content fired at boilers 3,4, and 5 shall be limited to the product of (gpm)*(%S) being less than or equal to the emission factor of 91.7 as per the curve shown in Appendix A of this Consent Order.
 - (f) The BOP Waste Heat Boiler shall be pre-heated using steam sparging. Fuel fired at the Waste Heat Boiler shall be limited to Natural Gas, Mixed Gas or steel making process gas.
 - (g) Foster Wheeler Boilers #101 & #102 shall have a combined limit of 109.73 lbs. per hour of SO₂ as determined by fuel usage and emission factor(s) for SO₂ (as determined pursuant to Section V.6 for blast furnace gas, AP-42 factors, or other emission factor(s) approved by the DEP). These boilers shall be limited to firing

only blast furnace gas, natural gas, and mixed gas (comprised of approximately 70% natural gas and 30% air).

- (h) Hot Mill Reheat Furnaces, Hydrochloric Acid Regeneration Plant combustion sources, and Annealing Furnaces shall be limited to firing only natural gas and mixed gas (comprised of approximately 70% natural gas and 30% air).
- (i) Blast Furnaces designated #2 and #3 shall not recommence operation.
- (j) Blast Furnace #1 Stoves shall be limited to 60.1 lbs. per hour of SO₂ as determined by fuel usage and emission factor(s) for SO₂ (as determined pursuant to Section V.6. for blast furnace gas, AP-42 factors, or other emission factor(s) approved by the DEP).
- (k) Blast Furnace #1 Flare shall be limited to 42.1 lbs. per hour of SO₂ as determined by fuel usage and emission factor(s) for SO₂ (as determined pursuant to Section V.6. for blast furnace gas, AP-42 factors, or other emission factor(s) approved by the DEP).
- (l) Blast Furnace #4 Stoves shall be limited to 60.1 lbs. per hour of SO₂ as determined by fuel usage and emission factor(s) for SO₂ (as determined pursuant to Section V.6. for blast furnace gas, AP-42 factors, or other emission factor(s) approved by the DEP).
- (m) Blast Furnace #4 Flare shall be limited to 42.1 lbs. per hour of SO₂ as determined by fuel usage and emission factor(s) for SO₂ (as determined pursuant to Section V.6. for blast furnace gas, AP-42 factors, or other emission factor(s) approved by the DEP).
- (n) Slag granulator shall be limited to 50 lbs. per hour of SO₂.

V. COMPLIANCE MONITORING, RECORDKEEPING, AND REPORTING

1. The Company shall monitor and record the total number of gallons of fuel oil fired at High Pressure Boilers 3, 4, and 5 over every 3-hour block time period. The Company shall maintain records of the fuel oil usage for a period of 5 years and make such records available to DEP upon request.
2. The Company shall require offsite suppliers of fuel oil to provide a copy of a fuel oil analysis certification from the supplier for each shipment of fuel oil received. Copies of such certifications shall be maintained by the Company for a period of 5 years and made available to the DEP upon request.
3. The Company shall conduct fuel oil analysis in accordance with American Society for Testing and Materials ("ASTM") approved procedures and test methods to determine the sulfur content of the fuel oil fired at High Pressure Boilers 3, 4, and 5. The fuel oil analysis will be conducted each time the "as burned" fuel oil sulfur content is reasonably expected to change by virtue of any addition of oil to the day tank used to circulate the oil to the burners. Fuel oil analysis shall be conducted at a minimum once per calendar

quarter unless fuel oil is not fired for the reporting quarter. The Company shall maintain records of the fuel analyses for a period of 5 years and make such records available to DEP upon request.

The Company shall monitor and record the amount of natural gas, blast furnace gas, and mixed gas combusted at all of the sources subject to numerical emission limits in Section IV.3. of this Consent Order. The Company shall maintain records of the fuel usage for a period of 5 years and make such records available to DEP upon request.

5. Compliance with the numerical emission limits set forth in Section IV.3.(g) - (m) of this Consent Order shall be demonstrated based on emission calculations using the applicable daily fuel usage data and emission factors for SO₂ (as determined in Section V.6. of this Consent Order, an AP-42 factor, or another factor approved by DEP).
6. The Company shall conduct testing of one or more of the sources listed in Section IV.3. in accordance with EPA Test Methods to determine an emission factor for SO₂ from the combustion of blast furnace gas. A Test Protocol for such testing shall be submitted for approval to the DAQ's Northern Panhandle Regional Office within 120 days from the effective date of this Consent Order. Source Testing shall be conducted within 60 days of approval of Test Protocol.
7. The slag granulator shall be tested to demonstrate compliance with the emission limit in Section IV. 3. A Test Protocol for such testing shall be submitted for approval to the DAQ's Northern Panhandle Regional Office within 120 days from the effective date of this Consent Order. Source Testing shall be conducted within 60 days of approval of Test Protocol.

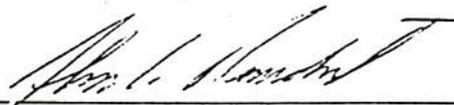
VI. OTHER PROVISIONS

1. The Company waives any and all rights of appeal of this Consent Order.
2. Nothing contained in this Consent Order shall be interpreted in such a manner as to relieve the Company of the responsibility to make all necessary short-term emission reductions as provided and required in 45 CSR 11 - "Prevention of Air Pollution Emergency Episodes".
3. The provisions of this Consent Order are severable and should any provisions be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.
4. The Director agrees that the Company shall have the right to petition DAQ for an amendment to this Consent Order. The petition shall state with specificity, the requested amendment and rationale supporting such request (e.g., force majeure, alternative emission limits or factors, and compliance demonstration). The Director shall hear the Company's petition and determine the relief accorded, if any. The determination of the Director shall be final and not subject to appeal.
5. This Consent Order shall become effective immediately upon signing by both parties.

7. This Consent Order is binding on the Company, its successors and assigns.
8. Any violations of this Consent Order may subject the Company to penalties in accordance with West Virginia Code § 22-5-6 and injunctive relief in accordance with West Virginia Code § 22-5-7.

AND NOW, this 30 day of July, 2003, the DIVISION OF AIR QUALITY of the DEPARTMENT OF ENVIRONMENTAL PROTECTION agrees to and enters into this Consent Order.

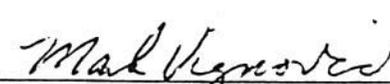
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY



By its Director
John A. Benedict

AND NOW, this 4th day of August, 2003, WEIRTON STEEL CORPORATION, by its duly authorized representative, consents to, agrees to, and enters into this Consent Order.

WEIRTON STEEL CORPORATION



By its Director, Environmental Control

$$\text{GPM} = 91.7 * (1/\text{Sulfur Percent})$$

