



STATE OF WEST VIRGINIA
OFFICE OF THE SECRETARY OF STATE
CHARLESTON 25305

A. JAMES MANCHIN
SECRETARY OF STATE

FILED IN THE OFFICE OF
A. JAMES MANCHIN
SECRETARY OF STATE
THIS DATE 8/13/82
Administrative Law Division

STATE REGISTER FILING

I, Carl G. Beard, II, Secretary,
Title or Position

Air Pollution Control Commission, hereby submit to record in
Department or Division

the State Register on 8 1/2 x 11" paper two (2) copies of

- () proposed rules and regulations concerning topics of material not covered by existing rules and regulations;
- () proposed rules and regulations superseding rules and regulations already on file;
- () notice of hearing;
- () findings and determinations;
- (X) rules and regulations; or Adopted by APCC August 11, 1982, amending existing regulations already on file.
- () other - specify (* file.

This filing pertains to (*Fiscal note and amendments to proposed regulation)

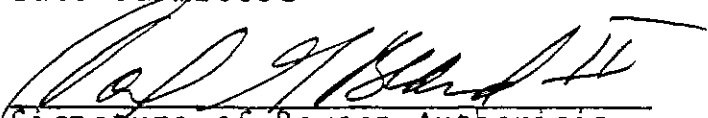
Chapter 16
Article 20
Series VII
Section _____
Page No. _____

*obsolete
valid Sept. 15, 1982
to May 26, 1983*

- (X) proposed rules and regulations are required to go to Legislative Rule Making Committee;
- () proposed rules and regulations are excluded from Legislative Rule Making Committee;

August 13, 1982

Date Submitted


Signature of Person Authorizing
this Filing Secretary

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Subject: Regulation VII - "To Prevent and Control Particulate
Air Pollution From Manufacturing Process Operations."

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WEST VIRGINIA ADMINISTRATIVE REGULATIONS
Air Pollution Control Commission

Chapter 16-20
Series VII
(1982)

Subject: Regulation VII - To Prevent and Control Particulate
Air Pollution From Manufacturing Process Operations.

Section 1. Definitions

- 1.01. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.
- 1.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 1.03. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.
- 1.04. "Person" shall mean any and all persons, natural or artificial, including the State of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.
- 1.05. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.
- 1.06. "Smoke" shall mean small gasborne and airborne particulate matter emitted in sufficient numbers to be visible.
- 1.07. "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

- 1.08. "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U. S. Bureau of Mines or any chart, recorder, indicator, or device which is standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.
- 1.09. "Fugitive Particulate Matter" shall mean any and all particulate matter generated by any manufacturing process which, if not confined, would be emitted directly into the open air from points other than a stack outlet.
- 1.10. "Fuel" shall mean any form of combustible matter (solid, liquid, vapor, or gas) that is used as a source of heat.
- 1.11. "Air Pollution Control Equipment" shall mean any equipment used for collecting or converting smoke and/or particulate matter for the purpose of preventing or reducing emission of these materials into the open air.
- 1.12. "Standard Conditions" shall mean for the purposes of this regulation a temperature of 68°F and a pressure of 29.92 inches of mercury column.
- 1.13. "Stack" for the purpose of this regulation, shall mean but not be limited to any duct, control equipment exhaust, or similar apparatus, which is designed to vent gases containing particulate matter into the open air.
- 1.14. "Plant" shall mean and include all equipment, grounds, source operations, and any manufacturing process(es) utilized in an integral complex.
- 1.15. "Manufacturing Process" shall mean any action, operation or treatment embracing chemical, industrial, or manufacturing efforts, and employing, for example, heat treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and non-ferrous foundries, kilns, stills, driers, crushers, grinders, roasters, and equipment used in connection therewith, and all

other methods or forms of manufacturing or processing that may emit smoke, particulate matter, or gaseous matter.

1.16. "Process Weight" shall mean that total weight of all materials introduced into a source operation, excluding solid, liquid, and gaseous fuels used solely as fuels, and excluding all process and combustion air.

1.17. "Process Weight Rate" shall mean a rate established as follows:

(a) For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

(b) For cyclical or batch unit operations, or unit processes, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

1.18. "Physical Change" shall mean for the purpose of this regulation, any change in a substance which does not change the properties of the substance. Such changes include but are not limited to crushing, grinding, drying, change of state and sizing.

1.19. "Chemical Change" shall mean for the purposes of this regulation, any change in a substance which does change the properties of the substance and by which a new substance is formed.

1.20. "Source Operation" shall mean the last operation in a manufacturing process preceding the emission of air contaminants which operation:

(a) Results in the separation of air contaminant from the process materials or in the conversion of the process materials into air contaminants; and

(b) Is not an air pollution abatement operation.

1.21. "A Duplicate Source Operation" shall mean any combination of two or more individual source operations of any size that have the same nomenclature, either formerly adopted and/or commonly sanctioned by usage such as but not limited to two or more rotary driers, basic oxygen furnaces, or electric arc furnaces contained in the same plant.

1.22. "Source Operation Type" shall mean a categorization established as follows:

(a) Type 'a' shall mean any manufacturing process source operation involving glass melting, calcination or physical change except as noted in Type 'c' below.

(b) Type 'b' shall mean any metallurgical manufacturing process source operation. Gray iron cupolas located in the counties of Brooke, Hancock, Ohio, Marshall, and Kanawha; and the Magisterial Districts of Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), and Union and Winfield (Marion County west of I-79) shall be classified as Type 'b' source operations.

(c) Type 'c' shall mean any wet cement manufacturing process source operation which is used for the primary purpose of calcination. Gray iron cupolas located in the areas of the state other than those defined in Subsection 1.22(b) shall be classified as Type 'c' source operations.

(d) Type 'd' shall mean any manufacturing process source operation in which materials of any origin undergo a chemical change unless otherwise classified.

Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of source operation type, the interpretation of the Commission shall apply.

- 1.23. "By-Product Coke Production Facility" shall mean the production of coke by the destructive distillation of coal in recovery type ovens in which gaseous and liquid distillates are separated and recovered as by-products, and includes any on-site coal preparation, charging, coking, coke pushing, hot coke transfer, coke quenching, coke handling and the separation and preparation of distillates.
- 1.24. "Non-Recovery Coke Production Facility" shall mean the destructive distillation of coal in which the gaseous and liquid distillates are separated from coal, but not recovered as by-products, and includes any on-site coal preparation, charging, coking, coke pushing, hot coke transfer, coke quenching and coke handling.
- 1.25. "Offtake Piping" shall mean the piping that transports gaseous by-products of the coking cycle from an oven to the coke oven gas collector main, such as standpipes, standpipe caps, goosenecks and slipjoints.
- 1.26. "Coke Battery Topside" shall mean the top of the coke battery including, but not necessarily limited to, charging ports, charging port lids, inspection lids, refractory ceiling, offtake piping and the coke oven gas collector main.
- 1.27. "Topside Emissions" shall mean any smoke and/or particulate matter emissions from one or more points on the topside of a coke oven battery excluding charging emissions.

