

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Subject: Regulation II - To Prevent and Control Particulate Air Pollution From
Combustion of Fuel in Indirect Heat Exchangers.

INDEX.

Section 0. General.

- 0.01. - Scope
- 0.02. - Authority
- 0.03. - Filing Date
- 0.04. - Effective Date
- 0.05. - Type

Section 1. Definitions

- 1.01. - "Air Pollution", 'statutory air pollution'
- 1.02. - "Air Pollutants"
- 1.03. - "Commission"
- 1.04. - "Director"
- 1.05. - "Person"
- 1.06. - "Fuel Burning Unit"
- 1.07. - "Similar Unit(s)"
- 1.08. - "Fuel"
- 1.09. - "Particulate Matter"
- 1.10. - "Smoke"
- 1.11. - "Ringelmann Smoke Chart"
- 1.12. - "Plant"
- 1.13. - "Fugitive Particulate Matter"
- 1.14. - "Fugitive Particulate Matter Control System"
- 1.15. - "Air Pollution Control Equipment"
- 1.16. - "Stack"
- 1.17. - "Kanawha Valley Air Basin"

Section 2. Emissions of Smoke and/or Particulate Matter

Prohibited and Standards of Measurement

- 2.01. (a) - Kanawha Valley
- 2.01. (b) - All Areas of State
- 2.01. (c) - All Areas of State After June 30, 1975
- 2.03. - Smoke During Cleaning of Fire Box
- 2.03. - Visible Emissions After Compliance with Section 3
- 2.04. - Soot Blowing
- 2.05. - Start-up of a New Fire

Section 3. Weight Emission Standards

- 3.01. (a) - Pounds Per Million B.T.U.'s
- 3.01. (b) - Determination for Individual Stacks
- 3.01. (c) - Additional New Units
- 3.02. - Prohibition of Addition of Sulfur Oxides
- 3.03. - Flue Gas Exemption

Section 4. Control of Fugitive Particulate Matter

- 4.01. - Prohibitions

Section 5. Registration

- 5.01. - Existing Units
- 5.02. - New Units

Section 6. Permits

Section 7. Reports and Testing

- 7.01. - Definition of Tests

7.02. - Tests the Director May Conduct

7.03. - Data Reports

7.04. - Start-up

7.05. - Test Procedures

Section 8. Compliance Programs and Schedules

8.01. - Existing Units

8.02. - Failure to Submit a Program

Section 9. Variance

9.01. - Malfunction of Equipment

9.02. - Start-up of Fuel Burning Units

Section 10. Exemptions

Section 11. Effective Date

ABSTRACT

The amendments to Regulation II (1972) were adopted by the Commission on the 23rd day of July, 1974. Regulation II (1972), as amended, was retitled Regulation II (1974) and became effective September 1, 1974, and was filed with the Secretary of State July 31, 1974, and superseded Regulation II (1972). The amendments to Regulation II (1966) were adopted by the West Virginia Air Pollution Control Commission on the 26th day of January, 1972. Regulation II (1966), as amended, was retitled Regulation II (1972), and became effective March 15, 1972, and was filed with the Secretary of State January 31, 1972, and superseded Regulation II (1966). Regulation II (1966) was adopted by the West Virginia Air Pollution Control Commission on the 17th day of February 1966 and became effective April 4, 1966 and was filed with the Secretary of State February 28, 1966.

Title 45
Legislative Rule

~~WEST VIRGINIA ADMINISTRATIVE REGULATIONS~~
Air Pollution Control Commission

~~Chapter 16-20~~
Series ~~HC 2~~
~~1974~~

Subject: Regulation II - To Prevent and Control Particulate Air Pollution From
Combustion of Fuel in Indirect Heat Exchangers.

Section d 1 General.

0.01. Scope.

Regulation II establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units.

