



WEST VIRGINIA SECRETARY OF STATE

MAC WARNER

ADMINISTRATIVE LAW DIVISION

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Office of West Virginia
Secretary Of State

**NOTICE OF FINAL FILING AND ADOPTION OF A LEGISLATIVE RULE AUTHORIZED
BY THE WEST VIRGINIA LEGISLATURE**

AGENCY: Air Quality TITLE-SERIES: 45-07
RULE TYPE: Legislative Amendment to Existing Rule: Yes Repeal of existing rule: No
RULE NAME: CONTROL OF PARTICULATE MATTER AIR
POLLUTION FROM MANUFACTURING
PROCESSES AND ASSOCIATED OPERATIONS
CITE STATUTORY AUTHORITY: W. Va. Code § 22-5-4

The above rule has been authorized by the West Virginia Legislature.

Authorization is cited in (house or senate bill number) SB2

Section 64-3-1 (f) Passed On 3/8/2024 12:00:00 AM

This rule is filed with the Secretary of State. This rule becomes effective on the following date:

June 1, 2024

This rule shall terminate and have no further force or effect from the following date:

BY CHOOSING 'YES', I ATTEST THAT THE PREVIOUS STATEMENT IS TRUE AND CORRECT.

Yes

Jason E Wandling -- By my signature, I certify that I am the person authorized to file legislative rules, in accordance with West Virginia Code §29A-3-11 and §39A-3-2.

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TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY

SERIES 7
CONTROL OF PARTICULATE MATTER AIR POLLUTION
FROM MANUFACTURING PROCESSES AND ASSOCIATED OPERATIONS

§45-7-1. General.

1.1. Scope. -- This rule establishes particulate matter emission standards for manufacturing processes and associated operations and sets forth permitting, testing, reporting, and exemption provisions.

1.2. Authority. -- W. Va. Code §22-5-4.

1.3. Filing Date. -- May 2, 2024.

1.4. Effective Date. -- June 1, 2024.

1.5. Sunset provision. -- Does not apply.

§45-7-2. Definitions.

2.1. “Air Pollution”, “statutory air pollution” shall have the meaning ascribed to it in W. Va. Code §22-5-2.

2.2. “Air Pollution Control Equipment” means 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.

2.3. “Alternative Emission Limitation” means an emission limitation that applies to a source during some but not all periods of normal operation (e.g., applies only during a specifically defined mode of operation such as startup or shutdown). An alternative emission limitation is a component of a continuously applicable emission limitation, and it may take the form of a control measure such as a design, equipment, work practice or operational standard (whether or not numerical).

2.4. “Blowing Tap” means any tap associated with ferroalloy submerged arc furnace in which an evolution of gas forces or projects jets of flame or metal sparks beyond the ladle, runner or collection hood.

2.5. “By-Product Coke Production Facility” means the production of coke by the destructive distillation of coal in recovery type ovens in which gaseous and liquid distillates are separated and recovered as by-products, and includes any on-site coal preparation, charging, coking, coke pushing, hot coke transfer, coke quenching, coke handling and the separation and preparation of distillates.

2.6. “Charging Emissions” means any smoke and/or particulate matter emissions from one or more charging ports, space between charging port rings and oven refractory, drop sleeves, larry car hoppers or emissions from any devices used for the capture and cleaning of emissions resulting from charging operations, but shall not include emissions resulting from the temporary removal of a charging port lid for

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the purpose of sweeping coal spillage into the oven just charged after all lids have been seated over the charging ports following removal of the larry car.

2.7. "Charging Operation" means any operation or procedure by which coal is introduced into a coke oven. For coke oven batteries employing larry cars, the charging operation shall begin when the gate(s) on the larry car coal hopper is (are) opened or the mechanical feeders start the flow of coal into the first charging port(s) until the oven is completely charged and the last charging port lid is seated.

2.8. "Charging Port" means any opening through which coal is, or may be, introduced into a coke oven, whether or not such opening is regularly used for that purpose.

