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Air Pollution Regulations in State Implementation Plans: West Virginia

Abcor Inc, Wilmington, MA Walden Div

Prepared for

Environmental Protection Agency, Research Triangle Park, NC

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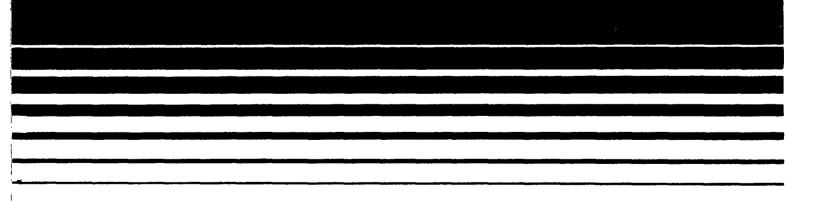
United States Environmental Protection Agency Office of Air Quality Planning and Standards Research Triangle Park NC 27711 EPA-450/3-78-098 August 1978

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West Virginia



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Air Pollution Regulations in State Implementation Plans:

West Virginia

by

Walden Division of Abcor, Inc. Wilmington, Massachusetts

Contract No. 68-02-2890

EPA Project Officer: Bob Schell

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise, and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

August 1978

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Publication No. EPA-450/3-78-098

INTRODUCTION

This document has been produced in compliance with Section 110(h)(1) of the Clean Air Act Amendments of 1977. The Federally enforceable regulations contained in the State Implementation Plans (SIPs) have been compiled for all 56 States and territories (with the exception of the Northern Mariana Islands). They consist of both the Federally approved State and/or local air quality regulations as indicated in the Federal Register and the Federally promulgated regulations for the State, as indicated in the Federal Register. Regulations which fall into one of the above categories as of January 1, 1978, have been incorporated. As mandated by Congress, this document will be updated annually. State and/or local air quality regulations which have not been Federally approved as of January 1, 1978, are not included here; omission of these regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations.

There have been recent changes in the Federal enforceability of parking management regulations and indirect source regulations. October, 1977, appropriation bill for EPA prohibited Federal enforcement of parking management regulations in the absence of specific Federal authorizing legislation. Federally promulgated parking management regulations have, therefore, been suspended indefinitely. Pursuant to the 1977 Clean Air Act Amendments, indirect source regulations may not be required for the approval of a given SIP. Consequently, any State adopted indirect source regulations may be suspended or revoked; State adopted indirect source regulations contained in an applicable SIP are Federally enforceable. More importantly, EPA may only promulgate indirect source review regulations which are specific to Federally funded, operated, or owned facilities or projects. Therefore, the Federally promulgated indirect source regulations appearing in this document are not enforceable by EPA except as they relate to Federal facilities.

Since State air quality regulations vary widely in their organization, content, and language, a standardized subject index is utilized in this document. Index listings consist of both contaminant and activity oriented categories to facilitate usage. For example, for regulations which apply to copper smelters, one might look under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State immediately follow the approved State and local regulations.

Additionally, a summary sheet of the information included in each comprehensive document is presented prior to the regulatory text to allow one to quickly assess the contents of the document. Specifically, the summary sheets contain the date of submittal to EPA of each revision

to the SIP and the date of the <u>Federal Register</u> in which the revision was either approved or disapproved by <u>EPA</u>. Finally, a brief description or reference of the regulation which was submitted is also included.

This document is not intended to provide a tool for determining the enforceability of any given regulation. As stated above, it is intended to provide a comprehensive compilation of those regulations which are incorporated directly or by reference into Title 40, Part 52, of the Code of Federal Regulations. Consequently, the exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation (for example, regulations governing pollutants, such as odors, for which there is no national ambient air quality standards) in this document does not, in itself, render the regulation enforceable.

SUMMARY SHEET

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EPA - APPROVED REGULATION CHANGES

Submittal Date	Approval Date	Description
11/14/73	8/28/74	Regulation X
6/17/74	11/10/75	Regulation XIII
11/8/74	11/10/75	Regulation II and VII
3/16/76	11/19/76	Regulation VIII (Delete 3.01(a))

FEDERAL

Section Number	Description
52.2524	Federal Compliance Schedule
52.2528	Regulation for Prevention of Significant Deterioration

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REVISED STANDARD SUBJECT INDEX

- 1.0 DEFINITIONS
- 2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
- 3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
- 4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
 - 4.1 PARTICULATES
 - 4.2 SULFUR DIOXIDE
 - 4.3 NITRIC OXIDES
 - 4.4 HYDROCARBONS
 - 4.5 CARBON MONOXIDE
 - 4.6 OXIDANTS
 - 4.7 OTHERS
- 5.0 VARIANCES
- 6.0 COMPLIANCE SCHEDULES
- 7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE
- 8.0 EMERGENCY EPISODES
- 9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING
- 10.0 NEW SOURCE PERFORMANCE STANDARDS
- 11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS
- 12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS
- 13.0 RECORD KEEPING AND REPORTING
- 14.0 PUBLIC AVAILABILITY OF DATA
- 15.0 LEGAL AUTHORITY AND ENFORCEMENT
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- 51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
- 51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
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- 51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) Particulates (includes Fuel Content and Other Related Topics)
- 51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) SO₂ (includes Fuel Content and Other Related Topics)
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- 51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)
- 51.15 PETROLEUM REFINERIES
- 51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)
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(51.5)

REGULATION II

TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION

FROM COMBUSTION OF FUEL IN INDIRECT HEAT EXCHANGERS

(1.0) Section 1. <u>Definitions</u>.

- 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. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.
- 1.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 1.04. "Director" shall mean the Director of the West Virginia Air Pollution Control Commission.
- 1.05. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the laws of this or any other state or county, and any firm, partnership, or association of whatever nature.
- 1.06. "Fuel Burning Unit" shall mean and include any furnace, boiler apparatus, device, mechanism, stack, or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. For the purposes of this regulation, all fuel burning units are classified in the following categories:
 - (a) Type 'a' shall mean any fuel burning unit which has as its primary purpose the generation of steam or other vapor to produce electric power for sale.
 - (b) Type 'b' shall mean any fuel burning unit not classified as a Type 'a' of Type 'c' unit such as industrial pulverized fuel-fired furnaces, cyclone furnaces, gas-fired and liquid-fuel-fired units.
 - (c) Type 'c' shall mean any hand-fired or stoker-fired fuel burning unit not classified as a Type 'a' unit.
- 1.07. "Similar Unit(s)" shall mean all Type 'a', or all Type 'b', or all Type 'c' fuel burning units located at one plant.

- 1.08. "Fuel" shall mean any form of combustible matter (solid, liquid, vapor, or gas) that is used as a source of heat.
- 1.09. "Particulate Matter" shall mean any material except uncombined water that exists in a finely divided form as a liquid or solid.
- 1.10. "Smoke" shall mean small gasborne and airborne particulate matter arising from a process of combustion in sufficient number to be visible.
- 1.11. "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 a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann's Scale.
- 1.12. "Plant" shall mean and include all fuel burning units, source operations, equipment, and grounds utilized in an integral complex.
- 1.13. "Fugitive Particulate Matter" shall mean any and all particulate matter generated by any operation involving or associated with the combustion of fuel in fuel burning units which, if not confined, would be emitted directly into the open air from points other than a stack outlet.
- 1.14. "Fugitive Particulate Matter Control System" shall mean any equipment of method used to confine, collect, or dispose of fugitive particulate matter, including, but not limited to, hoods, bins, duct work, fans, and air pollution control equipment.
- 1.15. "Air Pollution Control Equipment" shall mean any equipment used for collecting or confining particulate matter for the purpose of preventing or reducing the emission of air pollutant into the open air.
- 1.16. "Stack", for the purposed of this regulation, shall mean, but not be limited to, any duct, control equipment exhaust, or similar apparatus, which vents gases and/or particulate matter into the open air.
- 1.17. "Kanawha Valley Air Basin" shall mean that area starting at the junction of the Gauley and New Rivers and terminating at the center of the Winfield Locks and extending a distance of three (3) statute miles, measured horizontally, with no reference to terrain, on each side of the center line of the Kanawha River.

(50.1.2) Section 2. <u>Emissions of Smoke and/or Particulate Matter</u> Prohibited and Standards of Measurement.

2.01. Visible Emission Requirements for Fuel Burning Units Not Meeting the Requirements of Section 3, Weight Emission Standards.

No person shall cause, suffer, allow, or permit emission of smoke into the open air from any fuel burning unit which is in excess of the Ringelmann limitations specified in the following tables for the designated areas and time periods:

(a) From March 15, 1972, until September 1, 1972, smoke which is as dark as or darker than:

Areas of State	Installation Date of Fuel Burning Unit	Ringelmann Limita- tions on Fuel Burn- ing Units
Kanawha Valley Air Basin	Before April 4, 1966 After April 4, 1966	2 i
All Other	NO LIMITATIONS	

(b) From September 1, 1972, until June 30, 1975, smoke which is as dark as or darker than:

Areas of	Ringelmann Limitation of Fuel
State	Burning Units
All	1

(c) After June 30, 1975, smoke which is darker than:

Areas of	Ringelmann Limitation of Fuel
State	Burning Units
All	0.5

2.02 The provisions of Sub-Section 2.01 of this section shall not apply to smoke emitted during the cleaning of a fire box or soot blowing the shade or appearance of which is less than the Ringelmann number specified in the following table, for a period or periods aggregating no more than eight (8) minutes per fuel burning unit in any eight (8) hour period:

Sub-Sections	Ringelmann Number
2.01 (a)	3
2.01 (b) and (c)	2

2.03. Visible Emission Requirements for Fuel Burning Units that Meet the Requirements of Section 3, Weight Emission Standards.

No person shall cause, suffer, allow, or permit emission of smoke into the open air from any fuel burning unit which is darker in shade or appearance than 0.5 Ringelmann or tem (10) percent opacity.

- 2.04. The provisions of Sub-Section 2.02 shall not apply to smoke emitted during the cleaning of a fire box or soot blowing the shade or appearance of which is less than No. 1 Ringlemann or twenty (20) percent opacity for a period or periods aggregating no more than eight (8) minutes per fuel burning unit for any eight (8)-hour period.
- 2.05. Realizing that with present technology the provisions of this section may, in some cases, be too restrictive to be applied to the building of a new fire in a fuel burning unit, the Commission may, upon specific application by the owner and/or operator of a fuel burning unit(s), grant exemptions to these provision. However, in no case shall these exemptions exceed the limitations set forth in the following table:

Type of Fuel Burning Unit	Exemptions Allowed For No More Than Two (2) Hours Per Start-Up Operation Shall Not be as Dark or Darker in Shade or Appearance as:	
Type 'a' and Type 'b'	No. 2 Ringelmann	
Type 'c'	(1) For forty-five (45) minutes No. 3 Ringelmann	
	(2) For the remaining seventy- five minutes No. 2 Ringelmann	

If such an exemption to the provisions of this section is desired, an application in writing shall be made to the Director. From time to time the Commission shall review such exemptions to determine if they are still warranted. If the Commission revises or terminates an exemption the owner and/or operator fo the affected fuel burning unit(s) shall be notified by certified mail. Such revisions or terminations shall not become effective for at least ninety (90) days after the receipt of notification by the owner and/or operator.

(50.1.1) Section 3 <u>Weight Emission Standards</u>

- 3.01. (a) No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:
 - (1) For Type 'a' fuel furning units, the product of 0.05 and the total design heat inputs for such units in million British Thermal Units (B.T.U.'s) per hour, provided however that no more than 1200 pounds per hour of particulate matter shall be discharge into the open air from all such units;
 - (2) For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than 600 pounds per hour of particulate matter shall be

discharged into the open air from all such units; and

(3) For Type 'c' fuel burning units, in excess of the values listed in the following table, provided however that no more than 300 pounds per hour of particulate matter shall be discharged into the open air from all such units.

Table for Type 'c' Units		
Total Design Heat Input for all Type 'c' Fuel Burning Units Located at One Plant in Millions of B.T.U.'s Per Hour	Total Allowable Partic- ulate Matter Emission Rate for All Type 'c' Fuel Burning Units Located at One Plant in Pounds Per Hour	
10 20 40 60 80 100 200 400 600 3,333	3.4 5.6 9.0 11.7 14.4 16.6 26.4 42.2 54.0 300.0	

For values between any two corresponding consecutive values listed in this table, linear interpolation is to be used for both columns.

(b) Subject to the provisions of this regulation, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Commission at the request of, and on forms provided by, the Director. Such rates shall be subject to review and approval by the Director.

The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and/or any permits concerning

such source(s), and shall not be changed without the prior written approval of the Director.

(c) If the number of similar fuel burning units located at one plant, each of which is meeting the requirements of this regulation, is expanded by the addition of a new unit(s), the total allowable emission rate for the new unit(s) shall be determined by the following formula. However, the maximum allowable emission rates given in Sub-Section 3.01(a) are not to be exceeded:

$$R_c = \left[\frac{1}{1} \left(\frac{H_{ct} R_{ct}}{H_{ct}} \right) \right] H_c$$

Where.

 R_C is the total allowable emission rate in pounds per hour for the new fuel burning unit(s);

Hct is the total design heat input in million B.T.U.'s per hour of the existing and new similar units;

 $R_{\mbox{\scriptsize Ct}}$ is the total allowable emission rate in pounds per hour corresponding to $H_{\mbox{\scriptsize Ct}};$ and

H_C is the total design heat input in million B.T.U.'s per hour for the new fuel Burning unit(s).

3.02. Addition of Sulfur Oxides to Combustion Unit Exit Gas Stream.

No person shall cause, suffer, allow, or permit the addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving control equipment efficiency. Such action shall constitute a violation of this regulation.

- 3.03. The provision of Sub-Section 3.02 of this section shall not apply to combustion units in operation on the effective date of this regulation, September 1, 1974.
- (50.1) Section 4. <u>Control of Fugitive Particulate Matter</u>. (51.5)
 - 4.01. No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control

system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

- (a) Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- (b) Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and
- (c) Ash or fuel handling systems and ash disposal areas.

(3.0) Section 5. Registration.

- 5.01. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating existing fuel burning units not previously registered shall have registered such units with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner and/or operator of fuel burning unit(s) subject to the provisions of this section.
- 5.02. The owner and/or operator of fuel burning units that are under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such fuel burning units within this thirty (30) day period.

(3.0) Section 6. Permits.

6.01. After the effective date of this regulation, no person shall construct or modify any fuel burning unit without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source(s) will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of Secondary Air Quality Standards. Within ninety (90) days of the receipt

of an application the Director shall issue or deny such permit in accordance with the provisions of Section 2 of Chapter 16, Article 20, Paragraph 11b of the Code of West Virginia, as amended.