- 1.28. "Charging Operation" shall mean any operation or procedure by which coal is introduced into a coke oven. For coke oven batteries employing larry cars, the charging operation shall begin when the gate(s) on the larry car coal hopper is (are) opened or the mechanical feeders start the flow of coal into the first charging port(s) until the oven is completely charged and the last charging port lid is seated.
- 1.29. "Charging Port" shall mean any opening through which coal is, or may be, introduced into a coke oven, whether or not such opening is regularly used for that purpose.
- 1.30. "Charging Emissions" shall mean any smoke and/or particulate matter emissions from one or more charging ports, space between charging port rings and oven refractory, drop sleeves, larry car hoppers, or emissions from any devices used for the capture and cleaning of emissions resulting from charging operations but shall not include emissions resulting from the temporary removal of a charging port lid for the purpose of sweeping coal spillage into the oven just charged after all lids have been seated over the charging ports following removal of the larry car.
- 1.31. "Pushing Operation" shall mean the removal of coke from a coke oven and shall begin when the coke mass starts to move and shall continue until the coke transfer car enters the quenching station.
- 1.32. "Pushing Emissions" shall mean any smoke and/or particulate matter emissions resulting from the pushing operation.
- 1.33. "Transport Emissions" shall mean any smoke and/or particulate matter emissions which are emitted once the transport of the hot coke begins during the pushing operation and continues until the coke transfer car enters the quenching station.

- 1.34. "Door Area" shall mean the vertical face of a coke oven between two adjacent buckstays.
- 1.35. "Door Area Emissions" shall mean any smoke and/or particulate matter emissions from any door area including, but not limited to, emissions from the door, chuck door, door seal, jamb, or refractory.
- 1.36. "Quenching Operation" shall mean the process by which the combustion of hot coke is stopped by application of water or any other procedure achieving the same effect.
- 1.37. "Quenching Emissions" shall mean any smoke and/or particulate matter emissions resulting from the quenching operation.

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.

Section 2. Emission of Smoke and/or Particulate Matter Prohibited and Standards of Measurement.

- 2.01. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is darker in shade or appearance than that designated as No. 1 Ringelmann or twenty (20) percent opacity, except as noted in Sub-Sections 2.02, 2.03, 2.04, 2.05, 2.06, and 2.07.
- 2.02. The provisions of Sub-Section 2.01 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than No. 2 Ringelmann or forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
- 2.03. No person shall cause, suffer, allow, or permit the emission of smoke and/or particulate matter into the open air in excess of the following

provisions from the operation of a by-product coke production facility in production on the effective date of this regulation or a by-product coke production facility which is constructed as a replacement for a by-product coke production facility which shut down not more than three (3) years prior to the effective date of this regulation:

(a) Charging emissions from charging of any four consecutive ovens shall not exceed an aggregate time of more than one hundred (100) seconds.

(b) Pushing emissions from pushing shall be vented into air pollution control equipment. Particulate matter emissions discharged from this air pollution control equipment shall not exceed a mass particulate rate as determined by the following formula:

$$E = C \cdot 09$$

Where E = particulate matter emissions rate in pounds per push and C = actual charge of coal in tons per oven.

The smoke and/or particulate matter emissions discharged from this air pollution control equipment and noncaptured pushing emissions shall not exceed twenty (20) percent opacity.

(c) Transport emissions from an enclosed quench car shall not exceed twenty (20) percent opacity. Transport emissions from an open quench car shall not exceed ten (10) percent opacity except that batteries employing pushing emissions control systems that were constructed prior to July 1, 1982 and which do not involve enclosed quench cars during transport shall meet the provisions of Sections 2.01 and 2.02.

(d) Coke side sheds and similar structures used to capture pushing emissions shall be designed and operated so as to prevent the escape of smoke and/or particulate matter from points other than the stack of the air pollution control equipment.

(e) Coke oven topside emissions shall not exceed the following:

(1) No more than two (2) percent of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.

(2) No more than ten (10) percent of the off-take piping shall have smoke and/or particulate matter emissions.

(3) No smoke and/or particulate matter emissions are permitted from the coke oven gas collector main or any other topside point except as provided by 2.03(e)(1) or 2.03(e)(2).

(f) No more than ten (10) percent of the door areas of operating coke ovens shall have door area emissions, excluding the door areas representing the last oven charged.

(g) Quench towers shall employ as a minimum good baffle design with make-up water from the receiving stream, except that the blowdown from scrubbers of a pushing emission control system, dedicated to a specific battery, may be used as make-up water for the quench tower of that battery so long as suspended solids do not exceed 200 milligrams per liter. For batteries which this section applies the receiving stream shall be the Ohio River.

(h) Smoke and/or particulate matter emissions from combustion stacks shall meet the requirements of Sub-Sections 2.01 and 2.02 and shall not exceed a concentration of 0.040 grains per dry standard cubic foot.

(i) Good operating practices must be maintained to prevent the atmospheric entrainment of particulate matter resulting from the spillage or other deposition of coal and/or coke.

2.04.

No person shall cause, suffer, allow, or permit the emission of smoke and/or particulate matter into the open air in excess of the following

provisions from the operation of a new by-product coke production facility, other than a replacement by-product coke production facility that is constructed as per the provisions of Subsection 2.03, that begins production after the effective date of this regulation:

(a) Charging emissions from the charging of any four consecutive ovens shall not exceed an aggregate time of more than sixty (60) seconds.

(b) Pushing emissions from pushing shall be vented into air pollution control equipment. The particulate matter emissions discharged from this air pollution control equipment shall not exceed a mass emission rate of 0.04 lb/ton of coal charged. The smoke and/or particulate matter emissions discharged from this air pollution control equipment and non-captured pushing emissions shall not exceed twenty (20) percent opacity.

(c) Transport emissions from an enclosed quench car shall not exceed twenty (20) percent opacity. Transport emissions from an open quench car shall not exceed ten (10) percent opacity.

(d) Coke side sheds and similar structures used to capture pushing and/or quenching emissions shall be designed and operated so as to prevent the escape of smoke and/or particulate matter emissions from points other than the stack of the air pollution control equipment.

(e) Coke oven topside emissions shall not exceed the following:

(1) No more than two (2) percent of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.

(2) No more than five (5) percent of the offtake piping shall have smoke and/or particulate matter emissions.

(3) No smoke and/or particulate matter emissions are permitted from the coke oven gas collector main or any other topside point, except as provided by 2.04(e)(1) and 2.04(e)(2).

(f) No more than eight (8) percent of the door areas of operating coke ovens shall have door area emissions, excluding the door areas representing the last oven charged. Any battery affected by Sub-Section 2.04 shall be constructed in a manner that will allow for the retrofitting of the battery with hooding to capture door emissions and air pollution control equipment designed to at least a ninety (90) percent particulate control efficiency.

(g) Quench towers shall employ, as a minimum, multiple row baffles and use make-up water not to exceed 800 milligrams per liter of total dissolved solids and 100 milligrams per liter of total suspended solids.

(h) Smoke and/or particulate matter emissions from combustion stacks shall meet the requirements of Sub-Sections 2.01 and 2.02 and shall not exceed a grain loading of 0.025 grains per dry standard cubic foot.

(i) Good operating practices must be maintained to prevent the atmospheric entrainment of particulate matter resulting from the spillage or other deposition of coal/coke.

2.05. No person shall cause, suffer, allow, or permit the emissions of smoke and/or particulate matter into the open air in excess of the following provisions from the operation of a non-recovery coke production facility:

(a) Charging emissions from charging of any five (5) consecutive ovens shall not exceed an aggregate time of more than fifty (50) seconds.

(b) No more than two (2) percent of the coal charging ports shall have smoke and/or particulate matter emissions.

(c) No more than two (2) percent of the coke oven doors shall have smoke and/or particulate matter emissions excluding the ovens being charged and/or pushed.

(d) Pushing emissions shall be vented to air pollution control equipment. The particulate matter emissions from this air pollution control equipment shall not exceed a mass emission rate as determined by the following formula:

$$E = C \cdot 0.09$$

Where E = particulate emission rate in pounds per push and C = actual charge of coal in tons per oven.

The smoke and/or particulate matter emissions discharged from the air pollution control equipment and non-captured pushing emissions shall not exceed twenty (20) percent opacity.