2.9. "Chemical Change" means, for the purpose of this rule, any change in a substance which does change the properties of the substance and by which a new substance is formed.

2.10. "Coke Battery Topside" means the top of the coke battery including, but not necessarily limited to, charging ports, charging port lids, inspection lids, refractory ceiling, offtake piping and the coke oven gas collector main.

2.11. "Door Area" means the vertical face of a coke oven between two adjacent buckstays.

2.12. "Door Area Emissions" means any smoke and/or particulate matter emissions from any door area including, but not limited to, emissions from the door, chuck door, door seal, jamb or refractory.

2.13. "Duplicate Source Operation" means any combination of 2 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.

2.14. "Ferroalloy Electric Submerged Arc Furnace" means any furnace used in production of ferroalloys wherein electrical energy is converted to heat energy by transmission of current between electrodes partially submerged in the furnace charge.

2.15. "Fuel" means any form of combustible matter (solid, liquid, vapor or gas) that is used as a source of heat.

2.16. "Fugitive Particulate Matter" means any and all particulate matter which, if not confined, would be emitted directly into the open air from points other than a stack outlet.

2.17. "Furnace Charge" means any material introduced into a ferroalloy electric submerged arc furnace, and may consist of, but is not limited to, ores, slag, carbonaceous material and limestone.

2.18. "Maintenance Operation" means maintenance activities that have zero process weight rate and that are not defined as a manufacturing process.

2.19. "Malfunction" means a sudden and unavoidable breakdown of process or control equipment.

2.20. "Manufacturing Process" means any action, operation or treatment, embracing chemical, industrial or manufacturing efforts, and employing, for example, heat treating furnaces, by-product coke plants, core-baking ovens, mixing kettles, cupolas, blast furnaces, open hearth furnaces, heating and reheating furnaces, puddling furnaces, sintering plants, electric steel furnaces, ferrous and non-ferrous

foundries, kilns, stills, driers, crushers, grinders, roasters, and equipment used in connection therewith and all other methods or forms of manufacturing or processing that may emit smoke, particulate matter or gaseous matter.

2.21. “Non-Recovery Coke Production Facility” means the destructive distillation of coal in which the gaseous and liquid distillates are separated from coal, but not recovered as by-products, and includes any on-site coal preparation, charging, coking, coke pushing, hot coke transfer, coke quenching and coke handling.

2.22. “Offtake Piping” means the piping that transports gaseous by-products of the coking cycle from an oven to the coke oven gas collector main, such as standpipes, standpipe caps, goosenecks and slipjoints.

2.23. “Opacity” means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

2.24. “Oxygen Lancing” shall mean the burning open of a taphole to remove slag or product from the taphole associated with operations of a ferroalloy electric submerged arc furnace.

2.25. “Particulate Matter” means any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

2.26. “Person” means any and all persons, natural or artificial, including the state of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.

2.27. “Physical Change” means, for the purpose of this rule, 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.

2.28. “Plant” means and includes all equipment, grounds, source operations and any manufacturing processes utilized in an integral complex.

2.29. “Poling” shall mean pushing a log timer into the furnace taphole to clear slag from the furnace tapping channel associated with operation of a ferroalloy electric submerged arc furnace.

2.30. “Potential To Emit”, for the purpose of subsections 10.5 and 10.6, means the maximum capacity of a source, on an hourly and annual basis, to emit any air pollutant(s) under its physical and operational design, prior to any air pollution control equipment.

2.31. “Process Weight” means that total weight of all materials introduced into a source operation, excluding solid, liquid and gaseous fuels used solely as fuels, and excluding all process and combustion air.

2.32. “Process Weight Rate” means a rate established as follows:

2.32.1. 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.

2.32.2. 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.

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

2.33. "Pushing Emissions" means any smoke and/or particulate matter emissions resulting from the pushing operation.

2.34. "Pushing Operation" means the removal of coke from a coke oven and shall begin when the coke mass starts to move and shall continue until the coke transfer car enters the quenching station.