(13.0) Section 7. Reports and Testing. (9.0)

7.01. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of Section 3. The Director, or his duly authorized representative, may at his option witness or conduct such 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.

Within a reasonable tolerance, the individual samples for such emission tests shall be extracted isokinetically, with the probe and filter media maintained at, or about, stack temperatures. Individual measurements shall be made at each of the various extraction points throughout the sampling plane in a manner that yields a composite sample and a distribution of measurements which are representative of the total stack gas flow and pollutant concentrations during the test.

The primary particulate sample collector shall be a preconditioned, fiberglass mat filter, certified as being at least ninety-nine (99) percent efficient in collecting 0.3 micron DOP (Dioctyl Phthalate) smoke, or a filter or equivalent properties and efficiency. The filter used shall be pre-weighed to at least one-tenth (0.1) of a milligram.

The total sample weight shall include both the particulate collected by the filter and the particulate obtained by appropriate cleaning of all devices preceding this filter in the sampling train. The total sample weight shall be determined to the nearest one-tenth (0.1) of a milligram.

Sufficient information on temperatures, velocities, pressures, weights, and dimensional values shall be reported to the Director, with such necessary commentary as he may

- require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained.
- 7.02. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Sub-Section 3.01.
- 7.03. The operators of fuel burning units shall submit data on operating schedules and the quality of fuel used in such units. Such data shall be reported in the manner the Director may specify, and will include, but not necessarily be limited to, information such as the number of start-ups, the quantity of fuel burned, and the ash, sulfur, moisture, volatile matter, and B.T.U. content.
- 7.04. Within a reasonable time prior to the start-up of a fuel burning unit(s), the owner and/or operator of such unit(s) shall notify the Director of the proposed start-up. If such prior notification is not practicable (e.g., if emergency conditions require prompt action, or if the requirement for the start-up and the start-up itself must necessarily occur, in time, outside the Commission's normal working hours) notification should be made within a reasonable time thereafter.
- 7.05. The Commission may publish, and from time to time revise, detailed test procedures and reporting instructions implementing the provisions of this section.

(6.0) Section 8. Compliance Programs and Schedules.

8.01 In the event that a fuel burning unit(s) in existence prior to the adoption of this regulation does 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 plant. 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 II (1966) 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 a fuel burning unit(s) fails to submit a program or an acceptable program and schedule, the Commission shall, by order, determine the compliance program and schedule.

(5.0) Section 9. Variance.

- 9.01. 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 Cimmission.
- 9.02. For the purpose of preventing possible equipment damage during the start-up of a fuel burning unit(s), emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed twenty-four (24) hours, upon specific application to the Director no less than twenty-four (24) hours prior to the start-up operation.

(2.0) Section 10. Exemptions.

10.01. All fuel burning units having a heat input under ten (10) million B.T.U.'s per hour will be exempt from Sections 3 through 8. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

(2.0) Section 11. Effective Date.

Regulation II (1974) shall become effective September 1, 1973, and shall supersede Regulation II (1972) which was adopted by the West Virginia Air Pollution Control Commission of the 26th day of January, 1972, and became effective March 15, 1972, and was filed with the Secretary of State January 31, 1972.

(51.8)

REGULATION III

TO PREVENT AND CONTROL AIR POLLUTION FROM THE

OPERATION OF HOT MIX ASPHALT PLANTS.

(1.0) 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. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or county and any firm, partnership, or association of whatever nature.
- 1.04. "Fuel Burning Equipment" shall mean and include any chamber, apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat for direct heat transfer as applied to an asphaltic hot mix plant excluding internal combustion engines.
- 1.05. "Fuel" shall mean a fuel such as gas or liquid fuel which is fired in fuel burning equipment. When solid fuels are substituted for or used in conjuction with either of the above fuels, the same regulation will apply.
- 1.06. "Plant" shall mean an 'asphaltic hot mix plant' which shall mean and include all the equipment utilized in the manufacture of asphaltic hot mix concrete, such as burner, drier, elevators, screens, mixer, weighing equipment, bins, air pollution control equipment, etc.
- 1.07. "Air Pollution Control Equipment" is defined as:
 - (a) Primary collection That equipment such as cyclones or multicyclones incorporated for the collection of fine particulate material generated and emitted principally from the drying operation and from which all collected material may or may not be reinjected into the main aggregate flow.
 - (b) Secondary collection That equipment such as

multicyclones, scrubbers, bag filters, and electrostatic precipitators incorporated for the collection of that particulate material not collected by the primary collection equipment and from which such collected material may or may not be reinjected into the main aggregate flow.

- 1.08. "Smoke" shall mean small gasborne and airborne particles arising from a process of combustion in sufficient numbers to be visible.
- 1.09. "Ringelmann Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U. S. Bureau of Mines as information circular 7718, August, 1955, or any chart, recorder, indicator, or device which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.
- 1.10. "New Equipment" shall mean all asphaltic hot mix plants installed after the effective date of this regulation.
- 1.11. "Fugitive Dust" shall mean any and all particulate matter generated by the operation of an asphalt mix plant which, if not confined, would be emitted directly to the atmosphere from points other than the stack outlet.
- 1.12. "Fugitive Dust Control System" shall mean any equipment or method used to confine, collect, and dispose of fugitive dust, including hoods, bins, duct work, fans, air pollution control equipment, etc.

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, 1931, as amended.

(50.1.2) Section 2. Emission of Smoke Prohibited and Standards of Measurement.

- 2.01. No person shall cause, suffer, allow or permit emission of smoke into the open air from any fuel burning equipment which is as dark or darker in shade or appearance as that designated as No. 1 on the Ringelmann Smoke Chart.
- 2.02. The provisions of Sub-Section 2.01 of this Section shall not apply to smoke emitted during the starting operation the shade or appearance of which is less than No.3 of the Ringelmann Smoke Chart for a period or periods

aggregating no more than 4 minutes per start-up.

2.03. The equivalent opacity of those Ringelmann numbers in Sub-Section 2.01 and Sub-Section 2.02 of this Section shall be used as a guide in the enforcement of Section 3 of this Regulation.

(50.1)Section 3. Control and Prohibition of Particulate Emission (51.5)

3.01. No person shall cause, suffer, allow or permit particulate emission from a plant into the open air in excess of the quantity as listed in the following table:

Aggregate Process Rate Pounds Per Hour	Stack Emission Rate Pounds Per Hour
10,000	10
20,000	16
30,000	22
40,000	28
50,000	31
100,000	33
200,000	37
300,000	40
400,000	43
500,000	47
600,000 & above	50

For a process weight between any two consecutive process weights stated in this table, the emission limitation shall be determined by interpolation.

- 3.02. In the case of more than one stack to a hot mix asphalt plant, the emission limitation of Sub-Section 3.01 of this Section will be based on the total emission from all stacks.
- No person shall cause, suffer, allow or permit a plant to operate that is not equipped with a fugitive dust control system, This system shall be operated and maintained in such a manner as to prevent the emission of particulate material from any point other than the stack outlet.
- 3.04. The owner or operator of the plant shall maintain dust control of the plant premises and plant owned, leased, or controlled access roads by paving, oil treatment, or other suitable measures. Good operating practices shall

be observed in relation to stockpiling, screen changing, and general maintenance to prevent dust generation and atmospheric entrainment. Good operating practices, including water spraying or other suitable measures, shall be employed to minimize dust generation and atmospheric entrainment when hot bins are pulled.

(3.0) Section 4. Registration.

- 4.01. Within thirty (30) days after the effective date of this regulation, all persons operating asphalt mix plants within the state shall have registered with the Commission on forms to be made available by the Commission, the name of the person, company or corporation operating the plant, the address, location, county, ownership (lessee & lessor), the principal officer of the company, and any other such reasonable information as the Commission may require including by not necessarily limited to capacity of the plant, type of fuel used, plant operating schedule, description of rotary drier, height and size of stack and description of dust control equipment.
- 4.02. When such plants are modified by changes in burner design, heating fuel, fan capacity, drier design, air pollution control equipment, or like changes which significantly effect the emission characteristics of the plants then they shall be re-registered with the Commission defining those changes within thirty (30) days after being placed in operation.

(3.0) Section 5. Permits.

- 5.01. Plants in existence on the effective date of this regulation will be granted a temporary operating permit. These permits will be valid for as long as the Commission shall designate. When control programs are completed that meet the requirements of this regulation, these temporary permits will be replaced with annual operating permits.
- 5.02. Plants in existence on the effective date of this regulation will be granted an operating permit provided they meet and maintain the requirements as set forth in this regulation. These permits will be valid for one calendar year and must be renewed annually. Any plant failing to maintain these requirements shall, at the discretion of Commission, have their operating permit revoked.
- 5.03. When permits are revoked, the Commission will consider

reissuing permits when such changes as necessary to meet the requirements of this regulation are made by the owner or operator of the plants.

- 5.04. Ten (10) days prior to the operation of a new or relocated plant, application must be made to the Commission for a permit. Such application shall be made on forms to be made available by the Commission and in the manner acceptable to the Commission. Plants that meet the requirements of of this regulation will be issued an annual permit for operation by the Commission.
- 5.05. Plants operating without a permit will be in violation of this regulation.

(13.0) Section 6. Reports. (9.0)

- 6.01. When the Commission has reason to believe that the provisions of this regulation are being violated, the owner of the plant shall permit the Commission to conduct such stack tests as necessary to determine the dust loading in the exhaust gases. The operator will provide all the sampling connections and sampling ports to be located in such manner as the Commission may require, power for test equipment and the required safety equipment such as the necessary scaffolding, railings, ladders, ect., to comply with generally accepted good safety practices.
- 6.02. At such time as the Commission may request, the operator of the plant will submit data on type, sizing, and quantity of the aggregate used and the hours of operation.

(5.0) Section 7. Variance.

- 7.01. Where plants in existence prior to the adoption of this regulation do not meet the particulate matter emission limitations shall be developed and offered to the Commission by the person owning the plant causing the emission. This control program shall be submitted upon the request of and within such time as shall be fixed by the Commission, and after said program has been approved by the Commission, the owner or operator of the equipment causing the emission shall not be in violation of this regulation so long as the program is observed.
- 7.02. Due to unavoidable malfunctions of equipment, emissions exceeding those provided for in this regulation may be permitted by the Commission for periods not to exceed 2 days upon specific application to the Commission. Such application shall be made within 24 hours of the malfunction

or within such other time period as the Commission may specify. When parts are not available for repair the Commission may grant an extension of time for a period longer than 2 days, but not to exceed 10 days.

(2.0) Section 8. Effective Date.

Regulation III shall become effective October 1, 1966.

(51.2)

REGULATION V

TO PREVENT AND CONTROL AIR POLLUTION FROM THE OPERATION OF COAL PREPARATION PLANTS AND COAL HANDLING OPERATIONS.

(1.0) Section 1. Definitions.

- 1.01. "Air Pollution", "statutory air pollution' shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, as amended.
- 1.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 1.03. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or county and any firm, partnership, or association of whatever nature.
- 1.04. "Handling Operation" shall mean and include but not be limited to all coal grinding, crushing, picking, screening, conveying, storing, and stockpiling operations associated with the transport, production, or preparation of coal or coal refuse, excluding coal washing, drying, or air separation operations.
- 1.05. "Coal Preparation" shall mean and include but not be limited to all coal washing, drying or air separation operations used for the purpose of preparing the product for marketing.
- 1.06. "Plant" shall mean and include all equipment and grounds utilized in an integral complex for coal preparation and associated handling.
- 1.07. "Fuel" shall mean a fuel such as a solid, gaseous or liquid fuel which is fired in fuel burning equipment.
- 1.08. "Fuel Burning Equipment" shall mean and include any chamber, apparatus, device, mechanism, stack or structure used in the process of burning fuel for the primary purpose of reducing the moisture content of coal.
- 1.09. "Thermal Drier" shall mean a device using fuel burning equipment for the primary purpose of reducing the moisture content of coal.
- 1.10. "Air Table" shall mean a device using a gaseous separating

- media for the primary purpose of improving the product quality.
- 1.11. "Air Pollution Control Equipment" shall mean any equipment used for collecting gasborne particulate matter for the purpose of preventing or reducing particulate emissions into the open air.
- 1.12. "Standard Cubic Foot" One cubic foot of dry gas, measured at standard conditions of 60°F and 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 vents gases containing particulate matter into the open air.
- 1.14. "Particulate Matter" shall mean any material except uncombined water, that exists in a finely divided form as a liquid or solid.
- 1.15. "Smoke" shall mean small gasborne and airborne particles emitted from a stack in sufficient numbers to be visible.
- 1.16. "Ringelmann Smoke Chart" Shall be the Ringelmann's Scale for Grading the Density of Smoke published by the U. S. Bureau of Mines as information circular 7718, August, 1955, or any chart, recorder, indicator, device, or method which is a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.
- 1.17. "Fugitive Dust" shall mean any and all particulate matter generated, which, if not confined, would be emitted directly into the open air from points other than a stack outlet.
- 1.18. "Fugitive Dust Control System" shall mean any equipment or method used to confine, collect, and dispose of fugitive dust, including but not limited to hoods, bins, duct work, fans, and air pollution control equipment.

Other words and phrased used in this Regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of Code of West Virginia, 1931, as amended.

(50.1.2) Section 2. Emission of Smoke Prohibited and Standards of Measurement.

- 2.01. No person shall cause, suffer, allow or permit emission of smoke into the open air from any stack which is as dark or darker in shade or appearance as that designated as No. 1 on the Ringelmann Smoke Chart.
- 2.02. The provisions of Sub-Section 2.01 of this Section shall not apply to smoke, the shade or appearance of which is less than No. 3 on the Ringelmann Smoke Chart for a period or periods aggregating no more than 5 minutes in any 60-minute period during operation.
- 2.03. The provisions of Sub-Section 2.01 and 2.02 of this Section shall not apply to smoke, the shade or appearance of which is less than No. 3 on the Ringelmann Smoke Chart for a period of up to 8 minutes in any operating day for the purposes of building a fire of operating quality in the fuel burning equipment of a thermal drier.
- 2.04. The equivalent opacity of those Ringelmann numbers in Sub-Section 2.01 and Sub-Section 2.02 of this Section shall be used as a guide in the enforcement of Section 3 and Section 4 of this Regulation.
- 2.05. No person shall cause, suffer, allow or permit emission of smoke into the open air from any fugitive dust control system which is as dark or darker in shade or appearance as that designated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringlemann number.
- (51.2) Section 3. Control and Prohibition of Particulate Emissions From Coal Thermal Drying Operations of a Coal Preparation Plant.