(e) Transport emissions from an enclosed quench car shall not exceed twenty (20) percent opacity. Transport emissions from an open quench car shall not exceed ten (10) percent opacity.

(f) Coke side sheds and similar structures used to capture pushing and/or quenching emissions, shall be designed and operated so as to prevent the escape of smoke and/or particulate matter emissions from points other than the stack of the air pollution control equipment.

(g) Quench towers shall employ as a minimum, multiple row baffles and use make-up water not to exceed 800 milligrams per liter of total dissolved solids and 100 milligrams per liter of total suspended solids.

(h) Smoke and/or particulate matter from the combustion stack shall meet the requirements of Sub-Sections 2.01 and 2.02. The

particulate emissions rate from combustion stacks shall not be greater than 0.060 grains per dry standard cubic foot or 1.0 lb/ton of coal charged, whichever is most restrictive.

(i) Good operating practices must be maintained to prevent the atmospheric entrainment of particulate matter resulting from the spillage or other deposition of coal and/or coke.

2.06. The provisions of Sections 2.01 or 2.02 shall not apply to smoke and/or particulate matter emitted from the roof monitor(s) of a basic oxygen process or from a blast furnace cast house. The following provisions will apply:

(a) Visible emissions from a basic oxygen process roof monitor shall not exceed twenty (20) percent opacity except for a period or periods aggregating no more than three (3) minutes in any sixty (60) minute period where the average opacity for the aggregated period shall not exceed forty (40) percent opacity.

(b) Visible emissions from a blast furnace cast house shall not exceed twenty (20) percent opacity except for a period or periods aggregating no more than five (5) minutes in any sixty (60) minute period where the average opacity for the aggregated period shall not exceed forty (40) percent opacity.

2.07. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any storage structure associated with any manufacturing process.

Section 3. Control and Prohibition of Particulate Emissions by Weight from Manufacturing Process Source Operations

3.01. No person shall cause, suffer, allow, or permit particulate matter to be vented into the open air from any type source operation or duplicate

source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in the following table:

Operating Source Operation or Total Duplicate Source Operation Process Weight Rate in Pounds Per Hour ¹	Maximum Allowable Total Stack Emission Rate in Pounds Per Hour For the Appropriate Pro- cess Weight and Source Operation Type ¹			
	Type 'a'	Type 'b'	Type 'c'	Type 'd' ²
0	0	0	0	0
2,500	3	3	9	0.2
5,000	5	5	13	0.8
10,000	10	10	19	1.8
20,000	16	16	26	4.0
30,000	22	22	32	6.2
40,000	28	28	36	8.3
50,000	31	31	40	10.5
100,000	33	33	54	21.2
200,000	37	37	70	21.2
300,000	40	40	80	21.2
400,000	43	46	88	21.2
500,000	47	53	94	21.2
600,000	50	62	99	21.2
700,000	50	71	99	21.2
800,000	50	79	99	21.2
900,000	50	88	99	21.2
1,800,000 and above	50	176	99	21.2

1. For a process weight between any two consecutive process weights stated in this table, the emission limitation shall be determined by linear interpolation.
2. Type 'd' source operation stack emission rates do not apply to MINERAL ACIDS. See Sub-Section 3.02.

3.02. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in the following table:

Mineral Acid	Allowable Stack Gas Concentration in Milligrams Per Dry Cubic Meter at Standard Conditions from Source Operations or Duplicate Source Operations in Existence on the Effective Date of this Regulation	Allowable Stack Gas Concentration in Milligrams Per Dry Cubic Meter at Standard Conditions from Source Operations or Duplicate Source Operations Installed After the Effective Date of this Regulation
Sulfuric Acid Mist	70	35
Nitric Acid Mist and/or Vapor	140	70
Hydrochloric Acid Mist and/or Vapor	420	210
Phosphoric Acid Mist and/or Vapor	6	3

3.03. No person shall circumvent the provisions of this regulation by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.

3.04. If a duplicate source operation that meets the requirements of this regulation is expanded or if a source operation that meets the requirements of this regulation is expanded to form a duplicate source operation, the total allowable emission rate for the expanded portion shall be determined by the following formula:

$$R_e = \frac{W_e}{W_{et}} R_{et}$$

Where,

R_e is the total allowable emission rate in pounds per hour for the new expanded portion of the duplicate source operation;

W_{et} is the total operating process weight rate in pounds per hour of the source operation or duplicate source operation prior to expansion plus the operating process weight rate of the new expanded portion;

R_{et} is allowable emission rate in pounds per hour found in Sub-Section 3.01 opposite the process weight rate, W_{et} ; W_e is the operating process weight rate in pounds per hour for the new expanded portion.

3.05. Separate stack emission rates for the new expanded portions of concern in Sub-Section 3.04 shall be calculated as per Sub-Section 3.09. The applicable stack emission rate(s) so calculated shall be additive with the existing emission rate for any stack used to vent both an existing source operation or duplicate source operation(s) and addition(s) or portion(s) thereof.

3.06. The operating process weight for new plants which will contain duplicate source operations shall include the total process weight of those duplicate units to be installed during the initial five (5) year operating period.

3.07. Except as noted in Sub-Section 3.08, the increase of the operating process weight rate of any manufacturing process source operation or duplicate source operation by the operation of new, replacement, reactivated, and/or altered source operation(s) shall be considered as an expansion and the allowable emission rates from the source operation(s) which resulted in the increase shall be determined as per Sub-Section 3.04.

(a) Type 'b' duplicate source operations whose air pollution control equipment efficiency is a minimum of 99% by weight and whose total process weight rate is less than 250,000 pounds per hour shall be exempted from the requirements of Sub-Section 3.01 provided that smoke emitted into the open air from any such duplicate source operation is not as dark or darker in shade or appearance than that designated as No. 1 Ringelmann or twenty (20) percent opacity. If a duplicate source operation is expanded by the addition of a new source operation(s) and the total operating process weight rate is then greater than 250,000 pounds per hour, the allowable emission rates from the source operation which resulted in the increase above 250,000 pounds per hour shall be determined as per Sub-Section 3.04.

(b) Primary aluminum reduction potlines which are equipped with a fluidized bed reactor or other similar gas cleaning device which utilizes particulate matter as a media or as a component of a media for collecting or reducing the emissions of gaseous fluorides, shall be exempted from the requirements of Sub-Sections 3.01 and 3.04 provided that:

(1) At least 99 percent of the gaseous fluoride is removed from the exit gas stream by such device prior to discharging the cleaned gas stream to the open air; and

(2) The particulate matter loading in the exit gas stream is not greater than 0.01 grains per standard cubic foot of dry stack gas; and

(3) The smoke emitted into the open air from any such duplicate source operation is not as dark or darker in shade or appearance than that designated as No. 1 Ringelmann or twenty (20) percent opacity. If a duplicate source operation is expanded by the addition of new source operation(s) and the total operating process weight rate is then greater

than 250,000 pounds per hour, the allowable emission rates from the source operation which resulted in the increase above 250,000 pounds per hour shall be determined as per Sub-Section 3.04.

(c)(1) The emissions of gaseous fluorides and particulate fluorides from prebake cells within an existing primary aluminum plant in operation on or before January 26, 1976, shall be controlled by a system for continuous emission reduction which system shall achieve at least 90 percent fluoride emissions capture efficiency through its primary collection system and at least 99 percent fluoride emissions removal efficiency through its primary removal system; and

(2) Anode butts from such a plant which are recycled in an on-site anode bake plant shall be cleaned as necessary to minimize adherent fluoride bearing bath material.