2.35. "Quenching Emissions" means any smoke and/or particulate matter emissions resulting from the quenching operation.

2.36. "Quenching Operation" means the process by which the combustion of hot coke is stopped by application of water or any other procedure achieving the same effect.

2.37. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§22-1-6 or 22-1-8.

2.38. "Shutdown" means the cessation of operation of a source subject to this rule for any reason, unless otherwise defined in a permit creating an alternative emission limitation.

2.39. "Smoke" means small gasborne and airborne particulate matter emitted in sufficient numbers to be visible.

2.40. "Source Operation" means the last operation in a manufacturing process preceding the emission of air contaminants which operation:

2.40.1. Results in the separation of air contaminants from the process materials or in the conversion of the process materials into air contaminants; and

2.40.2. Is not an air pollution abatement operation.

2.41. "Source Operation Type" means a categorization established as follows:

2.41.1. Type 'a' means any manufacturing process source operation involving glass melting, calcination or physical change except as noted in Type 'c' below.

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

2.41.3. Type 'c' means any wet cement manufacturing process source operation which is used for the primary purpose of calcination. Gray iron cupolas located in the areas of the state other than those defined in subsection 2.39.b shall be classified as Type 'c' source operations.

2.41.4. Type 'd' means any manufacturing process source operation in which materials of any origin undergo a chemical change, and this chemical change results in the emission of particulate matter to the atmosphere, unless otherwise classified.

2.41.5. 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 Secretary shall apply.

2.42. "Stack", for the purpose of this rule, means, but is not limited to, any duct, control equipment exhaust or similar apparatus, which is designed to vent gases containing particulate matter into the open air.

2.43. "Standard Conditions" means, for the purposes of this rule, a temperature of 68 degrees F and a pressure of 29.92 inches of mercury column.

2.44. "Startup" means the setting in operation of a source subject to this rule for any reason, unless otherwise defined in a permit creating an alternative emission limitation.

2.45. "Tapping" means the removal of product and slag from a ferroalloy electric submerged arc furnace under normal operating conditions, such as removal of metal under normal pressure and movement by gravity down the spout into a ladle.

2.46. "Topside Emissions" means any smoke and/or or particulate matter emissions or both from one or more points on the topside of a coke oven battery excluding charging emissions.

2.47. "Transport Emissions" means any smoke and/or or particulate matter emissions which are emitted once the transport of the hot coke begins during the pushing operation and continues until the coke transfer car enters the quenching station.

2.48. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in W. Va. Code §22-5-1, et seq..

§45-7-3. Emission of Smoke and/or Particulate Matter Prohibited and Standards of Measurement.

3.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than 20 percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

3.2. The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than 40 percent opacity for any period or periods aggregating no more than 5 minutes in any 60 minute period.

3.3. Reserved.

3.4. New By-Product Coke Production Facility. No person shall cause, suffer, allow or permit the emission of smoke and/or particulate matter into the open air in excess of the following provisions from the operation of a new by-product coke production facility, other than a replacement by-product coke production facility that is constructed as per the provisions of subsection 3.3, that begins production after July 1, 1970:

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3.4.1. Charging emissions from the charging of any 4 consecutive ovens shall not exceed an aggregate time of more than 60 seconds.

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

3.4.3. Transport emissions from an enclosed quench car shall not exceed 20% opacity. Transport emissions from an open quench car shall not exceed 10% opacity.

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

3.4.5. Coke oven topside emissions shall not exceed the following:

3.4.5.a. No more than 2% of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.

3.4.5.b. No more than 5% of the offtake piping shall have smoke and/or particulate matter emissions.

3.4.5.c. No smoke and/or particulate matter emissions are permitted from the coke oven gas collector main or any other topside point, except as provided by paragraphs 3.4.5.a and 3.4.5.b.