No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any thermal drier exhaust in excess of the following limitations:

- 3.01. Until September 2, 1971, thermal driers installed on or before March 1, 1970, shall not emit more than 0.15 grains of particulate matter per standard cubic foot of exhaust gas.
- 3.02. After September 1, 1971, thermal driers installed on or before March 1, 1970, shall not exceed the emission limitations of following table:

Total Plant Volumetric Flow Rate

Maximum Allowable Particulate Loading Per Drier

(Standard Cubic Feet Per Minute)

(Grains Per Standard Cubic Foot)

120,000 or less	0.12
172,000	0.11
245,000	0.10
351,000	0.09
500,000 & above	0.08

3.03. Thermal driers installed after March 1, 1970, shall not exceed the emission limitations of the following table:

Total Plant Volumetric Flow Rate

Maximum Allowable
Particulate Loading Per Drier

(Standard Cubic Feet Per Minute) (Grains Per Standard Cubic Foot)

75,000 or less	0.10
111,000	0.09
163,000	0.08
240,000 & above	0.07

- 3.04. For the volumetric flow rate between any two consecutive volumetric flow rates stated in Sub-Section 3.02 and Sub-Section 3.03, limitations shall be as determined by linear interpolation. For the purpose hereof, the total volumetric flow rate shall be the total standard cubic feet of dry gas passed through all thermal driers at one plant location. This value shall be determined by methods which are acceptable to the Commission.
- 3.05. When modifications are made to plants after March 1, 1970, that result in a significant increase in the total gas volume passing through a thermal drier, said drier(s) will be subject to the emission limitations of Sub-Section 3.03 even though such modifications do not include the installation of a new thermal drier(s).
- 3.06. No person shall circumvent this Regulation by adding additional gas to any drier exhaust or group of drier exhausts for the purpose of reducing the grain loading.
- 3.07. No person shall cause, suffer, allow or permit the exhaust gases from a thermal drier to be vented into the open air at an altitude of less than 80 feet above the foundation grade of the structure containing the drier or less than 10 feet

above the top of said structure or any adjacent structure, whichever is greater.

In determining the desirable height of the above stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, and the stack emission rate.

- 3.08. Any stack venting thermal drier exhaust gases into the open air shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
- (51.2) Section 4. <u>Control and Prohibitions of Particulate Emissions From an Air Table Operation of a Coal Preparation Plant.</u>
 - 4.01. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any air table exhaust in excess of 0.05 grains per standard cubic foot of exhaust gases.
 - 4.02. No person shall circumvent this Regulation by adding additional gas to any air table exhaust or group of air table exhausts for the purpose of reducing the grain loading.
 - 4.03. Any stack venting air table exhaust gases into the open air shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
- (51.2) Section 5. <u>Control and Prohibitions of Fugitive Dust Emissions From Coal Handling Operations and Preparation Plants.</u>
 - 5.01. No person shall cause, suffer, allow or permit a plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.
 - 5.02. The owner or operator of the plant or handling operation shall maintain dust control of the premises and owned, leased, or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening, and general maintenance to minimize dust generation and atmospheric entrainment.

(3,0) Section 6. Registration.

- 6.01. Within thirty (30) days after the effective date of this Regulation, all persons owning and/or operating coal preparation plants within the State shall have registered with the Commission on forms to be made available by the Commission, the name of the person, company or corporation operating the plant, the address, location, county, ownership (lessee & lessor), the principal officer of the company, and any other such reasonable information as the Commission may require, including, but not necessarily limited to, capacity of the plant, type of fuel used, plant operating schedule, description and capacities of thermal driers and air tables, height and size of stacks and air pollution control equipment.
- 6.02. Persons operating registered plants which are to be modified by changes in fuel burning equipment, fuel, fan capacity, drier design, air pollution control equipment, air tables, stacks or like changes which could significantly affect the emission characteristics of the plants shall file with the Commission those proposed changes not less than thirty (30) days before such changes are made.
- 6.03. Within thirty (30) days after the completion of the modifications as filed under Sub-Section 6.02, the operator shall register such changes with the Commission of forms to be made available by the Commission.
- 6.04. Not later than sixty (60) days prior to operation, new plants shall be registered by the owner and/or operator of such plants. Such registration shall be made on forms to be made available by the Commission and will include the name of the person, company, or ownership (lessee & lessor), the principal officer of the company, and any other such reasonable information as the Commission may require including, but not necessarily limited to, data on the capacity of the plant, type of fuel to be used, description and capacities of thermal driers and air tables, height and size of stacks and description of air pollution control equipment.

(3.0) Section 7. Permits.

7.01. Plants in existence on the effective date of this Regulation will be granted temporary operating permits subject to compliance with Sub-Section 6.01. These permits will be valid for as long as the Commission shall designate. When it is determined by the Commission that a plant meets the requirements of the Regulation, the temporary permit will be replaced with an operating permit.

- 7.02. Any plant failing to maintain the requirements of this Regulation shall, at the discretion of the Commission, have the permit revoked.
- 7.03. When permits are revoked, the Commission will reissue permits when such changes as necessary to meet the requirements of this Regulation are made.
- 7.04. New plants will be granted temporary operating permits provided they comply with Sub-Section 6.04.
- 7.05. Subject to the provisions of Sub-Section 6.01, plants operating without a permit will be in violation of this Regulation.
- 7.06. The possession of a permit by any person shall in no way relieve the holder thereof of his obligation to comply with the provision of this Regulation.

(13.0) Section 8. Reports and Testing.

- 8.01. At such reasonable time as the Director may designate, the operator of a coal preparation plant may be required to conduct or have conducted stack tests to determine the dust loading in exhaust gases when the Director has reason to believe that the stack emission limitation is 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, ladders, etc., to comply with generally accepted good safety practices.
- 8.02. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Sub-Section 8.01.

(5.0) Section 9. Variance.

9.01. If a plant operating under a temporary permit does not meet the requirements of this Regulation, the operator of this plant shall develop and submit to the Commission an acceptable control program to meet these requirements. This control

program shall be submitted upon the request of and within such time as shall be fixed by the Commission, and after said program has been approved by the Commission, the owner or operator of the plant will not be in violation of this Regulation as long as said program is observed.

- 9.02. Due to unavoidable malfunctions of equipment or non-availability of repair parts, emissions exceeding those provided for in this Regulation may be permitted by the Commission upon specific application to the Commission. Such application shall be made within 24 hours of the malfunction within such other period as the Commission may specify.
- (2.0) Section 10. Effective Date.

Regulation V shall become effective September 1, 1968.

(51.9)

REGULATION VI

TO PREVENT AND CONTROL AIR POLLUTION FROM

COMBUSTION OF REFUSE.

(2.0) Section 1. Intent and Purpose.

- 1.01. Neither compliance with the provisions of this Regulation nor the absence of specific language to cover particular situations constitutes approval or implies consent or condonement of any emission which is released in any locality in such manner or amount as to cause or contribute to undesirable levels of air contaminants. Neither does it exempt nor excuse anyone from complying with other applicable laws, ordinances, regulations or orders of governmental entities having jurisdiction.
- 1.02. All persons engaged in any form of combustion of refuse shall give careful consideration to the effects of the resultant emissions on the air quality of the area(s) affected by such burning. Important considerations include but are not limited to the location and time of burning, the type of material being burned and the potential emissions and the prevailing meteorological conditions. Persons failing to give due consideration to these factors will be in violation of this Regulation.
- 1.03. It is the intent of the Commission that all incorporated areas and other local governmental entities prohibit open burning and develop alternative methods for disposal of waste material. If such action is not taken in any air basin, air quality control region or other such areas as the Commission may designate, then such action may be taken by the Commission to insure compliance with air quality standards.

(1.0) Section 2. Definitions.

- 2.01. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, as amended.
- 2.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 2.03. "Person" shall mean any and all persons, natural or artificial, including any municipal, public or private corporation organized or existing under the law of this or any other state or county, and any firm, partnership

or association of whatever nature.

- 2.04. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.
- 2.05. "Smoke" shall mean small gasborne and airborne particles emitted as the result of the combustion of refuse in sufficient numbers to be visible.
- 2.06. "Ringelmann Smoke Chart" shall mean the Ringelmann's Scale for Grading the Density of Smoke, published by the U. S. Bureau of Mines, or any chart, recorder, indicator, device or method which is a standardized method for the measurement of smoke density and is approved by the Commission as the equivalent of said Ringelmann Chart.
- 2.07. "Air Pollution Control Equipment" shall mean any equipment used for collecting or converting gasborne particulate or gaseous materials for the purpose of preventing or reducing emission of these materials into the open air.
- 2.08. "Incineration" shall mean the destruction of combustible refuse by burning in a furnace designed for that purpose. For the purposes of this Regulation, the destruction of any combustible liquid or gaseous material by burning in a flare/flare stack shall be considered incineration.
- 2.09. "Incinerator" shall mean any device used to accomplish incineration.
- 2.10. "Flare", 'flare stack' shall mean and include a combustion source normally comprised of but not limited to a length of stack or pipe which has an attached burner mechanism designed to destroy liquid or gaseous material with an open or semi-enclosed flame.
- 2.11. "Open Burning" shall mean the combustion of refuse whereby the gaseous products of combustion are not conveyed through man-made means from one point to another and are discharged directly to the open air.
- 2.12. "Refuse" shall mean the useless and/or unwanted or discarded solid, liquid and/or gaseous waste materials resulting from community, commercial, industrial or citizen activities.
- 2.13. "Construction and Demolition Wastes" shall mean combustible waste building materials and rubble resulting from construction, remodeling, repair and demolition operations

on houses, commercial buildings, pavements and other structures.

2.14. "Incinerator Capacity" shall be the manufacturer's or designer's guaranteed maximum charging rate or such other rate as may be determined by the Director in accordance with good engineering practices. In case of conflict the determination by the Director shall govern. For the Purposes of this Regulation the total of the capacities of all furnaces within one system shall be considered as the "incinerator capacity".

Other words and phrases used in this Regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, 1931, as amended.

(51.13) Section 3. Open Burning Prohibited.

3.01. General Provisions

The open burning of refuse for the purpose of volume reduction, elimination or product recovery by any person, firm, corporation, association or public agency is prohibited except for the following exemptions:

- (a) Vegetation grown on the premises of a home or farm, provided that there is compliance with the provisions of Sub-Section 1.02, and the health, safety, comfort and property of persons are protected from the effects of such burning.
- (b) Fires set for the purpose of bona fide instruction and training of public and industrial employees in the methods of fighting fires, provided that approval to conduct such burning is received from the Director or his duly authorized representative.
- (c) Open burning of construction and demolition wastes, provided that all the following conditions are met:
 - There is no practical alternate method for the disposal of the material to be burned;
 - (2) The health, safety, comfort and property of persons are protected from the effects of such burning;

- (3) Such burning shall not be conducted for salvage purposes; and,
- (4) In non-rural areas approval to conduct such burning is received from the Director or his authorized representative.
- (d) Backyard open burning for the reduction of refuse produced on the premises as long as the amount does not exceed that weight normally produced by the everyday living habits of one (1) family, until such families are serviced by a municipal or private refuse collection service.
- 3.02. The exemptions listed in Sub-Section 3.01 are subject to the following stipulation:

Upon notification by the Director, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Director may deem necessary and feasible.

(51.9) Section 4. <u>Emission Standards for Incinerators and Incineration</u>

4.01. Unless authorized by the Commission, no person shall cause, suffer, allow or permit particulate matter to be discharged from an incinerator into the open air in excess of the quantity determined by use of the following formula:

Emission (lb/hr)=F x Incinerator Capacity (tons/hr) where the Factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions		
Incinerator Capacity	F Factor	
A. 200 lbs/hr or less	8.25	
B. More than 200 lbs/hr but less than 15,000 lbs/hr	5.43	
C. 15,000 lbs/hr or greater	2.72	

4.02. Emission of Visible Particulate Matter

No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is as dark or darker in shade or appearance that that designated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number.

- 4.03. The provisions of Sub-Section 4.02 shall not apply to smoke, the shade or appearance of which is less than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number, for a period or periods aggregating no more than eight (8) minutes per start-up, or six (6) minutes in any 60-minute period for stoking operations.
 - 4.04. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
- 4.05. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
 - 4.06. Incineration of Residues and Hazardous Materials

Persons responsible for the incineration of hazardous materials such as insecticides, empty insecticide containers, toxic materials, certain chemical residues, explosives, used bandages and other medical wastes, pathological wastes, human and animal remains and other materials shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from such activities. Evaluation 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.

(3.0) Section 5. Registration.

5.01. Registration of Existing Incinerators

Within sixty (60) days after the effective date of this Regulation, all persons owning, operating or constructing incinerators within the State shall register with the

Commission on forms to be made available by the Commission. The Director may require any such reasonable information as he may specify.

5.02. Registration of New Incinerators

New incinerators shall be considered duly registered when the owner and/or operator thereof has received from the Director written approval of the plans and specifications submitted, pursuant to the requirements of Section 6.

5.03. Registration of Incinerator Modifications

When incinerators are to be modified by changes in charging method, auxiliary fuel, air pollution control equipment or like changes which significantly affect the emission characteristics of the incinerator, such proposed changes shall be registered with the Commission no later than thirty (30) days prior to their being made.

(51.9) Section 6. New Incinerator Plan Review.

Plans and specifications for proposed incinerators are to be submitted to the Director at least sixty (60) days prior to construction for review and approval. These plans and specifications shall include any such reasonable information as the Director may specify.

- (13.0) Section 7. Reports and Testing. (9.0)
 - At such reasonable times as the Director may designate, the operator of an incinerator may be required to conduct or have conducted stack tests to determine the dust loading in exhaust gases, when the Director has reason to believe that the stack emission limitation is 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 representatives, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted above.

(5.0) Section 8. <u>Variances</u>.

- 8.01. If it can be demonstrated to the Commission that the disposal of certain materials by any method other than burning leans to ground water contamination, then the person responsible for the disposal fo such materials shall submit to the Commission within sixty (60) days a program leading to the construction of a suitable incinerator. If such program is accepted by the Commission, the person shall not be in violation as long as the program is observed.
- 8.02. Due to unavoidable malfunctions of equipment and/or non-availability of repair parts, emissions exceeding those provided for in this Regulation may be permitted by the Director. Application for such variance shall be made within 24 hours of the malfunction or within, such time period as the Director may specify. These variances shall be valid for such time periods as the Director may specify.

8.03. Control Program Variance

The owner or operator of an incinerator or an open burning operation in existence on the effective date of this Regulation that does not meet the Regulation requirements shall submit a control program to the Commission. This program shall be submitted upon the request of and within such time as shall be fixed by the Commission, and after said program has been approved by the Commission, the owner or operator of such incinerator or open burning operation shall not be in violation of this Regulation so long as the program is observed.

(2.0) Section 9. Effective Date.

Regulation VI shall become effective September 1, 1969.