0.02. Authority. W.Va. Code § 16-20-5

This regulation is issued under the authority of the West Virginia Code, Chapter 16, Article 20, Section 5. This regulation relates to West Virginia Code, Chapter 16, Article 20, Sections 1 through 13 inclusive.

0.03. Filing Date.

This regulation was promulgated or last amended on the 23rd day of July, 1974, and was filed with the office of the Secretary of State the 31st day of July, 1974. Further, this regulation was filed pursuant to West Virginia Code, Chapter 29A, Article 2, Section 5 on the 30th day of December, 1982 in the office of the Secretary of State.

0.04. Effective Date.

The effective date of this regulation is the 1st day of September, 1974.

0.05. Type.

This regulation is a legislative rule as defined in West Virginia Code, Chapter 29A, Article 2.

Section ² 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. "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 country, 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' 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.
- 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 or 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 this air pollutant into the open air.

1.16. "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.

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.

Section ~~2~~³ Emissions of Smoke and/or Particulate Matter Prohibited and Standards of Measurement.

2.01. Visible Emission Requirements for Fuel Burning Units Not Meeting the Requirements of Section ~~2~~⁴ 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 Limitations on Fuel Burning Units
Kanawha Valley Air Basin	Before April 4, 1966	2
	After April 4, 1966	1
All Other	NO LIMITATIONS	

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

Areas of State	Ringelmann Limitation on Fuel Burning Units
All	1

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

Areas of State	Ringelmann Limitation on Fuel Burning Units
All	0.5

2.02. The provisions of Sub-Section ^{3.1}~~2.0D~~ 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 ~~2~~⁴ 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 ten (10) percent opacity.

2.04. The provisions of Sub-Section ~~2.03~~^{3.3} 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 Ringelmann 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 provisions. 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 (75) 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 of 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.

Section 3. ⁴ Weight Emission Standards.

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 burning 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 discharged 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 Particulate Matter Emission Rate for All Type 'c' Fuel Burning Units Located at One Plant in Pounds Per Hour
10	3.4
20	5.6
40	9.0
60	11.7
80	14.4
100	16.6
200	26.4
400	42.2
600	54.0
3,333	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 ^{9.1(a)} 3.01 (a) are not to be exceeded:

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

Where,

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

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

R_{et} is the total allowable emission rate in pounds per hour corresponding to H_{et} ; and

H_e 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 ^{4.2}~~3.02~~ of this section shall not apply to combustion units in operation on the effective date of this regulation, September 1, 1974.

Section ^{4.5} Control of Fugitive Particulate Matter.

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.

Section ^{4.6} 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.

Section ~~6~~⁷ 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.

Section ~~7~~⁸ Reports and Testing.

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 ~~8~~⁴. 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 pre-conditioned, fiberglass mat filter, certified as being at least ninety-nine (99) percent efficient in collecting 0.3 micron DOP (Diocetyl Phthalate) smoke, or a filter of 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 ~~3.0124,1~~

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.

Section ~~8~~⁹ 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 (1972) 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.

Section ~~8~~¹⁰ 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 Commission.

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.

Section ~~10~~⁹. Exemptions.

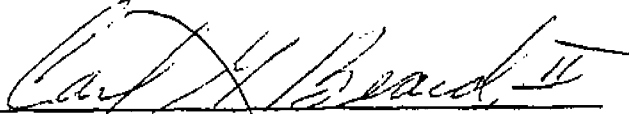
10.01. All fuel burning units having a heat input under ten (10) million B. T. U. 's per hour will be exempt from Sections ~~8~~⁴ through ~~8~~⁹. However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

Section 11. Effective Date.

Regulation II (1974) shall become effective September 1, 1974, and shall supersede Regulation II (1972) which was adopted by

the West Virginia Air Pollution Control Commission on the
26th day of January, 1972, and became effective March 15,
1972, and was filed with the Secretary of State January 31, 1972.

The foregoing is a true and correct copy of the West Virginia
Air Pollution Control Commission Regulation II as adopted on
the 23rd day of July, 1974.