3.4.6. No more than 8% of the door areas of operating coke ovens shall have door area emissions, excluding the door areas representing the last oven charged. Any battery affected by subsection 3.4 shall be constructed in a manner that will allow for the retrofitting of the battery with hooding to capture door emissions and air pollution control equipment designed to at least a 90% particulate control efficiency.

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

3.4.8. Smoke and/or particulate matter emissions from combustion stacks shall meet the requirements of subsections 3.1 and 3.2 and shall not exceed a grain loading of 0.025 grains per dry standard cubic foot.

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

3.5. Non-Recovery Coke Production Facility -- No person shall cause, suffer, allow or permit the emission of smoke and/or particulate matter into the open air in excess of the following provisions from the operation of a non-recovery coke production facility:

3.5.1. Charging emissions from charging of any 5 consecutive ovens shall not exceed an aggregate time of more than 50 seconds.

3.5.2. No more than 2% of the coal charging ports shall have smoke and/or particulate matter

emissions.

3.5.3. No more than 2% of the coke oven doors shall have smoke and/or particulate matter emissions excluding the ovens being charged and/or pushed.

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

$$E=C^{.09}$$

Where:

E = particulate emission rate in pounds per push and

C = actual charge of coal in tons per oven.

3.5.4.a. The smoke and/or particulate matter emissions discharged from the air pollution control equipment and non-captured pushing emissions shall not exceed 20% opacity.

3.5.5. Transport emissions from an enclosed quench car shall not exceed 20% opacity. Transport emissions from an open quench car shall not exceed 10% opacity.

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

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

3.5.8. Smoke and/or particulate matter from the combustion stack shall meet the requirements of subsections 3.1 and 3.2. The particulate matter emissions rate from combustion stacks shall not be greater than 0.060 grains per dry standard cubic foot or 1.0 lb/ton of coal charged, whichever is most restrictive.

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

3.6. Basic Oxygen Roof and Blast Furnace Cast House Roof Monitors. -- The provisions of subsections 3.1 or 3.2 shall not apply to smoke and/or particulate matter emitted from the roof monitor(s) of a basic oxygen process or from a blast furnace cast house. The following provisions will apply:

3.6.1. Visible emissions from a basic oxygen process roof monitor shall not exceed 20% opacity except for a period or periods aggregating no more than 3 minutes in any 60 minute period where the average opacity for the aggregated period shall not exceed 40% opacity.

3.6.2. Visible emissions from a blast furnace cast house shall not exceed 20% opacity except for a period or periods aggregating no more than 5 minutes in any 60 minute period where the average opacity for the aggregated period shall not exceed 40% opacity.

3.7. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to subsection 5.1 is required to have a full

enclosure and be equipped with a particulate matter control device.

§45-7-4. Control and Prohibition of Particulate Emissions by Weight from Manufacturing Process Source Operations.

4.1. 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 Table 45-7A found at the end of this rule.

4.2. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B found at the end of this rule.

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

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

$$R_e = \left(\frac{W_e}{W_{et}} \right) R_{et}$$

Where:

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

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

R_{et} is allowable emission rate in pounds per hour found in subsection 4.1 opposite the process weight rate, W_{et} ; and

W_e is the operating process weight rate in pounds per hour for the new expanded portion.

4.5. Separate stack emission rates for the new expanded portions of concern in subsection 4.4 shall be calculated as per subsection 4.9. The applicable stack emission rate(s) so calculated shall be additive with the existing emission rate for any stack used to vent both an existing source operation or duplicate source operation(s) and addition(s) or portion(s) thereof.

4.6. 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 5 year operating period.

4.7. Except as noted in subdivisions 4.7.1 through 4.7.3, the increase of the operating process weight rate of any manufacturing process source operation or duplicate source operation by the operation of new, replacement, reactivated and/or altered source operation(s) shall be considered as an expansion and the allowable emission rates from the source operation(s) which resulted in the increase shall be determined as per subsection 4.4.

