





DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES

**DIVISION OF ENVIRONMENTAL PROTECTION**

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SUMMARY OF MODIFICATIONS TO PROPOSED  
45CSR5 AS APPROVED BY THE LEGISLATIVE RULE  
MAKING REVIEW COMMITTEE ON JANUARY 8, 1993

Section 2.3. of 45CSR5 was modified as follows:

Language originally filed:

2.3. "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.

Language as modified by action of the Committee:

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

FILED

45CSR5

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TITLE 45  
LEGISLATIVE RULES  
WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION OFFICE OF WEST VIRGINIA  
SECRETARY OF STATE

SERIES 5  
TO PREVENT AND CONTROL AIR POLLUTION FROM  
THE OPERATION OF COAL PREPARATION PLANTS AND COAL  
HANDLING OPERATIONS

**§45-5-1. General.**

1.1. Scope. -- The purpose of Series 5 is to prevent and control air pollution from the operation of coal preparation plants and coal handling operations.

1.2. Authority. -- W. Va. Code §16-20-5

1.3. Filing Date. --

1.4. Effective Date. --

**§45-5-2. Definitions.**

2.1. "Air Pollution", 'statutory air pollution' shall have the meaning ascribed to it in ~~section two~~ article twenty [§16-20-1 et seq.], chapter sixteen of the Code of West Virginia, as amended.

2.2. "Commission" shall mean the West Virginia Air Pollution Control Commission.

2.3. "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~~ means any and all persons, natural or artificial, including the State of West Virginia or any other state and all agencies or divisions thereof, any state political subdivision, the United States of America, any municipal, statutory, public or private corporation or association organized or existing under the law of this or any other state or country, and any firm, partnership or association of whatever nature.

2.4. "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.

2.5. "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.

2.6. "Plant" shall mean and include all equipment and grounds utilized in an integral complex for coal preparation and associated handling.

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2.7. "Fuel" shall mean a fuel such as a solid, gaseous or liquid fuel which is fired in fuel burning equipment.

2.8. "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 producing heat for a thermal drier.

2.9. "Thermal Drier" shall mean a device using fuel burning equipment for the primary purpose of reducing the moisture content of coal.

2.10. "Air Table" shall mean a device using a gaseous separating media for the primary purpose of improving the product quality.

2.11. "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.

2.12. "Standard Cubic Foot" - One (1) cubic foot of dry gas, measured at standard conditions of ~~60~~68 degrees F and 29.92 inches of mercury column.

2.13. "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 from operations including, but not limited to, furnaces, drying chambers, and air separation (table) operations.

2.14. "Particulate Matter" shall mean any material except uncombined water, that exists in a finely divided form as a liquid or solid.

~~2.15. "Smoke" shall mean small gasborne and airborne particles emitted from a stack in sufficient numbers to be visible.~~

~~2.16.~~ 2.15. "Ringelmann-Smoke Chart" shall be the Ringelmann's Scale for Grading the Density of Smoke published by the United States 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.

~~2.17.~~ 2.16. "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.

~~2.18.~~ 2.17. "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.

2.18. "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

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Other words and phrases used in this regulation, unless otherwise indicated, shall have the meaning ascribed to them in ~~section two~~ article twenty [§16-20-1 et seq.], chapter sixteen of the Code of West Virginia, as amended.

**§45-5-3. Emission of ~~Smoke~~ Particulate Matter Prohibited and Standards of Measurement.**

3.1. No person shall cause, suffer, allow or permit emission of ~~smoke~~ particulate matter 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~~ or twenty (20) percent opacity, except as noted in subsection 3.2.

3.2. The provisions of subsection 3.1 of this section shall not apply to ~~smoke~~ particulate matter, the shade or appearance of which is less than No. 3 ~~on the Ringelmann Smoke Chart~~ or sixty (60) percent opacity for a period or periods aggregating no more than five (5) minutes in any sixty (60)-minute period during operation.

3.3. The provisions of subsection 3.1 and 3.2 of this section shall not apply to ~~smoke~~ particulate matter, the shade or appearance of which is less than No. 3 ~~on the Ringelmann Smoke Chart~~ or sixty (60) percent opacity for a period of up to eight (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.

~~3.4. -- The equivalent opacity of those Ringelmann numbers in Sub-Section 3.1 and Sub-Section 3.2 of this Section shall be used as a guide in the enforcement of Section 4 and Section 5 of this Regulation.~~

~~3.5. 3.4.~~ No person shall cause, suffer, allow or permit emission of ~~smoke~~ particulate matter 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 twenty (20) percent ~~the equivalent opacity of this Ringelmann number.~~

**§45-5-4. 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:

~~4.1. -- 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.~~

~~4.2. 4.1.~~ After ~~September 1, 1971,~~ Thermal driers installed on or before March 1, 1970, shall not exceed the emission limitations of the following table:

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Total Plant Volumetric Flow Rate (Standard Cubic Feet Per Minute)	Maximum Allowable Particulate Loading Per Drier (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 and above	0.08

4-3-4.2. Thermal driers installed after March 1, 1970, but before October 24, 1974 shall not exceed the emission limitations of the following table:

Total Plant Volumetric Flow Rate (Standard Cubic Feet Per Minute)	Maximum Allowable Particulate Loading Per Drier (Grains Per Standard Cubic Foot)
75,000 or less	0.10
111,000	0.09
163,000	0.08
240,000 and above	0.07

4.3. Thermal driers which commenced construction or modification after October 24, 1974, shall meet emission limitations set forth under series sixteen [45CSR16] of the Commission.