(51.21)

REGULATION VII

TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION

FROM MANUFACTURING PROCESS OPERATIONS

(1.0) Section 1. <u>Definitions</u>.

- 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 any municipal, public or private corporation organized or existing under the law of this or any other state or county 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 from a stack or other aperture in sufficient numbers to be visible.
- 1.07. "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 a standardized method for the measurement of smoke density which is approved by the Commission as the equivalent of said Ringelmann Scale.
- 1.08. "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.
- 1.09. "Fugitive Particulate Matter Control System" shall mean any equipment or method used to confine, collect, and dispose of fugitive particulate matter, including, but not limited to, hoods, bins, duct work, fans and air pollution control equipment.

- 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 Condition" shall mean for the purposes of this regulation a temperature of 60 degrees 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 nonferrous 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 air introduced for purposes of combustion.
- 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 or 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 purposes 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 the 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 manufacuring process source operation except gray iron cupolas in existence on the effective date of this regulation.

- (c) Type 'c' shall mean any wet cement manufacturing process source operation in existence on the effective date of this regulation which is used for the primary purpose of calcination and any gray iron cupola in existence on the effective date of this regulation.
- (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.

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.

(50.1.2) Section 2. <u>Emission of Smoke Prohibited and Standards of Measurements.</u>

- 2.01. No person shall cause, suffer, allow or permit emission of smoke into the open air from any process source operation which is darker in shade or appearance than that designated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number, except as noted in Sub-Sections 2.02, 2.03, 2.04, and 2.05.
- 2.02. The provisions of Sub-Section 2.01 shall not apply to smoke emitted from any process source operation which is less than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of this Ringelmann number for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
- 2.03. The provisions of Sub-Sections 2.01 and 2.02 shall not apply to smoke emitted during the charging or pushing operations of a coke production facility in existence on the effective date of this regulation. The following conditions will apply:
 - (a) Effective January 1, 1971, emission of smoke the shade or appearance of which is no darker than No.3 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than three (3) minutes per charge and one (1) minute per push.

- (b) Effective July 1, 1971, emission of smoke the shade or appearance of which is no darker than No. 3 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.
- (c) Effective January 1, 1972, emission of smoke the shade or appearance of which is no darker than No. 2.5 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.
- (d) Effective July 1, 1972, emission of smoke the shade or appearance of which is not as dark as or darker than No. 2 on the Ringelmann Smoke chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.
- 2.04. The provisions of Sub-Sections 2.01, 2.02 and 2.03 shall not apply to the charging or pushing operations of a coke production facility installed after July 1, 1970. Emission of smoke the shade or appearance of which is less than No. 2 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number shall be permitted for a period or periods aggregating no more than one and one-half (1.5) minutes per charge and one-half (0.5) minutes per push.
- 2.05. No person shall cause, suffer, allow or permit emission of smoke into the open air from any storage structure associated with any manufacturing process.
- (50.1.1) Section 3. <u>Control and Prohibition of Particulate Emissions</u> 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	Maximum Allowable Total Stack Emission Rate in Pounds per Hour for the Appro- priate Process Weight and Source Operation Type			
Weight Rate in Pounds per Hour ¹	Type 'a'	Type 'b'	Type 'c'	Type 'd' ²
0 2,500 5,000 10,000 20,000 30,000	0 3 5 10 16 22	0 3 5 10 16 22	0 9 13 19 26 32	0 0.2 0.8 1.8 4.0 6.2
40,000 50,000 100,000 200,000 300,000 400,000	28 31 33 37 40 43	28 31 33 37 40 46	36 40 54 70 80 88	8.3 10.5 21.2 21.2 21.2 21.2
500,000 600,000 700,000 800,000 900,000 1,800,000 and above	47 50 50 50 50 50	53 62 71 79 88 176	94 99 99 99 99	21.2 21.2 21.2 21.2 21.2 21.2

¹For a process weight between any two consecutive process weights stated in this table the emission limitation shall be determined by linear interpolation.

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 operation in excess of the quantity given in the following table:

 $^{^2\}text{Type}$ 'd' source operation stack emission rates do not apply to MINERAL ACIDS. See Sub-Section 3.02.

Mineral Acid	Allowable Stack Gas Concentration in Mil- ligrams per Dry Cubic Meter at Standard Con- ditions from Source Operations or Dupli- cate Source Operations in Existence on the Effective Date of this Regulation	Allowable Stack Gas Concentration in Mil- ligrams per Dry Cubic Meter at Standard Con- ditions from Source Operations or Dupli- cate Source Operations Installed After the Effective Date of this Regulation		
Sulfuric Acid Mist Nitric Acid	70	35		
Mist and/or Vapor Hydrochloric	140	70		
Acid Mist and/or Vapor Phosphoric	420	210		
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:

$$R_e = \left[\frac{1}{1} - \left(\frac{W_{et} - R_{et}}{W_{et}} \right) \right] W_e$$

Where,

 R_{e} is the total allowable emission rate in pounds per hour for the new expanded portion of the duplicate source operation:

Wet 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 the 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 the 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 or new, replacement, reactivated, and/or altered source operation(s) which resulted in the increase shall be determined as per Sub-Section 3.04.
- 3.08. (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 desingated as No.1 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number. 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 3.03.

- (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% 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 on the Ringelmann Smoke Chart or the equivalent opacity of that Ringelmann number. 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.
- 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 this Section shall not apply to the coking of coal. See Section 2.
- 3.11. 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.
- 3.12. 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. Evaluation 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.

(50.1) Section 4. <u>Control of Fugitive Particulate Matter</u>.

- 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 fugitive particulate matter control system, This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter.
- 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 or other suitable measures. Good operating practices shall be observed in relation to stockpiling and general maintenance to prevent dust

generation and atmospheric entrainment.

(3.0) Section 5. Registration.

- 5.01. 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.
- 5.02. After the effective date of this regulation the owner and/or operator of a manufacturing process source operation that is constructed, modified, or relocated in compliance with Regulation XIII shall register such process source with the Commission thirty (30) days after completion of such construction, modification or relocation. The information required for registration shall be determined by the Director, and shall be provided in the manner specified by the Director.

(9.0) Section 6. Reports and Testing. (13.0)

- At such resonable 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.
- 6.02. The Director, or his duly authorized representative may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 2 and 3.

(6.0) Section 7. <u>Compliance Programs and Schedules.</u>

- 7.01. 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 (1970) shall remain in effect until the expiration date of that compliance program, schedule, or variance.
- 7.02. 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.

(5.0) Section 8. Variance.

8.01. 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 10 days upon specific application to the Director. Such application shall be made within 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.

(2.0) Section 9. <u>Exemptions</u>.

9.01. 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.

(2.0) Section 10. Effective Date.

Regulation VII (1974) shall become effective October 1, 1974, and shall supersede Regulation VII (1970) which was adopted by the West Virginia Air Pollution Control Commission on the 27th day of May, 1970, and became effective July 1, 1970, and was filed with the Secretary of State May 28, 1970.

(4.1) (4.2)

REGULATION VIII

AMBIENT AIR QUALITY STANDARDS FOR SULFUR

OXIDES AND PARTICULATE MATTER.

(2.0) Section 1. Anti-Degradation Policy.

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present pquality and the established standards. The plans will be based upon the best available forecasts of probable land and air uses in such areas of high air quality.

The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in a statutory air pollution.

This will require that any industrial, public, or private project or development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

(1.0) Section 2. Definitions.

- 2.01. "Air Pollutants" shall mean solids, liquids or gases which, if discharged into the air, may result in a statutory air pollution.
- 2.02. "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.
- 2.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 2.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, public, or private corporation organized or existing under the law of this or any other

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state or coutry, and any firm, partnership, or association of whatever nature.

- 2.05. "Particulate Matter" shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.
- 2.06. "Standard Conditions" shall mean, for the purposes of this regulation, a temperature of 25°C and a pressure of 760 millimeters of mercury column.
- 2.07. "Ambient Air Quality Standards" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time-averaging interval over which that concentration level is measured.
- (4.1) Section 3. Ambient Air Quality Standards.(4.2)
 - 3.01. The following ambient air quality standards shall not be exceeded at any sampling site:
 - (a) Sulfur Dioxide

Primary Standard

Annual Arithmetic Mean - 80 micrograms per cubic meter (0.03 parts per million)

Maximum 24-Hour Concentration - 365 micrograms per cubic meter (0.14 ppm) - not to be exceeded more than once per year

Secondary Standard

Maximum Three (3) Hour Concentration - 1300 micrograms per cubic meter (0.50 ppm) - not to be exceeded more than once per year

(b) Particulate Matter

Primary Standard

Annual Geometric Mean - 75 micrograms per cubic meter

Maximum 24-Hour Concentration - 260 micrograms per cubic meter - not to be exceeded more than once per year

Secondary Standard

Annual Geometric Mean - 60 micrograms per cubic meter

Maximum 24-Hour Concentration - 150 micrograms per cubic meter - not to be exceeded more than once per year

(9.0) Section 4. <u>Methods of Measurement.</u>

- 4.01. Suspended particulate matter concentrations shall be determined by high-volume filtration or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.02. Sulfur dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:
 - (a) Utilization of the West-Gaeke (pararosaniline) method as modified by Scaringelli, et al.
 - (b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle and utilizing the modified West-Gaeke analytical procedure as a standard means of calibration.

(2.0) Section 6. <u>Effective Date</u>.

Regulation VIII (1972) shall become effective March 15, 1972, and shall supersede Regulation VIII (1970) which was adopted by the West Virginia Air Pollution Control Commission on the 31st day of August, 1970, and became effective October 1, 1970, and was filed with the Secretary of State on August 31, 1970.

¹ "Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulates, 1957-1961." Public Health Service Pub. No. 978, Washington D.C., 1962.

² Scaringelli, F. P., Saltzman, B. E., and Frey, S. A., Spectrophotometric Determination of Atmospheric Sulfur Dioxide." Analytical Chemistry, Vol. 39, pp. 1709-1719, December, 1967.

REGULATION IX

(4.4) (4.5)

(4.6) AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE,

NON-METHANE HYDROCARBONS, AND PHOTOCHEMICAL OXIDANTS.

(2.0) Section 1. Anti-Degradation Policy.

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air used in such areas of high air quality.

The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in "Statutory Air Pollution". This will require that any industrial, public, or private project or development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

(1.0) Section 2. Definitions.

- 2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, will result in a statutory air pollution.
- 2.02. "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.
- 2.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 2.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, 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.

- 2.05. "Hydrocarbons" shall mean compounds whose molecules consist of atoms of hydrogen and carbon and exist in the atmosphere in the gas phase. Specifically excluded are hydrocarbons and other organics associated only with suspended particles in the atmosphere. For purposes of these quality standards non-methane hydrocarbons shall be taken to be the difference between the reported total hydrocarbons and methane values obtained from an air sample.
- 2.06. "Photochemical Oxidant" shall be the term used to describe the net oxidizing ability of the ambient air. Oxidants are produced in the ambient air as the result of complex photochemical reactions.
- 2.07. "Standard Conditions" shall mean for the purposes of this regulation a temperature of 25°C and a pressure of 760 mm of mercury column.
- 2.08. "Ambient Air Quality Standards" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time averaging interval over which that concentration level is measured.
- (4.4) Section 3. Ambient Air Quality Standards.
- (4.6) 3.01. The following air pollutant concentrations shall not be exceeded at any sampling site:
 - (a) Carbon Monoxide

Maximum Eight (8) Hour Concentration, 10 milligrams per cubic meter (9ppm) - not to be exceeded more than once per year.

Maximum One (1) Hour Concentration, 40 milligrams per cubic meter (35ppm) - not to be exceeded more than once per year.

(b) Photochemical Oxidants (Measured and Corrected For Interferences Due to Nitrogen Oxides and Sulfur Dioxide)

Maximum One (1) Hour Concentration, 160 micrograms per cubic meter $(0.08\ \text{ppm})$ - not to be exceeded more than once per year.

(c) Hydrocarbons (Measured and Corrected for Methane)

Maximum Three (3) Hour Concentration, 160 micrograms per cubic meter (0.24ppm) for the time period of 6:00 a.m. to 9:00 a.m. - not to be exceeded more than once per year.

The hydrocarbon standard is to be used as a guide in devising implementation plans to achieve oxidant standards.

(9.0) Section 4. <u>Methods of Measurement.</u>

- 4.01. Carbon Monoxide concentrations shall be determined by nondispersive infrared (NDIR) methods or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.02. Photochemical Oxidant concentrations shall be determined by the neutral buffered potassium iodide method as modified by Saltzman, et al, or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.03. Hydrocarbon concentrations shall be determined by subtraction of methane concentrations from total hydrocarbon concentrations determined by the flame ionization technique or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.04. Other less specific methods of measurement may be used provided an accurate method of conversion can be developed to express the results in terms of equivalence to those that would be expected using the above methods of other more specific, accurate, sensitive, and reproducible methods approved by the West Virginia Air Pollution Control Commission.

(2.0) Section 5. Effective Date.

Regulation IX shall become effective September 1, 1971.

(50.2)

REGULATION X

TO PREVENT AND CONTROL AIR POLLUTION FROM

THE EMISSION OF SULFUR OXIDES

(2.0) Section 1. <u>Intent and Purpose</u>.

1.01. Fuel Quality Goals. It is the intent of the Commission that all persons engaged in the burning of fuel make a maximum effort to utilize the best quality fuel available regardless of the requirements of this regulation.

(1.0) Section 2. Definitions.

- 2.01. "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 amemded.
- 2.02. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.
- 2.03. "Commission" shall mean the West Virginia Air Pollution Conrol Commission.
- 2.04. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.
- 2.05. "Person" shall mean any and all persons, natural or artificial, including any municipal, 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.
- 2.06. "Fuel Burning Unit" shall mean and include any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power in indirect heat transfer. For the purposes of this regulation, all fuel burning units are classified in the following categories:
 - (a) Type 'a' shall mean any fuel burning unit which has as its primary purpose the generation of steam or other vapor to produce electric power for sale.
 - (b) Type 'b' shall mean any fuel burning unit not classified as a Type 'a' or Type 'c' unit such as industrial

pulverized-fuel-fired furnaces, cyclone furnaces, gas-fired and liquid-fuel-fired units.