3.09. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the following formula:

$$R_s = R_t \frac{W_s}{W_t}$$

Where,

R_s is the allowable stack emission rate for the separate stack venting the source operation(s) in question;

R_t is the total allowable emission rate for the duplicate source operation;

W_s is the operating process weight rate for the source operation(s) vented through the separate stack;

W_t is the total operating process weight rate for the duplicate source operation.

3.10. The provisions of Sub-Section 3.01, 3.04, and 3.09 shall not apply to the coking of coal.

3.11. The provisions of Sub-Section 3.01 shall not apply to sinter processes, basic oxygen processes, blast furnace cast house operations, machine scarfing operations and hot metal transfer operations employed in the manufacturing of steel. The following provisions shall apply:

(a)(1) Particulate matter emissions shall not exceed a concentration of 0.030 grains per dry standard cubic foot from a sinter strand windbox.

(2) Particulate matter emissions shall not exceed a concentration of 0.020 grains per dry standard cubic foot from a sinter strand discharge.

(3) Particulate matter emissions shall not exceed a concentration of 0.020 grains per dry standard cubic foot from the entry and exit ends of a sinter cooler.

(b)(1) Particulate matter emissions from the stack of the main (primary) air pollution control equipment of a basic oxygen process, including emissions from fuel firing in an integral waste heat boiler, shall not exceed 0.11 lbs/ton of steel produced.

(2) Particulate matter emissions from basic oxygen process secondary air pollution control equipment shall not exceed a concentration of 0.020 grains per dry standard cubic foot. The air pollution control device shall capture and control emissions from hot metal and scrap charging, tapping, turndown, slagging, and as required to control slopping emissions.

(c) Particulate matter emissions from any blast furnace cast house air pollution control equipment shall not exceed a concentration

of 0.020 grains per dry standard cubic foot.

(d) Particulate matter emissions shall not exceed a concentration of 0.040 grains per dry standard cubic foot from hot metal transfer from torpedo car to BOF charging ladle during periods when hot metal transfer is actually performed.

(e) Particulate matter emissions shall not exceed a concentration of 0.030 grains per dry standard cubic foot from a machine scarfing operation during periods in which scarfing is actually being performed.

3.12. The provisions of Sub-Sections 3.01, 3.04 and 3.09 shall not apply to petroleum coke calcining kilns in existence on April 1, 1982, provided that particulate matter vented into the open air from each kiln, measured in pounds per hour, shall not exceed the amounts as determined by the following formulas:

(a) When manufacturing regular (amorphous) coke:

$$E = 3.64P^{0.67}$$

Where E = allowable emission rate and P = the process weight rate in tons per hour, provided, however, that no kiln manufacturing regular (amorphous) coke shall exceed a maximum emission rate of fifty (50) pounds per hour.

(b) When manufacturing graphite (crystalline) coke:

$$E = 16.89P^{0.67}$$

Where E = allowable emission rate in pounds per hour, and P = process weight rate in tons per hour, provided, however, that no kiln manufacturing graphite (crystalline) coke shall exceed a maximum emissions rate of two hundred (200) pounds per hour.

Provided further that each such kiln is equipped with an incinerator that will be operated at a temperature of not less than 1600°F and have a residence time of twelve (12) seconds or longer when calcining regular coke and twenty-four (24) seconds or longer when calcining graphite coke, and provided further that, in the event a plant has more than one kiln, such plant shall be operated so that only one (1) of such kilns shall calcine graphite coke at any one time.

3.13. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

3.14. Potential Hazardous Material Emissions

Persons responsible for manufacturing process source operations from which hazardous particulate material may be emitted such as, but not limited to, lead, arsenic, beryllium, and other such materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluations of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Commission working in conjunction with other appropriate governmental agencies.

Section 4. Control of Fugitive Particulate Matter

4.01. No person shall cause, suffer, allow, or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system to minimize the emissions of fugitive particulate matter. To minimize means that a particulate capture or suppression system shall be installed to ensure the lowest fugitive particulate emissions reasonably achievable.

4.02. The owner or operator of a plant shall maintain dust control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary dust suppressants shall be applied in relation to stockpiling and general material handling to prevent dust generation and atmospheric entrainment.

Section 5. Registration

After the effective date of this regulation all persons owning and/or operating an existing manufacturing process source operation not previously registered shall register such source operation with the Commission. The information required for registration shall be determined by the Director, and shall be provided in the manner specified by the Director.

Section 6. Permits

No person shall construct, modify, or relocate any manufacturing process source operation without first obtaining a permit in accordance with the provisions of Section Two, Chapter Sixteen, Article Twenty, Paragraph 11b of the Code of West Virginia, as amended, and Regulations XIII and XIX of this agency.

Report and Testing

7.01. At such reasonable times as the Director may designate the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases when the Director has reason to believe that the stack emission limitation(s) is/are being violated. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

7.02. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions.

Section 8. Compliance Programs and Schedules

8.01. In the event that process equipment or operations in existence prior to the adoption of this regulation do not meet the emission limitations, an acceptable program to fully comply with the regulation shall be developed and offered to the Commission by the person responsible for the installation. This program shall be submitted upon the request of and within such time as shall be fixed by the Commission. Once this program has been approved by the Commission, the owner and/or operator of such installation shall not be in violation of this regulation so long as the approved or amended

program is observed. Compliance programs, schedules, and variances that have previously been issued by the Commission under Regulation VII (1974) shall remain in effect until the expiration date of that compliance program, schedule, or variance.

- 8.02. In the event that an owner or operator of such process equipment fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

Section 9. Variance

Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this regulation 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 malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator and approved by the Commission.

Section 10. Exemptions

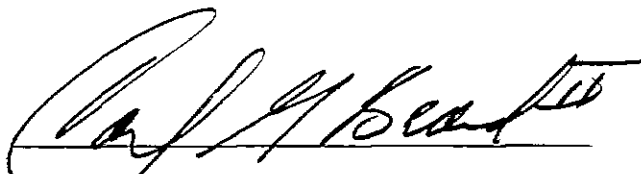
Provisions of this regulation shall not apply to particulate emissions regulated by Regulations II, III, V, and VI or to internal combustion engines, aircraft, and air entrained particulate matter from public or private carriers.

Section 11. Effective Date

Regulation Series VII (1980) was amended by the Commission on the 11th day of August, 1982, and shall become effective the 15th day of September 1982. Regulation Series VII (1980), as amended, shall henceforth be cited as Regulation Series VII (1982). Regulation Series VII was amended by the Commission on the 23rd day of February, 1979, and became effective the 8th day of April 1980. Regulation Series

VII (1974) was adopted by the Commission on the 28th day of August, 1974, and became effective October 1, 1974, and superseded Regulation Series VII (1970) which was adopted by the Commission on the 27th day of May, 1970, and became effective July 1, 1970.

The foregoing is a true and correct copy of the West Virginia Air Pollution Control Commission Regulation Series VII (1982) as adopted on the 11th day of August, 1982.



Carl G. Beard, II
Secretary
West Virginia Air Pollution
Control Commission

- 1.05. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.
- 1.06. "Smoke" shall mean small gasborne and airborne particulate matter emitted ~~from-a-stack-or-other-aperture~~ in sufficient numbers to be visible.
- 1.07. "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
- 1.08. "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U. S. Bureau of Mines or any chart, recorder, indicator, or device which is standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.
- 1.09. "Fugitive Particulate Matter", shall mean any and all particulate matter generated by any manufacturing process which, if not confined, would be emitted directly into the open air from points other than a stack outlet.
- 1.10. "Fuel" shall mean any form of combustible matter .

(solid, liquid, vapor, or gas) that is used as a source of heat.