4.4. For the volumetric flow rate between any two consecutive volumetric flow rates stated in subsection ~~4-24.1~~ and subsection ~~4-34.2~~, 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.

4.5. 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 subsection ~~4-34.2~~ even though such modifications do not include the installation of a new thermal drier(s).

4.6. 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.

4.7. 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 eighty (80) feet above the foundation grade of the structure containing the drier or less than ten (10) feet above the top of said structure or any adjacent structure, whichever is

greater. In determining the desirable height of ~~the above~~ a plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, ~~and the stack emission rate, and good engineering practice as set forth in Series 20 (45CSR20).~~

~~4.8. 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.~~

**§45-5-5. Control and Prohibition of Particulate Emissions From an Air Table Operation of a Coal Preparation Plant.**

5.1. 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 dry standard cubic foot of exhaust gases.

5.2. 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.

~~5.3. 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.~~

**§45-5-6. Control and Prohibition of Fugitive Dust Emissions From Coal Handling Operations and Preparation Plants.**

6.1. 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.

6.2. 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.

6.3. Owners or operators of coal handling operations and preparation plants located in the area of Brooke County west of State Route 2, north of an extension of the southern boundary of Steubenville Township in Jefferson County, Ohio, and south of the Market Street Bridge shall comply with the following fugitive dust control provisions:

a. Particulate matter mass emissions shall not exceed 0.001 pounds per ton of coal input from any coal crusher or coal screening operation.

b. Visible particulate emissions shall not exceed 5% opacity from any coal crushing or screening operation or from any coal conveying system.

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c. A definitive, approvable plan to control fugitive dust entrainment and emissions from vehicular traffic and activity areas including but not limited to, paved and unpaved haulroads, stockpile areas, haulway berms, and plant access roads to public streets and highways shall be submitted to the Commission and such a plan shall be embodied in a consent order approved by the Commission. The plan shall be submitted to the Commission on or before May 1, 1992 and shall:

1. Provide specific scheduled treatment frequencies for all areas of vehicular activity and stockpiling using water and/or chemical dust suppressants at sufficient application rates and intensities and wet flushing and vacuum sweeping for paved surfaces so as to reduce uncontrolled fugitive dust emissions by at least 95% as determined by methods and procedures in the document, "Control of Open Fugitive Dust Sources" (EPA 450/3-88-008, September, 1988).

2. Provide for daily monitoring and recordkeeping and not less than monthly reporting to the Director of dust control measures including, but not limited to water and chemical usage rates; chemical dust suppressant dilution ratios; accurate water and/or chemical flow rates or volumes through stationary or mobile dust suppression equipment and system pressures; beginning and ending times for treatment; traffic rates and types of vehicles using plant haulways, access roads and other vehicle activity areas; meteorological conditions relevant to control program requirements and equipment maintenance and downtime records.

3. Provide that no coal be unloaded from trucks which are not, upon entry to the plant or handling facility, tarped or otherwise covered to prevent dust entrainment, spillage or re-entrainment.

4. Provide that the wheels, tires and underbodies of all coal trucks be fully cleaned by an automatic washing system prior to exiting onto paved streets or highways from the premises of the plant or coal handling operation if such trucks travel over unpaved or soiled areas within the plant or coal handling operation.

5. Provide that all paved traffic areas be water flushed and vacuum or broom swept daily or alternatively be treated with water and/or chemical dust suppressants in accordance with section 6.3.c.1 of this regulation.

6. Provide that all reports required under this section be certified to be true and accurate by the owner or operator prior to submission to the Director.

7. Provide that the design of dust suppression systems or equipment, including but not limited to, number of trucks and truck tank capacity, spray bar or header volumes and pressures, spray system pump specifications, type of chemicals used, number and design of vacuum trucks maintained and other similar information be clearly incorporated.

d. The Commission may consider or incorporate exceptional provisions to the fugitive dust control plans or schedules approved pursuant to

section 6.3.c. taking into consideration such conditions as rainfall, snow cover, and freezing weather.

**§45-5-7. Monitoring of Operations.**

7.1. The owner or operator of a thermal drier shall install, calibrate, maintain, and continuously operate monitoring devices, as follows:

a. A monitoring device for the continuous measurement of the temperature of the gas stream at the exit of the thermal drier. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus three degrees Fahrenheit ( $\pm 3^{\circ}\text{F}$ ).

b. For thermal driers that use venturi scrubber emissions control equipment:

1. A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus one inch ( $\pm 1$  in.) water gage.

2. A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus five percent ( $\pm 5\%$ ) design water supply pressure. The pressure sensor must be located close to the water discharge point or at such point as approved by the Director.