- (c) Type 'c' shall mean any hand-fired or stoker-fired fuel burning unit not classified as a Type 'a' unit.
- 2.07. "Fuel" shall mean any form of combustible matter (solid, liqued, vapor, or gas) that is used as a source of heat.
- 2.08. "Priority I Regions", "Priority II Regions", and "Priority III Regions" are defined as follows:

	Priority Classification			, J		ncluded West irginia Counties	
-	I		Weirton- state A	I-Steubenville- -Wheeling Inter- ir Quality Conti Dhio-W. Va.)	- Hanco	ck	
			Keyser 1	VII-Cumberland- Interstate Air Control Region - Md.)	only) New C	(Union District Mineral (Elk, reek, and ont Districts)	
	II		Marietta Quality	II-Parkersburg- a Interstate Ain Control Region - Ohio)	r Pleasa Tyler	ants	
	111		All othe	er regions	or di	ther counties stricts not d above	

^{2.09. &}quot;Air Pollution Control Equipment" shall mean any equipment used for collecting, confining, or converting air pollutants for the purpose of preventing or reducing the emission of These pollutants into the open air.

- 2.10. "Manufacturing Process" shall mean any action, operation or treatment embracing chemical, industrial, or manufacturing efforts, and employing, for example, heattreating 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 sulfur dioxide or other sulfur compounds.
- 2.11. "Source Operation" shall mean the last operation in a manufacturing process preceding the emission of air pollutants which operation:
 - (a) Results in the separation of the air pollutant from the process materials or in the conversion of the process materials into air pollutants: and
 - (b) Is not an air pollution abatement operation.
- 2.12. "Sulfur Dioxide" is an air pollutant which is a nonflammable, nonexplosive, colorless, gaseous molecule composed of one atom of sulfur and two atoms of oxygen. In concentrations of 0.3 to 1.0 parts per million and above, most people can detect it by taste; in concentrations greater than 3.0 parts per million it has a pungent, irritating odor to most people.
- 2.13. "Plant" shall mean and include all fuel burning units, source operations, equipment and grounds utilized in an integral complex.
- 2.14. "Equivalent Fuel Sulfur Content" shall mean that quantity of sulfur dioxide in pounds per million British Thermal Units (B.T.U.'s) which corresponds to a given percent slufur in fuel being burned and is calculated on the basis of 100 percent conversion of the sulfur to sulfur dioxide and assuming that no sulfur or sulfur dioxide recovery or control measures are employed.
- 2.15. "Stack", for the purposes of this regulation, shall mean but not be limited to, any duct, control equipment exhaust, or similar apparatus, which vents gases and/or particulate matter into the open air.

(51.6) Section 3.

<u>Sulfur Dioxide Weight Emission Standards For</u> <u>Fuel Burning Units.</u>

- 3.01. Maximum Allowable Emission Rates For Similar Units In Priority I and Priority II Regions.
 - (a) Not later than June 30, 1975, no person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:
 - (1) For Type 'a' fuel burning units, the product of 2.7 and the total design heat inputs for such units discharging through those stacks in million (B.T.U.'s) per hour.
 - (2) For Type 'b' and Type 'c' fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.
 - (b) Not later than June 30, 1978, no person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant measured in terms of pounds per hour, in excess of the amount determined as follows:
 - (1) For Type 'a' fuel burning units, the product of 2.0 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour, provided however, that no more than 45,000 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.
 - (2) For Type 'b' and Type 'c' fuel burning units, the product of 2.3 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour, provided however, that no more than 8,000 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.
- 3.02. Maximum Allowable Emission Rates For Similar Units In Region IV (Kanawha Valley Air Quality Control Regions: Kanawha County, Putnam County, and Falls and Kanawha Magisterial Districts of Fayette County).

Not later than January 1, 1973, no person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

- (a) For Type 'a' fuel burning units, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour, provided however, that no more than 45,000 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.
- (b) For Type 'b' and Type 'c' fuel burning units, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour, provided however, that no more than 5.500 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.

3.03. Maximum Allowable Emission Rates For Similar Units In All Priority III Regions Except Region IV.

- (a) Not later than June 30, 1975, no person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:
 - (1) For Type 'a' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.
 - (2) For Type 'b' and Type 'c' fuel burning units, the product or 3.2 and the total design heat inputs for such units discharging through those stacks in million B.T.U.'s per hour.
- (b) Not later than June 30, 1978, the requirements of Sub-Section 3.01 (b) shall apply to all Type 'a', Type 'b', and Type 'c' fuel burning units.

3.04. Allowable Emission Rates For Individual Stacks.

The maximum allowable emission rate for an individual stack shall not exceed by more than 25 percent the emission rate determined by prorating the total allowable emission rate specified in Sub-Sections 3.01, 3.02, or 3.03 on the

basis of individual unit heat input at design capacity for all fuel burning units discharging through that stack.

Subject to the provisions of this regulation, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the Commission at the request of and on forms provided by the Director, Such rates shall be subject to review and approval by the Director.

The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and any permits concerning such source or sources, and shall not be changed without the prior written approval of the Director.

3.05. Weight Emission Standards For Manufacturing Process Source Operations.

- (a) Not later than June 30, 1975, no person shall cause, suffer, allow, or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in Sub-Sections (b), (c), (d), (e), and (f) following.
- (b) Not later than June 30, 1975, no person shall cause, suffer, allow, or permit sulfur dioxide tail gas emissions from sulfuric acid manufacturing plants to exceed the following:
 - (1) For plants using elemental sulfur as a feed stock, 30 pounds per ton of acid produced; and
 - (2) For plants using other materials as a feed stock, 40 pounds per ton of acid produced.
- (c) Not later than June 30, 1975, no person shall cause, suffer, allow, or permit the emission of sulfur oxides, calculated as sulfur dioxide, from a sulfur recovery plant to exceed 0.06 pounds per pound of sulfur processed.
- (d) Not later than June 30, 1975, no person shall cause, suffer, allow, or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration

greater than 50 grains per 100 cubic feet of gas. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Commission, compliance would be economically unreasonable and if the contribution of the unit to surrounding air quality could be considered negligible.

(e) No person shall cause, suffer, allow, or permit the emission of sulfur oxides, calculated as sulfur dioxide, from primary non-ferrous smelters to exceed that determined by the following equations:

> Copper Smelters: Y = 0.2XZinc Smelters: $Y = 0.564 \times 0.85$ Lead Smelters: $Y = 0.98 \times 0.77$

Where X is the total sulfur fed to the smelter in pounds per hour, and Y is the allowable sulfur dioxide emissions in pounds per hour.

(f) No person shall cause, suffer, allow, or permit the total sulfite pulp mill emissions of sulfur oxides, calculated as sulfur dioxide, from operations such as blow pits, washer vents, storage tanks, digester relief, and recovery system, to exceed 9.0 pounds per air-dried ton of pulp produced.

(3.0) Section 4. Registration.

- 4.01. Within thirty (30) days after the effective date of this regulation all persons owning and/or operating a source(s) of sulfur dioxide subject to this regulation and not previously registered shall have registered such source(s) with the Commission. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner and/or operator of such source(s).
- 4.02 The owner and/or operator of a source(s) of sulfur dioxide that is under construction or on which construction is initiated within thirty (30) days after the effective date of this regulation shall register such source(s) within this thirty (30) day period.

(3.0) Section 5. Permits.

5.01. After the effective date of this regulation, no person shall construct or modify any source of sulfur dioxide without first obtaining a permit for such construction or modification. Applications for permits shall be made upon forms available from the Director and shall be filed no less than ninety (90) days prior to the construction or modification. These forms shall include such information as in the judgment of the Director will enable him to determine whether such source will be so designed as to operate in conformance with the provisions of this regulation and the Code of West Virginia, and will not cause or contribute to the violation of Secondary Air Quality Standards. Within ninety (90) days of the receipt of an application the Director shall issue or deny such permit in accordance with the provisions of Section 2 of Chapter 16, Article 20, Paragraph 11b or the Code of West Virginia, as amended.

(9.0) Section 6. Reports and Testing. (13.0)

- 6.01. Tests to determine compliance with the allowable sulfur dioxide emission limitations of this regulation shall be based on a two (2)-hour averaging time.
- 6.02. (a) At the request of the Commission the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of this regulation. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this regulation.
 - (b) Prior to the installation of calibrated stack gas ! monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
- 6.03. At such reasonable times as the Director may designate, the owner or operator of a source(s) of sulfur dioxide may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of Section 3. 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 tests. Should the Director exercise his options to conduct such tests, the operator will provide all 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.

- 6.04. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in Section 3.
- 6.05. The operators of the fuel burning units or persons selling fuel shall submit data on the fuel used or sold for use in such units. Such data shall be reported in the manner the Director may specify. However, reports on such data shall not exceed one (1) per month. Such reports must be filed within fifteen (15) days of the end of the established reporting period and will include, but not necessarily be limited to, information such as the quantity of fuel burned or sold and the sulfur, moisture, volatile matter, and B.T.U. content.

(6.0) Section 7. <u>Compliance Programs and Schedules</u>.

- 7.01. In the event that a source(s) of sulfur dioxide in existence prior to the adoption of this regulation does not meet the emission limitaions, an acceptable program to fully comply with the regulation shall be developed and offered to the Commission by the person responsible for the source. 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.
- 7.02. In the event that an owner or operator of such a source(s) of sulfur dioxide fails to submit a program or an acceptable program and schedule, the Commission, shall, by order, determine the compliance program and schedule.

(5.0) Section 8. Variance.

8.01. Due to unavoidable malfunction of equipment or inadvertent

fuel shortages, 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 equipment malfunction or fuel shortage. Incases 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.

(2.0) Section 9. <u>Exemptions and Recommendations</u>.

- 9.01. All fuel burning units having a heat input under ten (10) million B.T.U.'s per hour will be exempt from Section 3 through Section 8. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.
- 9.02. In an effort to avoid the necessity for such mandatory controls the Commission strongly recommends that specific fuel quality objectives be met. In Priority I and Priority II regions and in cities in Priority III regions with a population of more than 10,000 (based on the latest census) the Commission recommeds that no person use or provide for sale fuel having a sulfur content greater than that listed in the following table for use in residential and other fuel burning units not otherwise restricted by this regulation:

Effective Date	Maximum Desirable Persent Sulfur Content of Fuels		
	Coal	011	
June 30, 1972	3.0	2.0	
June 30, 1975	2.0	1.5	
June 30, 1978	1.0	0.5	

(2.0) Section 10, Effective Date.

Regulation X shall become effective March 15, 1972.

(8.0)

REGULATION XI

PREVENTION OF AIR POLLUTION EMERGENCY EPISODES

(2.0) Section 1. <u>Intent and Purpose</u>.

1.01. It is the intent of the Commission to provide a mechanism to prevent the buildup of air pollutant concentrations during periods of adverse meteorological conditions in which air pollutants may accumulate, thereby preventing the occurrence of an emergency due to the effects of these pollutants on health. To achieve this purpose, three (3) stages of criteria (pollutant concentration levels) have been established and specific emission reductions plans will be developed which will be initiated at each criteria stage to prevent further deterioration of the air supply in any air quality region or substantial portion thereof.

(1.0) Section 2. Definitions.

- 2.01. "Air Pollution Episode" shall mean the occurrence of adverse meteorological conditions during which air pollutants accumulate, so that the population is exposed to an elevated concentration of airborne contaminants.
- 2.02. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 2.03. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.
- 2.04. "COH" shall be the term used for the coefficient of haze.

 A COH unit is defined as that quantity of light-scattering solids (on the filter) which produces an optical density equivalent of 0.01 when measured by light transmission.
- 2.05. "Particulate Matter' shall mean any material, except uncombined water, that exists in a finely divided form as a liquid or solid.
- 2.06. "Photochemical Oxidant" shall be the term used to describe the net oxidizing ability of the ambient air.
- 2.07. "Standard Conditions" shall mean, for the purposes of this regulation, a temperature of 25°C and a pressure of 760 millimeters of mercury column.
- 2.08. "Region" shall mean a Federal Air Quality Control Region

- designated by the Secretary of Health, Education and Welfare or the Administrator of the Environmental Protection Agency.
- 2.09. "Person" shall mean any and all persons, natural or artificial, including any municipal, 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.
- 2.10. "Priority" shall mean the numerical classification assigned to each Air Quality Control Region by the Environmental Protection Agency as follows:

	POLLUTANT					
1	Particu- late	Sulfur Oxides	Carbon Monoxide.	Nitrogen Dioxide	Photo- Chemical Oxidants	Hydro- Carbons
Region I	I	I	III	III	III	III
Region II	I	11	, III	III	III	. III
Region III	I	III	III	III	III	111
Region IV	I	III	111	III	III	III
Region V	111	111	111	III	III	III
Region VI	I	III	111	III	III	III
Region VII	I	I	111	III	III	III
Region VIII	III	111	111	111	III	111
Region IX	III	111	111	111 111		III
Region X	III	III	111	III III		III

(8.0) Section 3. <u>Episode Criteria</u>.

3.01. Conditions justifying the proclamation of an Air Pollution Alert or Air Pollution Warning shall be deemed to exist whenever the Director and/or Commission determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are exceeded, lead to an Air Pollution Emergency. In making this determination the Director and/or Commission shall be guided by the following criteria:

(a) Air Pollution Forecast.

An internal watch by the West Virginia Air Pollution Control Commission will be actuated by a National Weather Service advisory that an Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions is issued by the Commission.

(b) Alert.

An alert shall be declared by the Director and/or Commission when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase unless control actions are taken:

Sulfur Dioxide

800 micrograms per cubic meter (0.3 parts per million), 24 hour average

Particulate Matter

3.0 COHs, 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide parts per million, 24-hour average, and COHs, 24-hour average, equal to 0.2

Carbon Monoxide

17 milligrams per cubic meter (15 parts per million), 8-hour average

Oxidant (0_3)

200 micrograms per cubic meter (0.1 parts per million), 1-hour average

Nitrogen Dioxide

282 micrograms per cubic meter (0.15 parts per million), 24-hour average

(c) Warning.

A warning shall be declared by the Commission when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase unless control actions are taken:

Sulfur Dioxide

1600 micrograms per cubic meter (0.6 parts per million), 24-hour average

Particulate Matter

5COHs, 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide parts per million, 24-hour average, and COHs, 24-hour average, equal to 0.8

Carbon Monoxide

34 milligrams per cubic meter (30 parts per million), 8-hour average

Oxidant (0_3)

800 micrograms per cubic meter (0.4 parts per million), 1-hour average

Nitrogen Dioxide

565 micrograms per cubic meter (0.3 parts per million), 24-hour average

(d) Emergency.

Conditions justifying the proclamation of an Air Pollution Emergency shall be deemed to exist whenever the Commission determines that the accumulation of air pollutants in any place has attained levels which require immediate action for the protection of the public health. The emergency level indicates that air quality is continuing to degrade and is approaching a level that should never be reached, and that the most stringent control actions are necessary. In making this determination, the Commission shall declare an emergency when any one of the following levels is reached at any monitoring site and meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours:

Sulfur Dioxide

2100 micrograms per cubic meter (0.8 parts per million), 24-hour average

Particulate Matter

7.0 COHs, 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide parts per million, 24-hour average and COHs, 24-hour average, equal to 1.2

Carbon Monoxide

46 milligrams per cubic meter (40 parts per million), 8-hour average

Oxidant (0_3)

1200 micrograms per cubic meter (0.6 parts per million), 1-hour average

Nitrogen Dioxide

750 micrograms per cubic meter (0.4 parts per million), 24-hour average

An emergency will be declared by an order entered by the Commission with the written approval of the Governor.