- 1.11. "Air Pollution Control Equipment" shall mean any equipment used for collecting or converting smoke and/or particulate matter for the purpose of preventing or reducing emission of these materials into the open air.
- 1.12. "Standard Conditions" shall mean for the purposes of this regulation a temperature of 68°F and a pressure of 29.92 inches of mercury column.
- 1.13. "Stack", for the purpose of this regulation, shall mean but not be limited to any duct, control equipment exhaust, or similar apparatus, which is designed to vent gases containing particulate matter into the open air.
- 1.14. "Plant" shall mean and include all equipment, grounds, source operations, and any manufacturing process(es) utilized in an integral complex.
- 1.15. "Manufacturing Process" shall mean any action, operation or treatment embracing chemical, industrial, or manufacturing efforts, and employing, for example, heat treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and non-ferrous foundries, kilns, stills, driers, crushers, grinders, roasters, and equipment used in connection therewith, and all other methods or forms of



STATE OF WEST VIRGINIA
OFFICE OF THE SECRETARY OF STATE
CHARLESTON 25305

A. JAMES MANCHIN
SECRETARY OF STATE

STATE REGISTER FILING

I, Carl G. Beard, II, Secretary
Title or Position

Air Pollution Control Commission, hereby submit to record in
Department or Division

the State Register on 8 1/2 x 11" paper two (2) copies of

- ☐ proposed rules and regulations concerning topics of material not covered by existing rules and regulations;
- ☐ proposed rules and regulations superseding rules and regulations already on file;
- ☐ notice of hearing;
- ☒ findings and determinations;
- ☒ rules and regulations; or

☐ other - specify (

This filing pertains to

Temporary Regulation XIX-A - "Requirements for Preconstruction Review, Determination of Emission Offsets for Porposed New, Modified or Reconstructed Stationary Sources of Air Pollutants and Bubble Concept for Intra-source Pollutants"

Chapter 16
Article 20
Series XIX-A
Section _____
Page No. _____

- ☐ proposed rules and regulations are required to go to Legislative Rule Making Committee;
- ☒ proposed rules and regulations are excluded from Legislative Rule Making Committee;

January 18, 1982

Date Submitted

Carl G. Beard II
Signature of Person Authorizing
this Filing

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WEST VIRGINIA
AIR POLLUTION CONTROL COMMISSION

STATEMENT OF FACTS AND CIRCUMSTANCES CONCERNING
TEMPORARY REGULATION XIX-A

Each state, under the Federal Clean Air Act, must file a state implementation plan. Part of the state implementation plan, according to Federal requirements, must contain rules and regulations concerning a specific regulatory process for new source review for areas where air quality standards are not currently being met. As final Federal rules have yet to be adopted, the West Virginia Air Pollution Control Commission adopted temporary Regulation XIX-A at their meeting on January 13, 1982, to fulfill this Federal requirement.

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WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Subject: Regulation XIX-A-Requirements for Preconstruction
Review, Determination of Emission Offsets for Proposed
New, Modified or Reconstructed Stationary Sources of
Air Pollutants and Bubble Concept for Intrasource Pol-
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WEST VIRGINIA ADMINISTRATIVE REGULATIONS
Air Pollution Control Commission

Chapter 16-20
Series XIX-A
(1982)

Subject: Regulation XIX-A- Requirements for Preconstruction
Review, Determination of Emission Offsets for
Proposed New, Modified or Reconstructed Stationary
Sources of Air Pollutants and Bubble Concept for
Intrasource Pollutants.

Section 1. Intent and Purpose

1.01. Emission Offsets

It is the intent of the Commission that all applications filed by any person to construct major new, modified or reconstructed stationary air pollution sources, intending to locate in areas with air quality worse than the levels set to protect the public health and welfare, or that might impact those areas, must adequately meet the preconstruction review procedures and conditions of the Clean Air Act Amendments of 1977 and this regulation.

These conditions are designed to insure that the major new, modified or reconstructed source's emissions will be controlled to the greatest degree practicable; that more than equivalent offsetting emission reductions ("emission offsets") will be obtained from

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existing sources; that there will be progress toward achievement of the National Ambient Air Quality Standards; and that all applicable air pollution regulations adopted by the Commission will be met.

1.02. Bubble Concept

It is the intent of the Commission to extend to the owners or operators of existing sources of air pollutants the option of proposing alternative emission reduction plans employing a more economically efficient mix of control technology.

This alternative emission reduction concept, called the "Bubble Concept", permits the owners or operators of sources to place a greater burden of control on facilities where the cost of control technology is low, and a lesser burden where the cost is high.

The use of the bubble concept is intended to be, and should be interpreted to be, an alternative means to expeditious compliance with the applicable regulations, not as a way to avoid or delay compliance with the applicable regulations, or any requirements of Chapter 16, Article 20, of the Code of West Virginia, of 1931, as amended, or the Federal Clean

Air Act, as amended, nor as a way to avoid, delay, or reduce the sanctions flowing from previous or future noncompliance.

Section 2. Definitions

- 2.01. "Actual Emissions", shall mean the actual rate of emissions of a pollutant from an emissions unit using the units actual operating hours, production rates, and type of materials processed, stored or combusted during a selected time period, which time period shall be a two year period unless a determination is made by the Director that a different time period is more representative of normal source operation. For any emissions unit which has not begun normal operations, actual emissions equal the potential to emit of the unit on the date of filing of the application to construct.
- 2.02. "Allowable Emissions", shall mean the emissions rate calculated using the maximum rated capacity of the source and the most stringent of the following:
- (a) The applicable regulations for such source;
- or,
- (b) The emissions rate specified as a permit condition.
- 2.03. "Applicable Regulations", shall mean the West Virginia Administrative Regulations of the Air Pol-

lution Control Commission as promulgated pursuant to Chapter 16, Article 20, of the Code of West Virginia, of 1931, as amended.

2.04. "Applicant", shall mean any person who makes application to this Commission for a permit to construct, modify or relocate a source in West Virginia under the provisions of these regulations.

2.05. "Air Pollutants", shall mean solids, liquids or gases which, if discharged into the air, may result in a statutory air pollution.

2.06. "Air Quality Control Region (AQCR)", is defined in West Virginia as follows:

Region I - made up of the counties of Brooke, Hancock, Marshall and Ohio;

Region II - made up of the counties of Jackson, Pleasants, Tyler, Wetzel and Wood;

Region III - made up of the counties of Cabell, Mason and Wayne;

Region IV - made up of the counties of Kanawha and Putnam, and the Valley Magisterial District of Fayette County;

Region V - made up of the counties of Boone, Lincoln, Logan, McDowell, Mercer, Mingo, Raleigh and Wyoming, and Fayette (except the Valley Magisterial District);

Region VI - made up of the counties of Barbour,
Harrison, Marion, Monongalia, Preston and
Taylor;

Region VII - made up of the Union Magisterial Dis-
trict of Grant County and the Elk, New Creek,
and Piedmont Magisterial Districts of Mineral
County;

Region VIII - made up of the counties of Braxton,
Calhoun, Clay, Doddridge, Gilmer, Lewis,
Nicholas, Ritchie, Roane, Upshur, Webster and
Wirt;

Region IX - made up of the counties of Greenbrier,
Hampshire, Hardy, Monroe, Pendleton, Poca-
hontas, Randolph, Summers, Tucker, the Grant
and Milroy Magisterial Districts of Grant
County, and the Cabin Run, Frankfort, and Welten
Magisterial Districts of Mineral County;

Region X - made up of the counties of Berkeley,
Jefferson and Morgan.

