Office of Air Quality
1558 Washington Street, East
Charleston, WV 25311
Telephone Number: (304) 558-4022
Fax Number: (304) 558-3287

# West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY
1558 Washington Street, East
Charleston, WV 25311

v. CO-SIP-2000-2

BAYER CORPORATION
State Route 2, North
New Martinsville , WV 26155

## CONSENT ORDER

## I. AUTHORITY

Under the authority and direction of the Code of West Virginia, Chapter 22, Article 5, Section 1 et seq., this Consent Order is hereby entered.

## II. FINDINGS OF FACT

1. Bayer Corporation, hereinafter referred to as the "Company", owns and operates a Chemical plant in Marshall County, West Virginia. Sulfur dioxide is emitted from process and fuel burning sources at the facility including dual fired fuel oil and natural gas boilers, incinerators and a pigment kiln.

2. On July 4, 1995, the United States Environmental Protection Agency ("USEPA") indicated agreement to resolve American Electric Power's ("AEP") petition filed on, or about, June 10, 1995 to modify the existing Federal Consent Decree affecting AEP's Kammer Plant located in Marshall County, West Virginia. The Federal Consent Decree modification would be granted under the condition that the West Virginia Division of Environmental Protection ("WVDEP") would commit, in writing, to develop a comprehensive State Implementation Plan ("SIP") revision and schedule that would include a sulfur dioxide ("$SO_2$") impact analysis from all relevant sources of $SO_2$ in the area, provide for an attainment demonstration of the $SO_2$ National Ambient Air Quality Standards ("NAAQS") and fulfill the requirement of Good Engineering Practices.

3. During July and August, 1995, representatives of Bayer Corporation, Columbian Chemicals Corporation, Venture Coke Company L.L.C. and PPG Industries, Inc., located in Marshall County, West Virginia, and Ormet Corporation, located in Monroe County, Ohio, met and formed the Industrial Sources Group ("ISG"). The ISG represented facilities that are sources, or potential sources, of $SO_2$ in Marshall County.

4. On August 15, 1995, a meeting was held between representatives of the ISG and the WVDEP Office of Air Quality ("OAQ"). At that meeting the ISG proposed collecting on-site meteorological data for use in dispersion modeling.

5. On September 22, 1995, the WVDEP submitted a letter to the USEPA that committed the WVDEP to develop a comprehensive SIP revision for Marshall County in order to assess the impacts of $SO_2$ emissions on the ("NAAQS"). The letter included a schedule for SIP development.

6. On September 25, 1995, the USEPA acknowledged receipt of the OAQ's SIP committal and the schedule for SIP development and found that these documents provided an acceptable basis to modify the Federal Consent Decree schedule for the Kammer Plant's compliance.

7. On December 12, 1995, the ISG submitted the Meteorological Data Protocol for the Marshall County SIP Study ("Met Protocol") to the OAQ.

8. On January 7, 1996, the OAQ approved the Met Protocol.

9. On January 23, 1996, the USEPA approved the Met Protocol.

10. On August 1, 1996, the ISG commenced collection of meteorological data pursuant to the Met Protocol.

11. On July 31, 1997, the ISG completed collection of meteorological data in Marshall County.

12. On October 27, 1997, the ISG submitted the Dispersion Model Protocol For Industrial Sources Group Based In Marshall County, West Virginia ("Model Protocol").

13. On May 5, 1998, the USEPA approved the Model Protocol.

14. On May 20, 1998, the OAQ approved the Model Protocol.

15. On September 18, 1998, the ISG notified the OAQ that the modeling was complete.

16. The results of the dispersion modeling analysis, using an USEPA Region III approved model and procedures, show that $SO_2$ allowed to be emitted from the Company under 45 CSR 10 – ("To Prevent and Control Air Pollution From the Emission of Sulfur Oxides") may violate or contribute to projected violations of the NAAQS for $SO_2$ within, or adjacent to, the

Marshall County area without implementation of the emission limitations, and/or operating limitations and/or stack height requirements set forth in this Consent Order.

17. The Company and the OAQ have cooperated to develop and hereby enter into this Consent Order to establish $SO_2$ emission control requirements applicable to the Company sufficient to prevent violations of the NAAQS for sulfur dioxide within, or adjacent to, the Marshall County area.

18. The OAQ shall submit this Consent Order upon entry to EPA and request its incorporation into the SIP for the purpose of federal enforceability and to carry out OAQ's responsibility under the West Virginia Code and Federal Clean Air Act, as amended.

## III. CONCLUSIONS OF LAW

1. The Office of Air Quality 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 Director of the Division of Environmental Protection as provided in the Code of West Virginia, Chapter 22, Article 5, Section 1 et seq., and Chapter 22, Article 1, Section 7(3).