(e) Termination.

Once declared, any status reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

3.02. The episode criteria presented in Section 3.01 establish the basis for emission control action to be initiated to prevent an Air Pollution Emergency Episode. The stringent control actions required in Section 6 when the emergency stage has been declared are designed to prevent air pollutant concentrations from reaching levels which, in the judgment of the Commission, could constitute imminent and substantial endangerment to health. These levels are as follows:

Sulfur Dioxide

2620 micrograms per cubic meter (1.0 parts per million), 24-hour average

Particulate Matter

1000 micrograms per cubic meter or 8 COHsm 24-hour average

Sulfur Dioxide and Particulate Matter Combined

Product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulate matter in micrograms per cubic meter, 24-hour average, equal to 490×10^3 ; or product of sulfur dioxide in parts per million, 24-hour and COHs, 24-hour average, equal to 1.5

Carbon Monoxide

57.5 milligrams per cubic meter (50 parts per million), 8-hour average

86.3 milligrams per cubic meter (75 parts per million), 4-hour average

144 milligrams per cubic meter (125 parts per million), 1-hour average

Photochemical Oxidants

800 micrograms per cubic meter (0.4 parts per million), 4-hour average

1200 micrograms per cubic meter (0.6 parts per million), 2-hour average

1400 micrograms per cubic meter (0.7 parts per million), 1-hour average

Nitrogen Dioxide

938 micrograms per cubic meter (0.5 parts per million), 24-hour average

3750 micrograms per cubic meter (2.0 parts per million), 1-hour average

(9.0) Section 4. Methods of Measurement.

- 4.01. Sulfur dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:
 - (a) Utilization of the West-Gaeke (paraosaniline) method as modified by Scaringelli, et al.
 - (b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle and utilizing the modified West-Gaeke analytical procedure as a standard means of calibration.
 - 4.02. Suspended particulate matter concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:
 - (a) Filter Tape Sampler
 - (b) High-Volume Filtration
- 4.03. Carbon monoxide concentrations shall be determined by non-dispersive infrared (NDIR) methods or by such other methods approved as equally or more specific, accurate, sensitive,

- and reproducible by the West Virginia Air Pollution Control Commission.
- 4.04. Photochemical oxidant concentrations shall be determined by the neutral buffered potassium iodide method as modified by Saltman, et al., or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.05. Nitrogen dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
 - (a) Utilization of Jacobs-Hocheiser method
 - (b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle

(8.0) Section 5. Preplanned Reduction Strategies.

- 5.01. Any person responsible for the operation of a stationary source of air pollutants emitting 100 tons (90.7 metric tons) per year or more in a region classified Priority I or II for any pollutant, shall prepare standby plans for reducing the emission of air pollutants during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emission of air pollutants in accordance with the objectives set forth in Tables I, II, and III.
- 5.02. Any person responsible for the operation of a source of air pollutants not set forth under Section 5.01 shall, when requested by the Commission, prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III.
- 5.03. Standby plans as required under Sections 5.01 and 5.02 shall be in writing and shall include, but not be limited to, identifying the sources of air pollutants, the approximate amount of reduction of pollutants, and a brief description of the manner in which the reduction will be achieved during an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Such information shall be filed on forms and in a manner acceptable to the Director.

- 5.04. During a condition of Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency, standby plans as required by this section shall also be made available on the premises to the Director or his duly authorized representative.
- 5.05. Standby plans as required by this section shall be submitted to the Director upon request within sixty (60) days of the receipt of such request. All standby plans shall be subject to review and approval by the Commission. If, in the opinion of the Commission, a standby plan does not effectively carry out the objectives as set forth in Tables I, II, and III, the Commission may disapprove it, state its reason for disapproval, and order the preparation of an amended standby plan within the time period specified in the order.

(8.0) Section 6. Emission Reduction Plans.

1. 1

(a) Air Pollution Forecast.

When the National Weather Service issues a public announcement that an Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric conditions is issued by the West Virginia Air Pollution Control Commission, no open burning shall be conducted.

(b) Air Pollution Alert.

When an Air Pollution Alert is declared in the manner provided in Section 3.01 (b), any person responsible for the operation of a source, who is required under Section 5 to have standby plans, shall put into effect the pre-planned abatement strategy for an Air Pollution Alert when notified by the Director or his duly authorized representative. All other persons responsible for the operation of sources of air pollution shall take actions as required in Table I.

(c) Air Pollution Warning.

When an Air Pollution Warning is declared in the manner provided in Section 3.01 (c), any person responsible for the operation of a source, who is required under Section 5 to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Warning when notified by the Director or his duly authorized representative. All other

persons responsible for the operation of sources of air pollutants shall take actions as required in Table II.

(d) Air Pollution Emergency.

When an Air Pollution Emergency is declared in the manner provided in Section 3.01 (d), any person responsible for the operation of a source, who is required under Section 5 to have standby plans, shall put into effect the preplanned abatement strategy for an Air Pollution Emergency when notified by the Director or his duly authorized representative of such emergency. All other persons responsible for the operation of sources of air pollutants shall take actions as required in Table III.

(e) When the Director and/or Commission determines that a specified criteria level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, the Director shall notify such source(s) that the preplanned abatement strategies of Tables I, II, and III or the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until the criteria of the specified level are no longer met.

TABLE I - EMISSION REDUCTION PLANS

Alert Level

Part A. General

- 1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
- 2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.
- 3. Persons operating motor vehicles should eliminate all unnecessary operations.
- 4. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert Level:

Source of Air Pollution

Control Action

- Coal or oil-fired electric a. power generating facilities
- Substantial reduction by utilization of fuels having low ash and sulfur content
 - Substantial reduction by diverting electric power generation to facilities outside of Alert Area
 - c. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

Source of Air Pollution

Control Action

- Coal and oil-fired process a. steam generating facilities
 - Substantial reduction by utilization of fuels having low ash and sulfur content
 - Substantial reduction of steam load demands consistent with continuing plant operations
 - c. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
- 3. Manufacturing industries of a. the following classifications:

Primary Metals Industry
Petroleum Refining
 Operations
Chemical Industries
Mineral Processing
 Industries
Paper and Allied Products
Grain Industry

Substantial reduction of air pollutants from manufacturing operations by curtailing, post-poning, or deferring production and allied operations

- Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances
- Maximum reduction of heat load demands for processing
- d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

TABLE II - EMISSION REDUCTION PLANS

Warning Level

Part A. General

- 1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
- 2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.
- 3. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.
- 4. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level:

Source of Air Pollution

Control Action

- Coal or oil-fired electric a. power generating facilities
 - Maximum reduction by utilization of fuels having lowest ash and sulfur content
 - Maximum reduction by diverting electric power generation to facilities outside of Warning Area
 - c. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

Source of Air Pollution

Control Action

- Coal and oil-fired process a. steam generating facilities
 - Maximum reduction by utilization of fuels having lowest available ash and sulfur content
 - Substantial reduction of steam load demands consistent with continuing plant operations
 - Making ready for use a plan of action to be taken if an emergency develops
 - d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
- 3. Manufacturing industries which require considerable lead time for shut-down including the following classifications:

Petroleum Refining Chemical Industries Primary Metals Industries Glass Industries Paper and Allied Products

- a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations
- o. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances
- Maximum reductions of heat load demands for processing

Source of Air Pollution

Control Action

- 4. Manufacturing industries which require relatively short lead times for shutdown including the following classification:
 - Primary Metals Industries Chemical Industries Mineral Processing Industries Grain Industry

- d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
- lutants from manufacturing operations by ceasing, curtailing, postponing, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment
- Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances
- Maximum reduction of heat load demands for processing
- d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

TABLE III- EMISSION REDUCTION PLANS

Emergency Level

Part A. General

- 1. There shall be no open burning by any persons of tree waste, vegetations, refuse, or debris in any form.
- 2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.
- 3. All places of employment described below shall immediately cease operations:
 - a. Mining and quarrying of nonmetallic minerals
 - b. All construction work except that which must proceed to have in force an air pollution emergency plan
 - All manufacturing establishments except those required to have in force an air pollution emergency plan
 - d. All wholesale trade establishments, i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except thoses engaged in the distribution of drugs, surgical supplies and food
 - e. All offices of local, county, and State government including authorities, joint meetings, and other public bodies except such agencies which are determined by the chief administrative officer of local, county, or State government, authorities, joint meetings and other public bodies to be vital for public safety and welfate and the enforcement of the provisions of this order
 - f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food

TABLE III (Continued)

- g. Banks, credit agencies other than banks, securities and commodities brokers, uealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices
- h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops
- Advertising offices; consumer credit-reporting, adjustment and collection agencies; duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services; equipment rental services, commercial testing laboratories
- j. Automobile repair, automobile services, garages
- k. Establishments rendering amusement and recreational services including motion picture theaters
- Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries
- 4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.
 - 5. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

Part B. Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level:

	Source of Air Pollution		Control Action
1.	Coal or oil-fired electric power generating facilities		Maximum reduction by utilization of fuels having lowest ash and sulfur content
	b		Maximum reduction by diverting electric power generation to facilities outside of Emergency Area
	c		Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
2.	Coal and oil-fired process a steam generating facilities	•	Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage
	b		Taking the action called for in the emergency plan
	С	•	Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing
3.	Manufacturing industries of a. the following classifications:		lutants from manufac-
	Primary Metals Industries Petroleum Refining Chemical Industries Mineral Processing Industries Grain Industry Paper and Allied Products	turing operations by ceasing, curtailing, post-poning, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment	

TABLE III (Continued)

(Continued)

- Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances
- Maximum reduction of heat load demands for processing
- d. Maximum utilization of midday (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing

(8.0) Section 7. (16.0)

Air Pollution Emergencies; Contents of Order; Hearings;

Appeals.

As is provided in Chapter 16, Article 20, Section 10 of the Code of West Virginia, as amended, if the Commission, with the written approval of the Governor, shall hereafter enter an order declaring an Air Pollution Emergency, as provided in Section 3.01 (d) hereof, it shall, in such order, direct what action shall be taken by the Director to bring about the reduction or prevention of emissions substantially contributing to said Emergency. In such order the Commission shall also fix a time (which shall be not later than twenty-four (24) hours from the time of entry of such order) and place for a hearing to be held be the Commission for the purpose of investigating and determining the factors bearing upon the existence of and contribution to the alleged emergency.

A true copy of any such order shall be served upon all persons whose interests are directly prejudiced by such order in the same manner as a summons in a civil action may be served, and a true copy shall also be posted on the front door of the courthouse of the county in which the alleged emergency conditions originated. All persons whose interests are prejudiced or affected in any manner by any such order shall have the right to appear in person or by counsel at such hearing and to present relevant

evidence. Within twenty-four (24) hours after the completion of the hearing, the Commission shall affirm, modify or set aside said order in accordance and consistent with the evidence adduced at such hearing.

Any person aggrieved by any such final action of the Commission may thereafter exercise the rights of judicial review and appeal which are set forth in the statute hereinabove cited.

(2.0) Section 8. <u>Effective Date</u>.

Regualtion XI shall become effective March 15, 1972.

(4.3)

REGULATION XII

AMBIENT AIR QUALITY STANDARD FOR NITROGEN DIOXIDE

(2.0) Section 1. <u>Anti-Degradation Policy.</u>

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air used in such areas of high air quality.

The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in a statutory air pollution.

This will require that any industrial, public, or private project of development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

(1.0) Section 2. Definitions.

- 2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.
- 2.02. "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.
- 2.03. "Commission' shall mean the West Virginia Air Pollution Control Commission.
- 2.04. "Person" shall mean any and all persons, natural or artificial, including any municipal, 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.

- 2.05. "Standard Condtitions" shall mean, for the purposes of this regulation, a temperature of 25°C and a pressure of 760 milli-meters of mercury column.
- 2.06. "Ambient Air Quality Standard" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time-averaging interval over which that concentration level is measured.
- (4.3) Section 3. Ambient Air Quality Standard
 - 3.01. The following ambient air quality standard shall not be exceeded at any sampling site:

Nitrogen Dioxide

Annual Arithmetic Mean - 100 micrograms per cubic meter (0.05 parts per million)

- (9.0) Section 4. Methods of Measurement.
 - 4.01. Nitrogen dioxide concentrations shall be determined by any of the methods listed below or by such other methods approved as equally of more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission:
 - (a) The Jacobs-Hocheiser method
 - (b) The use of a continuous sampling and recording instrument based on coulometric, colorimetric, or an equivalent principle.
- (2.0) Section 5. Effective Date.

Regulation XII shall become effective March 15, 1972.

(3.0)

REGULATION XIII

PERMITS FOR CONSTRUCTION, MODIFICATION, OR RELOCATION OF STATIONARY SOURCES OF AIR POLLUTANTS, AND PROCEDURES

FOR REGISTRATION AND EVALUATION

(2.0) Section 1. <u>Intent and Purpose</u>.

1.01. To insure the attainment and maintenance of West Virginia's primary and secondary ambient air quality standards; to protect the difference between the present air quality and the secondary standards in areas of high air quality; and to insure compliance with West Virginia's emission standards, it is the intent of the Commission to register and evaluate sources of air pollutants and to preclude the construction, modification, or relocation of any direct and/or indirect affected source(s) in any locality, in which the establishment of such source(s) may interfere with the attainment or maintenance of these standards, or which would lower the air quality in any area unless it has been clearly demonstrated to the Commission that such change is justifiable as a result of necessary economic or social development and will not result in a statutory air pollution.

The purpose of this regulation is to set forth the procedures for registration and reporting, and the criteria for obtaining a permit to construct a new direct and/or indirect affected source within the State of West Virginia. Such construction, modification, or relocation without such a permit is a violation of this regulation. Sources covered by this regulation are termed a direct or indirect 'affected source' as herein defined.

(1.0) Section 2. Definitions.

- 2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.
- 2.02. "Discharge" shall refer to the release, escape, or emission of air pollutants into the air.
- 2.03. "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.