7.2. All monitoring devices required under subsection 7.1 are to be recalibrated at least once annually.

**§45-5-7:----Registration:**

~~7.1:--Within thirty (30) days after the effective date of this regulation, all persons owning and/or operating coal preparation plants with 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.~~

~~7.2:--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.~~

~~7-3:--Within thirty (30) days after the completion of the modifications as filed under Sub-Section 7.2; the operator shall register such changes with the Commission on forms to be made available by the Commission.~~

~~7-4:--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.~~

**§45-5-8. Permits: Construction, Modification, and Relocation Permits.**

~~8-1:--Plants in existence on the effective date of this regulation will be granted temporary operating permits subject to compliance with Sub-Section 7.1. 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 this regulation, the temporary permit will be replaced with an operating permit.~~

~~8-2:--Any plant failing to maintain the requirements of this regulation shall, at the discretion of the Commission; have the permit revoked.~~

~~8-3:--When permits are revoked; the Commission will reissue permits when such changes as necessary to meet the requirements of this regulation are made.~~

~~8-4:--New plants will be granted temporary operating permits provided they comply with Sub-Section 7.4.~~

~~8-5:--Subject to the provisions of Sub-Section 7.1; plants operating without a permit will be in violation of this regulation.~~

~~8-6:--The possession of a permit by any person shall in no way relieve the holder thereof of his obligation to comply with the provisions of this regulation.~~

8.1. No person shall construct, modify, or relocate any coal preparation plant or coal handling operation without first obtaining a permit in accordance with the provisions of article twenty [§16-20-1 et seq.], chapter sixteen of the Code of West Virginia, as amended, and the Commission rules for review and permitting of new or modified sources.

**§45-5-9. Operating Permits.**

9.1. No person shall operate any coal preparation plant or handling operation without an operating permit. Any person issued an operating permit for a coal preparation plant or handling facility shall operate such facility in accordance with all terms and conditions of such permit. A complete application for an operating

permit shall be submitted upon such forms and shall contain such information as the Director may specify and shall be submitted to the Director not later than 120 days following receipt of the Director's written request for such application.

9.2. If, after any investigation made by the Director, or his designated representative, the Director shall be of the opinion that an operating permit holder is willfully violating the provisions of this regulation, the Director shall issue an order suspending or revoking the operating permit. Such order shall be considered a cease and desist order for purposes of administrative and judicial review.

9.3. The possession of a permit by any person shall in no way relieve the holder thereof of the obligation to comply with the provisions of this or any other regulation of the Commission or article twenty [§16-20-1 et seq.], chapter sixteen of the Code of West Virginia, as amended.

#### **§45-5-9-§45-5-10. Reports and Testing.**

9-1-10.1. At such reasonable times as the Director may designate, the owner or operator of a coal preparation plant may be required to conduct or have conducted stack tests to determine the dust loading in exhaust gases mass emission rates of particulate matter. ~~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.~~ All tests to determine compliance with exhaust gas dust concentrations and particulate matter mass emission rates shall be conducted in accordance with Methods 1-5 of 40 CFR 60, Appendix A as promulgated by USEPA on July 1, 1991 provided that all compliance tests must consist of not less than three (3) test runs, test run duration shall not be less than sixty (60) minutes, and not less than thirty (30) standard cubic feet of exhaust gas must be sampled during each test run. Should the Director exercise his option 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, ladders, etc., to comply with generally accepted good safety practices.

9-2-10.2. 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 subsection 9-1-10.1.

10.3. The owner or operator shall submit a test protocol for the Director's approval not less than thirty (30) days prior to any test to determine compliance with this regulation and shall provide at least fifteen (15) days notice of all compliance tests to the Director.

10.4. Tests to determine compliance with the visible emission limitations of sections 3 and 6 shall be conducted by certified visible emission observers in accordance with Method 9 of 40 CFR 60, Appendix A as promulgated by USEPA on July 1, 1991, except that visible emissions measurements shall not be averaged.

10.5. Any stack venting thermal drier exhaust gases and/or air table exhaust gases or exhaust gases or air from any air pollution control device shall include straight runs of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. Flow straightening devices shall be required where cyclonic gas flow would exist in the absence of such devices.

~~§45-5-10.~~ §45-5-11. Variance.

~~10-1.- If a plant operating under a temporary permit does not meet the requirements of this regulation, the operator of the 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.~~

~~10-2-11.1.~~ Due to unavoidable malfunctions of equipment or nonavailability of repair parts, emissions exceeding those provided for in this regulation may be permitted by the Commission upon specific application to the Commission Director, upon specific application to the Director, for periods not to exceed ten (10) days. Such application shall be made within twenty-four (24) hours of the malfunction or within such other time period as the Commission may specify. In case 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.