2. The Office of Air Quality has acted in accordance with the Code of West Virginia and the rules that it administers.

3. The Office of Air Quality has provided notice and opportunity for public comment and a hearing in accordance with the Code of West Virginia and the federal Clean Air Act, as amended.

4. The Company makes no admission of fact or law in this Consent Order and reserves all rights and defenses available regarding liability or responsibility for the contended exceedences in any proceedings other than proceedings to enforce this Consent Order.

## IV. COMPLIANCE PROGRAM

1. The Company agrees that it shall not operate any source of $SO_2$ emissions unless such source is in compliance with the Code, terms of this consent order, and any additional or more stringent $SO_2$provisions of 45 CSR 10.

2. The Company agrees that at all times, including periods of source start-up, shut down, and malfunction, that it will, to the extent possible, maintain and operate all sources of $SO_2$ emissions, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing such emissions.

3. Upon the effective date of this Consent Order, the Company agrees to comply with the following emission and operational limitations:

A. The Company shall not operate Boiler Number 3.

B. The Company shall burn only natural gas OR hydrogen in Boilers Number 4, Number 6, Number 7, and Number 8.



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C. $SO_2$ emissions from Boiler Number 9 and Boiler Number 10 shall not exceed 86 lbs./hour and 62.5 lbs./hour respectively.

a. Sulfur content of the fuel oil burned in Boilers Number 9 and 10 shall not exceed 0.72%.

b. Total combined fuel oil burn rate to Boilers Number 9 and 10 shall not exceed 22 gallons per minute.

D. $SO_2$ emissions from Incinerator #1, Solids Incinerator, shall not exceed 9.5 lbs./hour. The unit's burners shall only fire natural gas. The unit shall only incinerate non-hazardous plant waste.

E. $SO_2$ emissions from Incinerator #4, Fluidized Bed Incinerator shall not exceed 7.1 lbs./hour and 28.4 tons per year.

F. $SO_2$ emissions from the Iron Oxide Pigment Kiln shall not exceed 10.4 lbs./hour.

a. Sulfur content of the #2 fuel oil burned at the Iron Oxide Pigment Kiln shall not exceed 0.5%.

b. Total combined fuel oil burn rate to the Iron Oxide Pigment Kiln shall not exceed 146 gallons per hour.

## V. COMPLIANCE TESTING AND MONITORING REQUIREMENTS

1. Compliance with the emission limitations of this Consent Order shall be based upon the averaging time and compliance determination methods established within this section.

2. No testing shall be required for units required to burn natural gas under Section IV.B.: Boilers Number 4, Number 6, Number 7, Number 8.

3. Upon entry of this Consent Order, compliance with the sulfur dioxide emission limits established in Section IV.3.C.a. and b., boilers number 9 and number 10, shall be demonstrated in accordance with the following provisions:

A. During periods when boilers number 9 and/or number 10 are burning fuel oil, the Company shall sample the fuel oil being burned in accordance with an applicable ASTM method. Sampling shall be conducted at the commencement of each fuel oil burning period. A certificate of analysis from the supplier of the fuel oil shall also be attached to the sample analytical results, although it is recognized that different shipments of fuel oil may be blended to achieve the desired sulfur content

B. During periods when boilers number 9 and/or number 10 are burning fuel oil, the Company shall record the fuel oil consumption rate in gallons per minute at a minimum frequency of once per eight (8) hour shift.

4. Within one hundred and eighty (180) days after entry of this Consent Order, and every two (2) years thereafter, compliance with the sulfur dioxide emissions limits established in Section IV.3.D., Incinerator #1, shall be demonstrated by stack testing in accordance with 40CFR Part 60, Appendix A. A report of the test results shall be submitted to the OAQ within sixty (60) days of completing the stack test. If, after the first two (2) stack tests it has been demonstrated that the sulfur dioxide emissions from each of the two (2) stack tests conducted under this Section are at, or less than, seventy-five percent (75%) of the allowable limit established in Section IV.3.D., the Company may petition the Director for relief from this provision.

5. Compliance with the sulfur dioxide emissions limits established in Section IV.3.E. Fluidized Bed Incinerator, shall be demonstrated by a Continuous Emission Monitoring (CEM) program as required by R13-842.

6. Upon entry of this Consent Order, compliance with the sulfur dioxide emission limits established in Section IV.3.F.a. Iron Oxide Pigment Kiln, shall be demonstrated in accordance with the following provisions:

A. During periods when the Iron Oxide Pigment Kiln is burning fuel oil, the Company shall sample the fuel oil being burned in accordance with an applicable ASTM method. Sampling shall be conducted at the commencement of each fuel oil burning period. A certificate of analysis from the supplier of the fuel oil shall also be attached to the sample analytical results.