- 2.04. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 2.05. "Director" shall mean the director of the West Virginia Air Pollution Control Commission.
- 2.06. "Person" shall mean any and all persons, natural or artificial, including any municipal, 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.
- 2.07. "Construction" shall mean the fabrication, erection, or installation of a direct or indirect affected source. For the purposes of this regulation, an expansion of an existing direct affected source which increases the amount of any discharge or results in any new discharge shall be considered construction.
- 2.08. "Modification" for the purposes of this regulation is defined as follows:
 - (a) "Direct Affected Source Modification" shall mean any physical change in, or change in the method of operation of, an existing direct affected source which increases the amount of any discharge from such existing source or results in any new discharge from such existing source, for which the Commission has promulgated an emission or ambient air quality standard. However, the following actions shall not constitute a modification of a direct affected source:
 - (1) An expansion of an existing direct affected source;
 - (2) Routine maintenance, repair, and replacement;
 - (3) An increase in hours of operation;
 - (4) An increase in the production rate if such increase does not exceed the design capacity of the affected source; or
 - (5) Use of an alternative fuel or raw material, provided that prior to the effective date of this regulation the affected source is designed to accommodate such alternative use without increasing emissions.

- (b) "Indirect Affected Source Modification";
 - (1) Any change is a parking facility located in a Standard Metropolitan Statistical Area which increases the parking capacity of such facility by more than 500 cars;
 - (2) Any change in a parking facility located outside of a Standard Metropolitan Statistical Area which increases the parking capacity of such facility by more than 1,000 cars;
 - (3) Any change which is predicted by a method approved by the Director to increase the average annual daily traffic volume on a road or highway section located within a Standard Metropolitan Statistical Area by 10,000 vehicles per day or more within ten (10) years of modification; or
 - (4) Any change in an airport which is predicted by a method approved by the Director to result within ten (10) years of modification in an increase of 50,000 or more takeoffs or landings per year by any scheduled air carriers over the existing volume of takeoffs or landings, or increase of 1,600,000 or more passengers per year.
- 2.09. "Relocation" shall mean the physical movement of a direct and/or indirect affected source outside its existing plant boundaries.
- 2.10. "Commenced" shall mean that an owner or operator has undertaken a continuous program of physical site preparation, construction, modification, or relocation, or that a binding general construction contract has been entered into which obligates one party to such contract to perform the physical work involved in such program of construction, modification, or relocation of a direct and/or indirect affected source. Interruptions resulting from acts of God, strikes, or other matters beyond the control of the owner shall be disregarded in determining whether a construction, modification, or relocation program is continuous.

2.11. "Direct Affected Source"

(a) Except for the exemptions of Sub-Section 2.11(b), for the purpose of this regulation, a 'direct affected source' shall mean:

- (1) Any stationary source subject to any emission regulation promulgated by the Commission; or
- (2) Any stationary source which discharges, or may discharge more than six (6) pounds per hour of any air pollutant for which the Commission has promulgated an ambient air quality standard; or
- (3) Any source discharging, or which may discharge, a hazardous pollutant(s) as defined by the Commission.
- (b) However, for the purpose of this regulation, a 'direct affected source' shall not mean:
 - (1) Any fuel burning unit having a heat input under ten (10) million B.T.U.'s (British Thermal Units) per hour;
 - (2) Any internal combustion engines;
 - (3) Any normal and necessary operation associated with the production of agricultural products grown on the premises or livestock, dogs, cats, and poultry grown on the premises; or
 - (4) Any other source of minor significance as may be specified by the Commission.

2.12. "Indirect Affected Source"

For the purpose of this regulation an "indirect affected source" shall mean:

- (a) Any new parking area located in a Standard Metropolitan Statistical Area with a capacity of 1,000 or more cars;
- (b) Any new parking area located outside of a Standard Metropolitan Statistical Area with a capacity or 2,000 cars of more;
- (c) Any new airport which is predicted by a method approved by the Director to have 50,000 or more takeoffs or landings per year by regularly scheduled air carriers, or use by 1,600,000 or more passengers per year; or

- (d) Any new road or highway section located inside a Standard Metropolitan Statistical Area which is predicted by a method approved by the Director to have an average annual daily traffic volume within ten (10) years of construction of 20,000 or more vehicles per day.
- 2.13. "Standard Metropolitan Statistical Area" shall mean any county or group of counties which contain at least one city of 50,000 inhabitants or more, or twin cities with combined total population of 50,000 inhabitants or more, and any contiguous counties which are socially and economically integrated with the central city.
- 2.14. "Stationary Source" shall mean, for the purpose of this regulation, any building, structure, facility, or installation, or combination thereof, which may directly emit or indirectly cause to be emitted any air pollutant. Two designated classes of stationary sources shall be "direct affected source" and "indirect affected source".

Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in Chapter Sixteen, Article Twenty, Section Two of the Code of West Virginia, 1931, as amended, and any rules or regulations promulgated thereunder;

- (3.0) Section 3. Registration and Report Requirements for Direct Affected Sources on which Construction, Modification, or Relocation Commenced Prior to the Effective Date of this Regulation.
 - 3.01. Not later than one hundred twenty (120) days after the effective date of this regulation all persons owning and/or operating a direct affected source(s) shall register such source(s) with the Commission unless such source(s) has been previously registered.

The information required for registration shall be determined and provided in the manner and on such forms as specified by the Director. Registration forms shall be requested from the Director, or his duly authorized representative, by the owner and/or operator of such source(s).

- 3.02. The owner and/or operator of such a direct affected source shall maintain data on the operation of the source and the Director, or his duly authorized representative, may request reports on such data in such resonable manner and detail as the Director may specify. If requested, such reports shall be filed within fifteen (15) days of the end of the established reporting period. However, reports on such data shall not exceed one (1) per month.
- (3.0) Section 4. Permit Application and Report Requirements for Direct and/or Indirect Affected Sources on which Construction,

 Modification, or Relocation is Commenced After the Effective Date of this Regulation.
 - 4.01. No person shall cause, suffer, allow, or permit the construction, modification, or relocation of any direct and/or indirect affected source(s) to be commenced after the effective date of this regulation without notifying the Director of such intent and obtaining a permit(s) to so construct, modify, or relocate the direct and/or indirect affected source(s) as herein provided. Where an indirect affected source is constructed, modified, or relocated in increments which individually are not subject to the provisions of this regulation, all such increments occuring since the effective date of this regulation shall be added together for determining the applicability of this regulation.
 - 4.02. Not later than ninety (90) days, for construction or modification of a direct and/or indirect affected source or for relocation of an indirect affected source, or forty-five (45) days for relocation of a direct affected source, prior to the time that such construction, modification, or relocation is commenced, the owner or operator of the source shall file with the Director permit application forms available from the Director. These applications shall contain sufficient information as, in the judgment of the Director, will enable him to determine whether such souce construction, modification, or relocation will be in conformance with the provisions of any rules and regulations promulgated by the Commission. Such information may include, but not be limited to, site information, plans, descriptions, specifications, and drawings relating to the proposed construction, modification, or relocation of the direct and/or indirect affected source and the manner in which it will be operated and controlled.

- 4.03. Each permit application shall be signed by the owner or operator of the direct and/or indirect affected source, and such signature shall constitute an agreement that the applicant will assume responsibility for the construction, modification, relocation, or operation of the direct and/or indirect affected source in accordance with applicable rules and regulations of the Commission.
- 4.04. Within ninety (90) days of the receipt of a permit application for construction or modification of a direct and/or indirect affected source or for relocation of an indirect affected source, or within forty-five (45) days, for relocation of a direct affected source, the Director shall issue such permit unless he determines that the proposed construction, modification, or relocation will violate applicable emission standards, will interfere with the attainment or maintenance of applicable ambient air quality standards, or will be inconsistent with the intent and purpose of this regulation, in which case he shall issue an order for the prevention of such construction, modification, or relocation. Failure to issue the permit or such order within the time prescribed shall be deemed a determination that such construction, modification, or relocation may proceed: provided that it is in accordance with the plans and specifications or other information required to be submitted on the application required herein.
- 4.05. When the Director denies a permit application for the proposed construction, modification, or relocation of any direct and/or indirect affected source, the order shall set forth his reasons with reasonable specificity.
- 4.06. The Director may impose any reasonable conditions as part of a granted construction, modification, or relocation permit. Such conditions may include, but not be limited to, the submission of periodic progress or operation reports, the provisions of a suitable sampling site, and the installation of pollutant monitoring devices.
- (6.0) Section 5. <u>Determination of Compliance of Direct Affected Sources</u>
 <u>With Commission Rules and Regulations.</u>
 - 5.01. At the time a direct affected source is alleged to be in compliance with an applicable emission standard, an appropriate test consisting of visual determinations and/or conventional in-stack measurements or such other tests as the Director may specify shall be conducted to determine such compliance.

5.02. At the request of the Commission the owner and/or operator of a direct affected source shall install such stack gas monitoring devices as the Director deems necessary to determine continuing compliance. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this regulation.

(14.0) Section 6. Public Review Procedures for Direct Affected Sources

- 6.01. The Director shall maintain for public review a permit application list for direct affected sources containing the name of the applicant, the type and location of the source, and the proposed startup date. No permit shall be issued to any applicant until he has been on the permit application list for at least thirty (30) days for construction of modification, or twenty-five (25) days for relocation.
- 6.02. At the same time that an application for a direct affected source permit is filed with the Director, the applicant shall also place a legal advertisement in the paper of general circulation in the area where the source is located. The advertisement shall contain, as a minimum, the name of the applicant, the type and the location of the source, and the proposed startup date.
- 6.03. During the time periods specified in Sub-Section 6.01 that an applicant's name appears on the direct affected source permit application list, the Director will receive and evaluate written comments relating to the permit application.

(14.0) Section 7. Public Review Procedures for Indirect Affected Sources

7.01. Within thirty (30) days after receipt, by the Director, of a satisfactorily completed application for a permit for an indirect affected source, the Director shall place a legal advertisement in a paper of general circulation in the area where the source is located. The advertisement shall contain, as a minimum, the name of the applicant, the type and location of the source, the proposed startup date, and shall notify the public of its opportunity to comment upon the proposed construction, modification, or relocation and the public availability of information pertinent to the

application.

- 7.02. The Director, at the time of notifying the public of its opportunity to comment upon the proposed construction, modification, or relocation of an indirect affected source, shall make available for public review in at least one location in the affected region such information as may be provided by the owner or operator that is not of a proprietary nature, as well as the Director's analysis of the effect of the indirect affected source on air quality, and his intention to grant or deny a permit.
 - 7.03. Public comments submitted within thirty (30) days after the Director's public notification of an opportunity for comment upon a proposed construction, modification, or relocation of an indirect affected source shall be considered by the Director before making his final decision upon the application.
 - 7.04. The Director shall take final action on an application for construction, modification, or relocation of an indirect affected source within thirty (30) days after the close of the public comment period.

(14.0) Section 8. Public Meetings.

- 8.01. Public meetings to receive comments on direct and/or indirect permit applications will be held when the Director deems it appropriate or when substantial interest is expressed, in writing, by a significant number of persons who might reasonably be expected to be affected by the source in question.
- 8.02. The Director, the Commission, or a duly authorized employee of the Commission shall preside over such meetings and insure that all interested parties have ample opportunity to present comments. Such meetings shall be held at a convenient place as near as practicable to the location of the proposed source.
- 8.03. At a reasonable time prior to such meetings, the Director shall provide appropriate information to news media in the area where the proposed source is to be located.

(3.0) Section 9. Permit Transfer, Cancellation, and Responsibility

- 9.01. A permit shall not be transferable.
- 9.02. The Director will cancel or suspend a permit if, after six (6) months from the date of issuance the holder of

the permit cannot provide the Director, at the Director's request, with written proof of a good faith effort that such construction, modification, or relocation has commenced. Such proof shall be provided not later than thirty (30) days after the Director's request.

- 9.03. The Director may cancel or suspend a permit if the plans and specifications upon which the approval was based and/or the conditions established in the permit are not adhered to.
- 9.04. Possession of a permit does not relieve any person of the responsibility of complying with any and all applicable rules or regulations of the Commission or any other governmental agency.
- (2.0) Section 10. Conflict With Other Rules or Regulations.
 - 10.01. 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.
- (2.0) Section 11. Effective Date.

Regulation XIII (1974) shall become effective June 1, 1974, and shall supersede Regulation XIII (1972) which was adopted by the West Virginia Air Pollution Control Commission on the 5th day of May, 1972, and became effective June 15, 1972, and was filed with the Sectretary of State May 11, 1972.

FEDERALLY PROMULGATED REGULATIONS

(6.0) 52.2524 (b) Federal Compliance Schedules.

- (1) The owner or operator of any boiler or furnace of more than 250 million BTU per hour heat input subject to the emission limitation requirements of West Virginia Administrative Regulation, Chapter 16-20, Series X (hereinafter regulation X), section 3.01(a) or section 3.03(a), shall notify the Administrator, no later than October 1, 1973, of his intent to meet the requirements of said regulation by utilizing low-sulfur fuel, stack gas desulfurization, or a combination of stack gas desulfurization and low-sulfur fuel.
- (2) Any owner or operator of a stationary source subject to subparagraph (1) of this paragraph who elects to utilize low-sulfur fuel, either alone or in combination with stack gas desulfurization, shall be subject to the following compliance schedule:
 - (i) November 1, 1973 Submit to the Administrator a projection of the amount of fuel, by types, that will be substantially adequate to enable compliance with the applicable regulation on June 30, 1975, and for at least one year thereafter.
 - (ii) December 31, 1973 Sign contracts with fuel suppliers for fuel requirements as projected above.
 - (iii) January 31, 1974 Submit a statement as to whether boiler modifications will be required. If modifications will be required, submit plans for such modifications.
 - (iv) March 15, 1974 Let contracts for necessary boiler modifications, if applicable.
 - (v) May 15, 1974 Initiate onsite modifications, if applicable.
 - (vi) February 28, 1975 Complete onsite modifications, if applicable.
 - (vii)June 30, 1975 Final compliance with the requirements of regulation X, section 3.01(a) or section 3.03(a).

- (3) Any owner or operator of a stationary source subject to subparagraph (1) of this paragraph who elects to utilize stack gas desulfurization, either alone or in combination with low-sulfur fuel, and any owner or operator of a stationary source subject to the emission limitation requirements of regulation X, section 3.05, shall be subject to the following compliance schedule:
 - (i) October 15, 1973 Let necessary contracts for construction.
 - (ii) February 28, 1974 Initiate onsite construction.
 - (iii)February 28, 1975 Complete onsite construction.
 - (iv) June 30, 1975 Final compliance with the requirements of regulation X, section 3.01(a), section 3.03(a), or section 3.05.
- (4) The owner or operator of any boiler of furnace of more than 250 million BTU per hour heat input subject to the emission limitation requirements of regulation X, section 3.01(b) or section 3.03(b) shall notify the Administrator, no later than July 31, 1975, of his intent to meet the requirements of said regulation by utilizing low-sulfur fuel, stack gas desulfurization, or a combination of stack gas desulfurization and low-sulfur fuel.
- (5) Any owner or operator of a stationary source subject to subparagraph (4) of this paragraph who elects to utilize low-sulfur fuel, either alone or in combination with stack gas desulfurization, shall be subject to the following compliance schedule:
 - (i) August 31, 1975 Submit to the Administrator a projection of the amount of fuel, by types, that will be substantially adequate to enable compliance with the applicable regulation on June 30, 1978, and for at least one year thereafter, as well as a statement as to whether boiler modifications will be required. Submit final plans for modifications

if they will be required.