2.07. "Baseline", shall mean the limitation of emis-
sions of a source, as determined by the applicable
regulations in effect at the time the application to
construct or modify a source is filed and is more
fully defined in Section 7 herein.

2.08. "Begin Actual Construction", shall mean, in

general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities which mark the initiation of the change.

2.09. "Commission", shall mean the West Virginia Air Pollution Control Commission.

2.10. "Commence", shall mean as applied to construction of a major stationary source or major modification that the owner or operator has all necessary preconstruction approvals or permits and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

2.11. "Construction", shall mean any physical change or

change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

2.12. "Director", shall mean the Director of the West Virginia Air Pollution Control Commission.

2.13. "Emissions", shall mean both direct emissions resulting from the operations of a source or facility and those secondary emissions which are well defined and quantifiable and result from activities related to such source or facility.

2.14. "Facility", shall mean an identifiable piece of process equipment. A stationary source is composed of one or more pollutant emitting facilities.

2.15. "Fixed Capital Cost", shall mean the capital needed to provide all the depreciable components.

2.16. "Fugitive Emissions", shall mean those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

2.17. "Intrapollutant Emission Offsets", shall mean that emission offsets may only be achieved for the same air pollutants which have comparable physical and chemical characteristics and properties (e.g., hydrocarbon increases may not be offset against SO₂

reductions or coke plant particulate matter may not be offset against boiler fly ash).

2.18. "Intrasource Pollutants", shall mean air pollutants emitted from within the same source which have comparable physical and chemical characteristics and properties.

2.19. "Lowest Achievable Emission Rate (LAER)", shall mean, for any source, that rate of emissions based on the following, whichever is more stringent:

(a) The most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or

(b) The most stringent emission limitation which is achieved in practice by such class or category of source.

This term, applied to a new, modified, or reconstructed facility, means the lowest achievable emission rate for such facility within the source. In no event shall the application of this term permit a proposed new, modified, or reconstructed facility to emit any pollutant in excess of the amount allowable under applicable new source standards of

performance.

2.20. "Major Modification", shall mean any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation by the Commission. Any net emissions increase that is considered significant for volatile organic compounds shall be considered significant for ozone.

A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement;

(b) Use of alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material

by a stationary source which:

(1) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or CFR 51.24; or

(2) The source is approved to use under any permit issued under regulations approved pursuant to this section;

(f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24.

(g) Any change in ownership at a stationary source.

2.21. "Major Stationary Source", shall mean:

(a) Any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation by the Commission; or

(b) Any physical change that would occur at a

stationary source not qualifying under paragraph 2.21 (a) as a major stationary source if the change would constitute a major stationary source by itself.

A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

2.22. "National Ambient Air Quality Standard (NAAQS)", shall mean the numerical standard specified by the United States Environmental Protection Agency for each air pollutant for which air quality criteria have been issued.

2.23. "Necessary Pre-construction Approvals or Permits", shall mean those permits or approvals required by the Air Pollution Control Commission and the Clean Air Act as amended or any regulations promulgated thereby or thereunder.

2.24. "Net Emissions Increase", shall mean the amount by which the sum of the following exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

(b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(1) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(a) The date five years before construction on the particular change commences, and

(b) The date that the increase from the particular change occurs.

(2) An increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit for the source under this regulation which permit is in effect when the increase in actual emissions from the particular change occurs.

(3) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(4) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(b) It is judicially enforceable at and after the time that actual construction on the particular change begins;

(c) The Director has not relied on it in issuing

any permit under this regulation; and

(d) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(5) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

2.25. "Nonattainment Area", shall mean for the purpose of this regulation, those areas designated by the Commission as not having attained National Ambient Air Quality Standards for specific air pollutants.

2.26. "Offset", and "emission offset", shall mean an emission reduction of a given pollutant achieved at an existing source (or facility within such source) that allows for the emission of such given pollutant at a different proposed source (or facility within such proposed source); provided that the amount of reduction in emissions at the existing source (or facility within such source), is greater, on a

pounds per hour and/or tons per year basis, than one-to-one with respect to the proposed emissions from the different source (or facility within such source) so that total emissions from the source(s) including all existing and proposed facilities for a given pollutant shall be less than baseline emissions. This term shall also mean an emission reduction of a given pollutant achieved at a facility within an existing source that allows for the emission of such given pollutant at a different facility within the same existing source.

2.27. "Person", shall mean any and all persons, natural or artificial, including the State of West Virginia or any other state, any state political subdivision, the United States of America, any municipal, statutory, public or private corporation organized or existing under the law of this or any other state or country, and any firm, partnership or association of whatever nature.

2.28. "Potential to Emit", shall mean the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of

operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is approved and enforceable by the Commission. Secondary emissions do not count in determining the potential to emit of a stationary source.

2.29. "Reasonable Further Progress", shall mean the annual reductions in emissions of pollutants in nonattainment areas committed to by the Commission in the West Virginia State Implementation Plan to assure attainment of National Ambient Air Quality "NAAQS".

2.30. "Reconstruction", shall mean the replacement of components of an existing stationary source to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new stationary source. In addition, any determination shall also be considered in accordance with 40 CFR 60.15 (f) (1-3). A reconstructed stationary source will be treated as a new stationary source for purposes of this regulation. In determining LAER for a reconstructed stationary source, the provisions of 40 CFR 60.15 (f) (4) shall be taken into

account in assessing whether a new source performance standard is applicable to such stationary source.

2.31. "Resource Recovery Facility" shall mean any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Energy conversion facilities must utilize solid waste to provide more than 50 percent of the heat input to be considered a resource recovery facility under this regulation.

2.32. "Secondary Emissions", shall mean emissions which occur as a result of the construction and/or operation of a major source or major modification, or reconstruction, but do not come from the source itself.

Secondary emissions may include, but are not limited to:

(a) Emissions from vessels or trains coming to or from a refinery, terminal facility, etc.

(b) Emissions from off-site support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a major source, modification or relocation.

2.33. "Significant", shall mean, in reference to a

net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates for such pollutants:

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy

Ozone: 40 tpy of volatile organic compounds

Lead: 0.6 tpy

2.34. "Source", shall mean any structure, building, facility, equipment, or installation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control), which may directly or indirectly cause any air pollutant to be emitted.

2.35. "Temporary Source", and "sources of temporary emissions", shall mean for a source located in a nonattainment area and subject to this regulation, those emissions occurring for a period of time less than two years.

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter 16, Article 20, Section

2, of the Code of West Virginia, 1931, as amended.

Section 3. Applicability

3.01. This regulation shall apply to all major stationary sources intending to locate in a designated nonattainment area and to all major modifications or reconstruction to any existing sources located in designated nonattainment areas. This regulation shall also apply to all proposed major stationary sources and to all major modifications or reconstruction to any such sources located anywhere in the State whose emission would cause a violation of a NAAQS or which would cause a significant impact on air quality in a designated nonattainment area.

3.02. The determination under this regulation of whether such a source will cause or significantly contribute to a violation of a NAAQS will be made by the Director upon a case-by-case review of the results of an adequate demonstration submitted by the applicant.

3.03. This regulation shall not apply to sources of temporary emissions such as pilot plants, portable facilities which will be relocated away from the nonattainment area after a short period of time, emissions resulting from the construction phase of a new source, resource recovery facilities utilizing municipal solid waste to provide more than 50 percent of the

heat input for generating steam or electricity.
However, the lowest achievable emission rate
(LAER) shall apply to all such sources located in
or having a significant impact on a nonattainment
area with respect to the specific pollutant for
which the area has been designated as nonattainment.