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



WEST VIRGINIA
AIR POLLUTION CONTROL COMMISSION
1558 Washington Street, East
CHARLESTON, WEST VIRGINIA 25311
TELEPHONE: 348-2275 OR 348-3286

July 31, 1974

FILED IN THE OFFICE
EDGAR F. HEISKELL, III
SECRETARY OF STATE
THIS DATE 7-31-74

The Honorable Edgar F. Heiskell, III
Secretary of State
State Capitol Building
Charleston, West Virginia 25311

Dear Mr. Heiskell:

Attached are the original and one copy of Regulation II -
To Prevent and Control Particulate Air Pollution From Com-
bustion of Fuel in Indirect Heat Exchangers - for file in your
office as required by law.

The regulation was adopted by the West Virginia Air
Pollution Control Commission at their meeting on July 23, 1974,
and becomes effective September 1, 1974, and shall supersede
Regulation II (1972) which was adopted by the West Virginia Air
Pollution Control Commission on the 26th day of January, 1972,
and became effective March 15, 1972, and was filed with the
Secretary of State January 31, 1972.

Sincerely yours,

Handwritten signature of Carl G. Beard, II in cursive script.
Carl G. Beard, II
Director

CGB/bam

Attachments (2)

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Subject: Regulation II - To Prevent and Control Particulate Air
Pollution From Combustion of Fuel in Indirect Heat Exchangers.

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- 1.16. - "Stack"
- 1.17. - "Kanawha Valley Air Basin"

FILED IN THE OFFICE OF
SECRETARY OF STATE OF
WEST VIRGINIA

THIS DATE 7/31/74

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Air Pollution Control Commission

Chapter 16-20
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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:

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(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.

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.

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- 1.14. "Fugitive Particulate Matter Control System" shall mean any equipment or 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 this air pollutant into the open air.

1.16. "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.

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.

Section 2. Emissions of Smoke and/or Particulate Matter
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 Limitations on Fuel Burning Units
Kanawha Valley Air Basin	Before April 4, 1966	2
	After April 4, 1966	1
All Other	NO LIMITATIONS	

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

Areas of State	Ringelmann Limitation on Fuel Burning Units
All	1

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

Areas of State	Ringelmann Limitation on Fuel 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 emissions of smoke into the open air from any fuel burning unit which is darker in shade or appearance than 0.5 Ringelmann or ten (10) percent opacity.

2.04. The provisions of Sub-Section 2.03 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 Ringelmann 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 provisions. 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 (75) 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 of 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.

Section 3. Weight Emission Standards.

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 burning 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 discharged 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 Particulate Matter Emission Rate for All Type 'c' Fuel Burning Units Located at One Plant in Pounds Per Hour
10	3.4
20	5.6
40	9.0
60	11.7
80	14.4
100	16.6
200	26.4
400	42.2
600	54.0
3,333	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:

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

Where,

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

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

R_{et} is the total allowable emission rate in pounds per hour corresponding to H_{et} ; and

H_e 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.

Section 4. Control of Fugitive Particulate Matter.

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.

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.

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.

Section 7. Reports and Testing.

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 pre-conditioned, fiberglass mat filter, certified as being at least ninety-nine (99) percent efficient in collecting 0.3 micron DOP (Diocetyl Phthalate) smoke, or a filter of 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, weight, 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.

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 (1972) 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.

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 Commission.

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.

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.

Section 11. Effective Date.

Regulation II (1974) shall become effective September 1, 1974, and shall supersede Regulation II (1972) which was adopted by

the West Virginia Air Pollution Control Commission on the 26th day of January, 1972, and became effective March 15, 1972, and was filed with the Secretary of State January 31, 1972.

The foregoing is a true and correct copy of the West Virginia Air Pollution Control Commission Regulation II as adopted on the 23rd day of July, 1974.



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