- (ii) October 31, 1975 Sign contracts with fuel suppliers for fuel requirements as projected above.
- (iii)December 31, 1975 Let contracts for necessary boiler modifications, of applicable.
- (iv) April 30, 1976 Initiate onsite modifications, if applicable.
- (v) April 30, 1977 Complete onsite modifications, if applicable.
- (vi) June 30, 1978 Final compliance with the requirements of regulation X, section 3.01(b) or section 3.03(b).
- (6) Any owner or operator of a stationary source subject to subparagraph (4) of this paragraph who elects to utilize stack gas desulfurization, either alone or in combination with low-sulfur fuel, shall be subject to the following compliance schedule:
 - (i) October 30, 1975 Submit to the Administrator a final control plan, which describes at a minimum the steps which will be taken by the source to achieve compliance with the applicable regulations.
 - (ii) February 28, 1976 Let necessary contracts for construction.
 - (iii) August 31, 1976 Initiate onsite construction.
 - (iv) December 31, 1977 Complete onsite construction.
 - (v) June 30, 1978 Final compliance with the requirements of regulation X, section 3.01(b) or section 3.03(b).
- (7) Any owner or operator subject to the compliance schedule in subparagraph (2), (3), (5) or (6) of this paragraph shall certify to the Administrator within five days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

- (8) If a performance test is necessary for a determination as to whether compliance has been achieved, such a test must be completed by the final compliance date in the applicable regulation. Ten days prior to such a test, notice must be given to the Administrator to afford him the opportunity to have an observer present.
- (9) (i) None of the above subparagraphs shall apply to a source which is presently in compliance with applicable regulation and which has certified such compliance to the Administrator by October 1, 1973. The administrator may request whatever supporting information he considers necessary for proper certification.
 - (ii) Any compliance schedule adopted by the State and approved by the Administrator shall satisfy the requirements of this paragraph of the affected source.
 - (iii)Any owner or operator subject to a compliance schedule in this paragraph may submit to the Administrator no later than October 1, 1973, a proposed alternative compliance schedule. No such compliance schedule may provide for final compliance after the final compliance date in the applicable compliance schedule of this paragraph. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.
 - (iv) The requirements of this paragraph shall not apply to the following sources for which a request for a post-ponement of the applicability of regulation X had been submitted pursuant to section 110(f) of the Act prior to the date of publication of this regulation:

Source

Location

Kammer Station, Ohio Power Company
Mitchell Station, Ohio Power Company
Harrison Station, Monongahela
Power Company
Fort Martin Station, Monongahela
Power Company

Moundsville Moundsville Haywood

Maidsville

(10) Nothing in this paragraph shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in subparagraphs (2), (3), (5), or (6) of this paragraph fails to satisfy the requirements of 51.15 (b) and (c) of this chapter.

(17.0) 52.2528 Prevention of Significant Deterioration

- (b) <u>Definitions</u>. For the purposes of this section:
 - (1) "Facility" means an identifiable piece of process equipment. A stationary source is composed of one or more pollutant-emitting facilities.
 - (2) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.
 - (3) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal Government which administers federally-owned land, including public domain lands.
 - (4) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
 - (5) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
 - (6) "Construction" means fabrication, erection or installation of a stationary source.
 - (7) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(c) Area designation and deterioration increment

(1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. The provisions of this paragraph do not apply in those counties or other functionally equivalent areas that pervasively exceeded any national ambient air quality standards during 1974 for sulfur dioxide or particulate matter and then only with respect to such pollutants. States may notify the Administrator at any time of those areas which exceeded the national standards during 1974 and therefore are exempt from the requirements of this paragraph.

(2) (i) For purposes of this paragraph, areas designated as Class I or II shall be limited to the following increases in pollutant concentration occurring since January 1, 1975:

Area Designations

Pollutant	Class I (ug/m³)	Class II (ug/m ³)
Particulate matter: Annual geometric mean	5 10	10 30
Sulfur dioxide: Annual arithmetic mean	5	15 100 700

- (ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.
- (iii) The air quality impact of sources granted approval to construct or modify prior to January 1, 1975 (pursuant to the approved new source review procedures in the plan) but not yet operating prior to January 1, 1975, shall not be counted against the air quality increments specified in paragraph (c) (2) (i) of this section.
- (3) (i) All areas are designated Class II as of the effective date of this paragraph. Redesignation may be proposed by the respective States, Federal Land Manager, or Indian Governing Bodies, as provided below, subject to approval by the Administrator.
 - (ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:
 - (a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in 51.4 of this chapter, and
 - (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing, and

- (c) A discussion of the reasons for the proposed redesignation is available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contains appropriate notification of the availability of such discussion, and
 - (d) The proposed redesignation is based on the record of the State's hearing, which must reflect the basis for the proposed redesignation, including consideration of (1) growth anticipated in the area, (2) the social, environmental, and economic effects of such redesignation upon the area being proposed for redesignation and upon other areas and States, and (3) any impacts of such proposed redesignation upon regional or national interests.
 - (e) The redesignation is proposed after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.
- (iii) Except as provided in paragraph (c) (3) (iv) of this section, a State in which lands owned by the Federal Government are located may submit to the Administrator a proposal to redesignate such lands Class I, Class II, or Class III in accordance with subdivision (ii) of this subparagraph provided that:
 - (a) The redesignation is consistent with adjacent State and privately owned land, and
 - (b) Such redesignation is proposed after consultation with the Federal Land Manager.
- (iv) Notwithstanding subdivision (iii) of this subparagraph, the Federal Land Manager may submit to the Administrator a proposal to redesignate any Federal lands to a more restrictive designation than would otherwise be applicable provided that:
 - (a) The Federal Land Manager follows procedures equivalent to those required of States under paragraph
 (c) (3) (ii) and,
 - (b) Such redesignation is proposed after consultation with the State(s) in which the Federal Land is located or which border the Federal Land.
- (v) Nothing in this section is intended to convey authority to the States over Indian Reservations where States have not assumed such authority under other laws nor is it intended to deny jurisdiction which States have assumed

under other laws. Where a State has not assumed jurisdiction over an Indian Reservation the appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

- (a) The Indian Governing Body follows procedures equivalent to those required of States under paragraph
 (c) (3) (ii) and,
- (b) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located or which border the Indian Reservation and, for those lands held in trust, with the approval of the Secretary of the Interior.
- (vi) The Administrator shall approve, within 90 days, any redesignation proposed pursuant to this subparagraph as follows:
 - (a) Any redesignation proposed pursuant to subdivisions (ii) and (iii) of this subparagraph shall be approved ed unless the Administrator determines (1) that the requirements of subdivisions (ii) and (iii) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph, or (3) that the State has not requested and received delegation of responsibility for carrying out the new source review requirements of paragraphs (d) and (e) of this section.
 - (b) Any redesignation proposed pursuant to subdivision (iv) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (iv) of this subparagraph have not been complied with, or (2) that the Federal Land Manager has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.
 - (c) Any redesignation submitted pursuant to subdivision (v) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (v) of this subparagraph have not been complied with, or (2) that the Indian Governing Body has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

- (d) Any redesignation proposed pursuant to this paragraph shall be approved only after the Administrator has solicited written comments from affected Federal agencies and Indian Governing Bodies and from the public on the proposal.
- (e) Any proposed redesignation protested to the proposing State, Indian Governing Body, or Federal Land Manager and to the Administrator by another State or Indian Governing Body because of the effects upon such protesting State or Indian Reservation shall be approved by the Administrator only if he determines that in his judgment the redesignation appropriately balances considerations of growth anticipated in the area proposed to be redesignated; the social, environmental and economic effects of such redesignation upon the area being redesignated and upon other areas and States; and any impacts upon regional or national interests.
- (f) The requirements of paragraph (c) (3) (vi) (a) (3) that a State request and receive delegation of the new source review requirements of this section as a condition to approval of a proposed redesignation, shall include as a minimum receiving the administrative and technical functions of the new source review. The Administrator will carry out any required enforcement action in cases where the State does not have adequate legal authority to initiate such actions. The Administrator may waive the requirements of paragraph (c) (3) (vi) (a) (3) if the State Attorney-General has determined that the State cannot accept delegation of the administrative/technical functions.
- (vii) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.

(d) Review of new sources

(1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the requirements of this paragraph apply to any new or modified stationary source of the type identified below which has not commenced construction or modification prior to June 1, 1975 except as specifically provided below. A

source which is modified, but does not increase the amount of sulfur oxides or particulate matter emitted, or is modified to utilize an alternative fuel, or higher sulfur content fuel, shall not be subject to this paragraph.

- (i) Fossil-Fuel Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.
- (ii) Coal Cleaning Plants.
- (iii) Kraft Pulp Mills.
- (iv) Portland Cement Plants.
- (v) Primary Zinc Smelters.
- (vi) Iron and Steel Mills.
- (vii) Primary Aluminum Ore Reduction Plants.
- (viii) Primary Copper Smelters.
- (ix) Municipal Incinerators capable of charging more than 250 tons of refuse per 24 hour day.
- (x) Sulfuric Acid Plants.
- (xi) Petroleum Refineries.
- (xii) Lime Plants.
- (xiii) Phosphate Rock Processing Plants.
- (xiv) By-Product Coke Oven Batteries.
- (xv) Sulfur Recovery Plants.
- (xvi) Carbon Black Plants (furnace process).
- (xvii) Primary Lead Smelters.
- (xviii) Fuel Conversion Plants.
- (xix) Ferroalloy production facilities commencing construction after October 5, 1975.
- (2) No owner or operator shall commence construction or modification of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

- (i) The effect on air quality concentration of the source or modified source, in conjunction with the effects of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in the area where the source will be located nor the air quality increments applicable in any other areas. The analysis of emissions growth and reduction after January 1, 1975, of other sources in the areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this paragraph; reduction in emissions from existing sources which contributed to air quality during all or part of 1974; and general commercial, residential, industrial, and other sources of emissions growth not exempted by paragraph (c) (2) (111) of this section which has occurred since January 1, 1975.
- (ii) The new or modified source will meet an emission limit, to be specified by the Administrator as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology, as defined in 52.01 (f), for particulate matter and sulfur dioxide. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall to the degree possible set forth the emission reductions achievable by implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.
- (iii) With respect to modified sources, the requirements of subparagraph (2) (ii) of this paragraph shall be applicable only to the facility or facilities from which emissions are increased.
- (3) In making the determinations required by paragraph (d) (2) of this section, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification will have on sulfur dioxide and particulate matter air quality levels; and any other information necessary to determine that best available control technology will be applied. Upon request of the Administrator, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial, and other growth which has occurred in the area affected by the source's emissions (such area to be specified by the

Administrator) since January 1, 1975.

- (4) (i) Where a new or modified source is located on Federal Lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal Lands. Where feasible, the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.
 - (ii) New or modified sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior with respect to lands over which the State has not assumed jurisdiction under other laws.
 - (iii) Whenever any new or modified source is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.
- (5) Where an owner or operator has applied for permission to construct or modify pursuant to this paragraph and the proposed source would be located in an area which has been proposed for redesignation to a more stringent class (or the State, Indian Governing Body, or Federal Land Manager has announced such consideration), approval shall not be granted until the Administrator has acted on the proposed redesignation.

(e) Procedures for public participation

- (1) (i) Within 20 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (e) (1) (ii) of this section shall be the date on which all required information is received by the Administrator.
 - (ii) Within 30 days after receipt of a complete application, the Administrator shall:

- (a) Make a preliminary determination whether the source should be approved, approved with conditions, or disapproved.
- (b) Make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and
- (c) Notify the public, by prominent advertisement in newspaper of general circulation in each region in which the proposed source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the source.
- (iii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the locations where the source will be situated as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional land use planning agency; and any State, Federal Land Manager or Indian Governing Body whose lands will be significantly affected by the source's emissions.
- (iv) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the source would be located.
- (v) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the source would be located.

- (vi) The Administrator may extend each of the time periods specified in paragraph (e) (l) (ii), (iv), or (v) of this section by no more than 30 days or such other period as agreed to by the applicant and the Administrator.
- (2) Any owner or operator who constructs, modifies, or operates a stationary source not in accordance with the application, as approved and conditioned by the Administrator, or any owner or operator of a stationary source subject to this paragraph who commences construction or modification after June 1, 1975, without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.
- (3) Approval to construct or modify shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Administrator may extend such time period upon a satisfactory showing that an extension is justified.
- (4) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State, and Federal regulations which are part of the applicable State Implementation Plan.

(f) Delegation of authority

- (1) The Administrator shall have the authority to delegate responsibility for implementing the procedures for conducting source review pursuant to paragraphs (d) and (e), in accordance with subparagraphs (2), (3), and (4) of this paragraph.
- (2) Where the Administrator delegates the responsibility for implementing the procedures for conducting source review pursuant to this section to any Agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:
 - (i) Where the agency designated is not an air pollution control agency, such agency shall consult with the appropriate State and local air pollution control agency prior to making any determination required by paragraph (d) of this section. Similarly, where the agency designated does not have continuing responsibilities for managing land use, such agency shall consult with the appropriate State and local agency which is primarily responsible for managing land use prior to making any determination required by paragraph (d) of this section.
 - (ii) A copy of the notice pursuant to paragraph (e) (1) (ii)(c) of this section shall be sent to the Administrator through the appropriate regional office.

- (3) In accordance with Executive Order 11752, the Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be delegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are owned or operated by the Federal government or for new or modified sources located on Federal lands; except that, with respect to the latter category, where new or modified sources are constructed or operated on Federal lands pursuant to leasing or other Federal agreements, the Federal land Manager may at his discretion, to the extent permissible under applicable statutes and regulations, require the lessee or permittee to be subject to a designated State or local agency's procedures developed pursuant to paragraphs (d) and (e) of this section.
- (4) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be redelegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are located on Indian reservations except where the State has assumed jurisdiction over such land under other laws, in which case the Administrator may delegate his authority to the States in accordance with subparagraphs (2), (3), and (4) of this paragraph.

(39 FR 42514, Dec. 5, 1974; 40 FR 2802, Jan. 16, 1975, as amended at 40 FR 24535, June 9, 1975; 40 FR 25005, June 12, 2975; 40 FR 42012, Sept. 10, 1975)