B. During periods when the Iron Oxide Pigment Kiln is burning fuel oil, the Company shall record the fuel oil consumption rate in gallons per hour at a minimum frequency of once per eight (8 ) hour shift.

## VI. RECORDKEEPING, NOTICES AND REPORTING

1. When demonstrating compliance using a reference test method under 40 CFR part 60, Appendix A, the Company shall be required to submit a test protocol to the Director for approval at least thirty (30) days prior to the projected test dates. The Director shall be provided written notice of the actual test dates after approval of the test protocol, but not less than fifteen (15) days prior to the first date of testing.

2. The Company shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of sources subject to this Consent Order, any malfunction of air pollution control equipment or any periods during which a control device was inoperative.

3. The Company shall report to the Director, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess $SO_2$ emission rate within twenty-four (24) hours of becoming aware of such condition. The Company shall file a

written report concerning the malfunction with the Director within ten (10) days, providing the following information:

A. A detailed explanation of the factors involved or causes of the malfunction;

B. The date and time of duration (with starting and ending times) of the period of excess emissions;

C. An estimate of the total amount of excess emissions discharged during the malfunction period;

D. The maximum emission rate determined during the malfunction in units of the applicable emissions standard;

E. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction and;

F. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

4. All data and information required to be recorded or obtained under the terms of this Consent Order shall be maintained in a permanent form suitable for inspection and shall be retained for at least five (5) years following the date of the record or report. All such data and information shall be submitted in accordance with the terms of this Consent Order or made available to the Director upon his or her request or during any facility inspection by an authorized representative of the Director.

5. All reports required to be submitted to the Director under the terms of this Consent Order shall be certified by a responsible official of the Company. This certification shall state that, based on information and belief formed by reasonable inquiry, the statements and information in the document are true, accurate and complete.

## VII. OTHER PROVISIONS

1. In entering this Consent Order agreement, the Company and the OAQ seek to resolve the nonattainment issues identified in Section II. Findings of Fact, but the Company makes no admission of fact or law with regard to those findings.

2. The Company agrees to comply with all requirements of this Consent Order and further agrees to waive any and all rights of appeal of this Consent Order. However, the Company reserves its right to contest any enforcement actions with respect to all alleged violations of the terms and conditions of this Consent Order, or any modifications or amendments thereof.

3. 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 Regulation 11 - "Prevention of Air Pollution Emergency Episodes".

4. 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.

5. This Consent Order is binding on the Company, its successors and assigns.

6. Violations of this Consent Order may subject the Company to penalties and injunctive relief in accordance with the Code of West Virginia.

7. The Company may elect to file for an administrative change to Permit R13-842 to reduce the sulfur dioxide allowable emission limits in R13-842 to the limits prescribed in Section IV.3.E. of this Consent Order. Should the OAQ revise Permit R13-842 to reflect the limits prescribed in Section IV.3.E., of this Consent Order, then the requirements set forth in Section IV.3.E and Section V. 5., shall be rendered moot.

7. The OAQ agrees that the Company shall have the right to petition for an amendment to this Consent Order in the event of a "force majeure" condition. The petition shall allege such conditions with specificity. The Director shall determine whether to hear the Company's petition and relief accorded, if any.

8. The Company shall not build, erect, install or use any article, machine, equipment or process, the user of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

9. The terms and conditions of the Consent Order shall become effective upon signing by both parties.

10. Nothing contained in this Consent Order shall be construed to limit, in any way, the Director's authority to require the Company to install, calibrate, and operate continuous emission monitoring equipment for sources other than those specifically required to have such monitoring equipment under the terms of the Consent Order.

11. For the purpose of the administration of the Consent Order, all decisions and determinations required to be made by the Director-may be made by the Chief of the OAQ and all reports and notifications required under this Consent Order shall be submitted to the Chief of the OAQ.

12. Nothing contained in this Consent Order shall be construed, in any manner, to provide relief from the requirements of any permit issued by the Office of Air Quality or the Air Pollution Control Commission prior to the date of this order.

AND NOW, this 21st day of January, 2000, the Division of Environmental Protection, Office of Air Quality agrees to and enters this Consent Order.

DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

Edward L Kropp

By Its Chief

Bayer Corporation hereby agrees with the provisions and consents to the terms of this Consent Order and agrees to comply with all requirements set forth herein.

AND NOW, this 26th day of January, 2000, Bayer Corporation, by its duly authorized representative, consents to , agrees to and enters this Consent Order.

BAYER CORPORATION

BY: Ronald W. Staib

Ronald W. Staib
V. P. and General Plant Manager