Section 4. Conditions for a Permit Approval for Proposed
Major Sources That Would Contribute to a
Violation of a NAAQS

4.01. (a) Upon determination by the Director that the
emissions from a proposed new major source or major
source modification, or reconstruction, located with-
in a nonattainment area, or located elsewhere and
having a significant impact on pollutant concen-
trations in a nonattainment area, as of such source's
proposed start-up date, permit approval may be granted
only if such source agrees within its permit appli-
cation and permit, to meet the following conditions:

(1) The proposed source, modification or re-
construction is required to meet the lowest achiev-
able emission rate (LAER) for such sources;

(2) The applicant must certify that all exist-
ing major sources owned or operated by the applicant
(or any entity controlling, controlled by, or under
common control of the applicant) in West Virginia

are in compliance with all applicable emission limitations and standards of the Clean Air Act and Chapter 16, Article 20, of the Code of West Virginia, 1931, as amended, or any rule or regulation promulgated thereunder, or is in compliance with a compliance program which is judicially enforceable or contained in a court decree;

(3) More than equivalent emission offsets from existing sources in the nonattainment area impacted by the proposed new source, modification or reconstruction, (whether or not under the same ownership) are required such that there will be reasonable further progress toward attainment of the applicable NAAQS. Only intrapollutant emission offsets are acceptable;

(4) The emission offsets will provide a positive net air quality benefit in the affected nonattainment area. Fulfillment of Sub-Section 4.01 (a) (3) above and Sub-Sections 8.02 (a) and (d) will be adequate to meet this condition.

(b) Upon determination by the Director that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an enforceable numerical emission standard infeasible,

the applicant may, by petition, request that the Commission approve an appropriate design, operational or equipment standard. In the event that the applicant's proposed design, operational or equipment standard is unacceptable to the Commission, the Commission shall determine an appropriate measurement methodology or design, operational or equipment standard and shall incorporate such determinations and requirements within the permit.

Section 5. Conditions for Permit Approval for Sources
 Locating in Attainment or Unclassifiable Areas
 That Would Cause a New Violation of a NAAQS

5.01. Upon determination by the Director that the emissions from a proposed new major source, or major modification, or reconstruction locating in attainment or unclassified areas would cause a new violation of a NAAQS, permit approval may be granted only if the new source agrees within its permit application and permit to meet a more stringent emission limitation and/or limit emissions of existing sources below levels allowed by the applicable regulations so that the proposed source will not cause a new violation of any NAAQS. Only intrapollutant emission offsets are acceptable.

Section 6. Exemption from Certain Conditions

6.01. (a) The Commission, upon petition by the applicant, may exempt the following sources from the requirements of Sub-Sections 4.01 (a) (3) and (4), and Section 5.01:

(1) Resource recovery facilities burning municipal solid waste; and

(2) Sources which must switch fuels:

(i) due to lack of adequate fuel supplies; or

(ii) where a source is required to be modified as a result of future regulation and no exemption from such regulations is available to the source.

(b) Such exemptions may be granted only if:

(1) The applicant demonstrates that it made its best efforts to obtain sufficient emission offsets to comply with Sub-Sections 4.01 (a) (3) and (4) and Section 5.01, and that such efforts were unsuccessful; and

(2) The applicant has secured all available emission offsets; and

(3) The applicant will continue to seek the necessary emission offsets and apply them when they become available, and the State's commitment to reasonable further progress will not be adversely

affected.

Section 7. Baseline for Determining Credit for Emission
Offsets

7.01. (a) The baseline for determining credit for emission offsets will be the applicable regulation emission limitations in effect at the time the application to construct, modify or reconstruct a source is filed.

(b) Emission offsets shall be made on a pounds per hour basis when all facilities involved in the emission offset calculations are operating at their maximum expected or allowable production rate.

(c) The Director may specify other averaging periods, such as tons per year, in addition to the pounds per hour basis if necessary to carry out the intent of this regulation. When offsets are calculated on a tons per year basis, the baseline emissions for existing sources providing the offset shall be calculated using the actual annual operating hours for the previous one year period (or other appropriate period if warranted by cyclical business conditions as determined by the Director).

(d) Where the applicable regulation requires certain design, operational or equipment standards in lieu of an emission limitation (such as floating

roof tanks for petroleum storage), baseline allowable emissions shall be based on actual operating conditions for the previous one to two year period, whichever is appropriate, in conjunction with such design, operational or equipment standards.

7.02. Where the applicable regulation does not contain an emission limitation for a source or source category, the emission offset baseline involving such sources shall be the actual emissions determined in accordance with Section 7.01.

7.03. Where the applicable regulation emission limit allows greater emissions than the potential emission rate of the source, emission offset credit will be allowed only for control below the potential emission rate.

7.04. (a) The emissions for determining emission credit involving an existing fuel combustion source will be the allowable emissions under the applicable regulation for the type of fuel being burned at the time the new source application is filed.

(b) No emission offset credit shall be allowed for emission reductions (either actual or allowable) resulting from a switch by an existing source to a different type of fuel prior to the date the new

source application is filed.

(c) No emission offset credit, based on the allowable emissions for an alternate fuel, to which the existing source commits to switch at some future date, shall be allowed unless the permit contains conditions requiring the use of specific alternative control measures which would achieve the same degree of emission reduction in the event the source switches back to the original fuel at some later date. The applicant shall ensure that adequate long-term supplies of the new fuel are available before emission offset credit for fuel switches shall be granted.

7.05. (a) A source may be credited with emission reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels.

(b) Emission offsets that involve reducing operating hours or production or source shutdowns must be agreed to in the permit application and embodied in the permit.

(c) Source shutdowns and curtailments in production or operating hours occurring prior to the date the new source application is filed generally may not be used for emission offset credit. However, where an applicant can establish that it shut down

or curtailed production after August 7, 1977, or less than one year prior to the date of permit application, whichever is earlier, and the proposed new source is a replacement for the shutdown or curtailment, credit for such shutdown or curtailment may be applied to offset emissions from the new source.

- 7.06. No emission offset credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for the following compounds: methane, ethane, 1, 1, 1-Trichloroethane (Methyl Chloroform), and Trichlorotri-fluoroethane (Freon 113).

Section 8. Location of Offsetting Emissions

- 8.01. Offsets shall be obtained from sources located as close to the proposed new, modified or reconstructed source site as possible.
- 8.02. (a) The Commission, by petition, may allow offsets from sources located at greater distances from the proposed new, modified or reconstructed source provided that an adequate demonstration that nearby offsets were investigated and reasonable alternatives which provide a positive net air quality benefit are not available is submitted by the applicant, subject to the following:

(1) Emission offsets for volatile organic compounds (VOC) will generally be acceptable from sources located within the same Air Quality Control Region (AQCR) or from other areas which may cause or significantly contribute to the ozone problem at the proposed new, modified or reconstructed source location;

(2) Emission offsets for sources of sulfur dioxide (SO_2), and total suspended particulate (TSP), should be obtained from an existing facility on the same premises or in the immediate vicinity of the new or modified source.

(b) If such allowance is granted, as provided for in Sub-Section (a), of this Section, the Commission should increase the ratio of the required offsets for such a source.

(c) In order to ensure that the emission offsets will provide a positive net air quality benefit, the Director may, at his option, perform the necessary analysis or require the applicant to submit appropriate modeling results for review.

(d) The appropriate modeling referred to in Section 8.02 (c) above is as follows:

(1) For sulfur dioxide (SO_2) and total suspended particulate (TSP), the source's allowable

emissions should be used in an atmospheric simulation model to ensure that the emission offsets provide a positive net air quality benefit. It may, however, be assumed that if the emission offsets are obtained from an existing source on the same premises or in the immediate vicinity of the new source, and the pollutants disperse from substantially the same effective stack height, the air quality test of Sub-Section 4.01 (a) (4) will be met without the necessity of modeling. Thus, when stack emissions are offset against a ground level source at the same time, modeling would be required.

(2) Atmospheric simulation modeling is not necessary for volatile organic compounds. For such pollutants, meeting the requirements of Sub-Section 4.01 (a) (3) and Sub-Section 8.02 (a) (1) will be adequate.

(3) (a) Sources of volatile organic compounds (VOC) locating in a designated nonattainment area for ozone shall be subject to the provisions of Section 4 of this regulation.

(b) VOC sources locating within 36 hours travel time (under wind conditions associated with concentrations exceeding the NAAQS for ozone) of a

nonattainment monitor shall also be subject to Section 4 of this regulation.

(c) A VOC source may be exempt from these requirements if the source owner can demonstrate that the emissions from the proposed source will have virtually no effect upon any nonattainment area for ozone. This exemption is only intended for remote rural sources whose emissions would be very unlikely to interact with other significant sources of VOC or NO_x to form additional ozone.

Section 9. Administrative Procedures for Emission Offset Proposals

9.01. Emission offsets may be proposed either by the owner of the proposed major new, modified or reconstructed sources or by the local community or the State.

(a) The emission offsets committed to must be accomplished by the said source's start-up date, except when such major new, modified or reconstructed source is a replacement for a source that is being shut down in order to provide the necessary benefits; in such cases the Director may allow up to 180 days for shakedown of the new source before the existing source is required to cease operation. Such allowances must be requested by the applicant and contained, if

granted, within the construction permit.

(b) If the emission reductions are to be obtained in a State that neighbors West Virginia, for offset credit for a proposed major new, modified or reconstructed source located in West Virginia, the offsets committed to must be embodied in a State Implementation Plan revision in the neighboring State and must be judicially enforceable by both States and the U. S. Environmental Protection Agency in accordance with the Clean Air Act, as amended, August 7, 1977.

9.02. (a) Such source may propose emission offsets which involve:

(1) Reductions from sources controlled by the source owner (or by persons under common control); and/or

(2) Reductions from neighboring sources not controlled by the applicant.

(b) A state or local community which desires that such major new, modified or reconstructed source locate in its area may commit to reducing emissions from existing sources to sufficiently offset the impact of such major new, modified or reconstructed source.

9.03. Any emission offset proposal described in Section

9.02 (a) (2) above must be embodied either in the applicant's permit application and permit or in a consent order as provided in Chapter 16, Article 20, Section 5 (17) of the Code, which such consent order shall be submitted to the US EPA for inclusion in the State Implementation Plan.

Section 10. Banking of Emission Offset Credit

10.01. Major new, modified, or reconstructed sources obtaining permits after January 16, 1979, by applying offsets that exceed the requirements herein are permitted to save ("bank") such offset credit for up to two (2) years to provide offsets for a source seeking a permit in the future under the requirements of this regulation.

10.02. (a) The owner of an existing source that permanently reduces emissions by shutdown or curtailment is permitted to bank any resulting reductions beyond baseline emissions for use in accordance with this regulation.

 (b) These banked reductions or offsets may only be used as offset credit by the applicant in a subsequent application filed within a period of two (2) years from the date of said permanent shutdown or permanent curtailment, notwithstanding

the provisions of Sub-Section 7.05 (c). Such offsets shall be identified in the construction permit application.

10.03. Emission reductions not banked or which are not used as offset credit within the specified time will be credited to the State for use or disposal by the Commission at its sole discretion.

10.04. To preserve banked emission offsets, the owner thereof shall notify the Director in writing within sixty (60) days of any such permanent shutdown or permanent curtailment, and the Director shall record the emission offsets in a registry and identify the person that has the right to use, transfer, or allocate the banked emission offsets and shall record any transfers of such banked emission offsets after written notice thereof.

Section 11. Control of Fugitive Emissions

Fugitive emissions associated with major new, modified or reconstructed sources subject to this regulation shall not be excluded from the provisions of this regulation.

Section 12. Offsetting of Secondary Emissions

12.01. The conditions of this regulation must be met for secondary emission of a particular pollutant only if the applying major source is subject to this

regulation for emission of that same pollutant.

12.02. For the purposes of this regulation, secondary emissions must be shown as specific and well-defined, must be quantifiable, and must impact the nonattainment area as the major source which causes the secondary emissions.

12.03. Secondary emissions shall not be considered in determining whether the significant levels in Section 2.33 would be exceeded.

12.04. (a) For the following pollutants, the determination of whether, in the area of nonattainment, there is any overlap between the areas of impact of the direct emissions and the secondary emissions, shall be based on a pollutant-by-pollutant analysis:

(1) For total suspended particulate (TSP) and sulfur dioxide (SO_2), the areas of impact shall be determined by modeling in accordance with Sub-Section 8.02 (d).

(2) For volatile organic compound (VOC) emissions, the area of impact would be the areas designated as nonattainment for ozone or as otherwise shown to be in violation of the NAAQS for ozone.

(b) If the proposed source owner and the Director disagree as to whether the secondary emissions impact the same area as the direct emissions, the source

owner has the burden of proving it is correct
by performing the necessary modeling.

Section 13. Bubble Concept for Intrasource Pollutants

- 13.01. The owner or operator of a source with multiple process-related emission facilities (stacks, vents, ports, etc.), each of which is subject to specific emission requirements under the applicable regulations, may propose to meet the total emission control requirements of the applicable regulations, for a given pollutant, through a different mix of control technology than that mandated by existing or proposed regulations.
- 13.02. It is the responsibility of the owner or operator of the source to develop its specific bubble concept design. The owner or operator also has the burden to demonstrate to the satisfaction of the Commission that the proposed bubble concept design is equivalent in emission reduction, enforceability, and environmental impact to existing individual process standards.
- 13.03. The Commission shall not approve any bubble concept design without first giving due notice and holding a public hearing, on a case-by-case basis. Such approved bubble concept design shall be embodied in a consent order as provided in Chapter 16, Article 20, Section 5 (17) of the Code.

13.04. An approved bubble concept design shall be in effect for any source for a period of no more than three years from the date of issuance. At the end of such three-year period, the Commission shall review the bubble concept design for such source and may either terminate or extend approval of the design based on consideration of air quality, control technology innovation, compliance and such other determinations as the Commission deems appropriate.

Section 14. Discretionary Decisions Made by the Director

Any discretionary decision made by the Director as provided herein may be appealed to the Commission for review by petition. Such review shall be discretionary with the Commission.

Section 15. Conflict with Other Rules or Regulations

When a provision of this regulation conflicts with a similar portion(s) of any rule or regulation previously adopted by the Commission, the provision(s) of this regulation shall apply.

Section 16. Effective Date

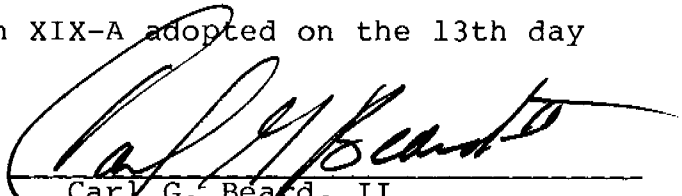
Regulation XIX-A shall become effective as a temporary regulation the 22nd day of January, 1982.

The foregoing is a true and correct copy of the West Virginia Air Pollution Control Commission

APCC
Adm. Reg. 16-20
Series XIX-A

Sec. 16.

Temporary Regulation XIX-A adopted on the 13th day
of January, 1982.



Carl G. Beard, II
Secretary
West Virginia Air Pollution
Control Commission