4.7.1. 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 subsection 4.1 provided that smoke emitted into the open air from any such duplicate source operation is less than 20% opacity. If a duplicate source operation is expanded by the addition of a new source operation(s) and the total operating process weight rate is then greater than 250,000 pounds per hour, the allowable emission rates from the source operation which resulted in the increase above 250,000 pounds per hour shall be determined as per subsection 4.4.

4.7.2. 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 subsections 4.1 and 4.4 provided that:

4.7.2.a. 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;

4.7.2.b. 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

4.7.2.c. The smoke emitted into the open air from any such duplicate source operation is less than 20% opacity. If a duplicate source operation is expanded by the addition of new source operation(s) and the total operating process weight rate is then greater than 250,000 pounds per hour, the allowable emission rates from the source operation which resulted in the increase above 250,000 pounds per hour shall be determined as per subsection 4.4.

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

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

4.8. 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:

$$R_s = R_t \left(\frac{W_s}{W_t} \right)$$

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; and

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

4.9. The provisions of subsections 4.1, 4.4 and 4.8 shall not apply to the coking of coal.

4.10. The provisions of subsection 4.1 shall not apply to sinter processes, basic oxygen processes, blast furnace cast house operations, machine scarfing operations and hot metal transfer operations employed

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in the manufacturing of steel. The following provisions shall apply:

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

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

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

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

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

4.10.6. Particulate matter emissions from any blast furnace cast house air pollution control equipment shall not exceed a concentration of 0.020 grains per dry standard cubic foot.

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

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

4.11. The provisions of subsections 4.1, 4.4 and 4.8 shall not apply to petroleum coke calcining kilns in existence on April 1, 1982, provided that particulate matter vented into the open air from each kiln, measured in pounds per hour, shall not exceed the amounts as determined by the following formulas:

4.11.1. When manufacturing regular (amorphous) coke:

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

Where:

E = allowable emission rate and

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

4.11.2. When manufacturing graphite (crystalline) coke:

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

Where:

E = allowable emission rate in pounds per hour, and

P = process weight rate in tons per hour, provided, however, that no kiln manufacturing graphite

(crystalline) coke shall exceed a maximum emissions rate of 200 pounds per hour.

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

4.12. 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.

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

4.14. Reserved.

§45-7-5. Control of Fugitive Particulate Matter.

5.1. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

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

5.3. The provisions of subsections 3.1, 3.2, and 5.1 shall not apply to particulate matter emitted from the operation of a ferroalloy electric submerged arc furnace in existence prior to June 1, 1993 during blowing taphole events, poling and oxygen lancing operations. Poling emissions shall not exceed 5 minutes in duration during any poling operation.

§45-7-6. Registration.

6.1. All persons owning and/or operating an existing manufacturing process source operation not previously registered shall register such source operation with the Secretary. The information required for registration shall be determined by the Secretary, and shall be provided in the manner specified by the Secretary.

§45-7-7. Permits.

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7.1. No person shall construct, modify or relocate any manufacturing process source operation without first obtaining a permit in accordance with the provisions of W. Va. Code §22-5-1 et seq., and series 13, 14, 19 and 30 of Title 45.

§45-7-8. Reporting and Testing.

8.1. At such reasonable times as the Secretary 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. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner acceptable to the Secretary. The Secretary may at his option witness or conduct such stack tests. Should the Secretary 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 Secretary 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.

8.2. The Secretary may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

§45-7-9. Reserved.

§45-7-10. Exemptions.

10.1. Provisions of this rule shall not apply to particulate matter emissions regulated by Title 45, Series 2, 3, and 5 or to mobile internal combustion engines and aircraft.

10.2. Fugitive particulate matter emissions from any manufacturing processes and associated operations which are subject to this rule shall be exempt from the provisions of 45CSR17, provided that such sources shall not be exempt from the provisions of W.Va. Code §§22-5-1 et seq., including the provisions of §22-5-3 relating to statutory air pollution.

10.3. Reserved.

10.4. Reserved.

10.5. The owner or operator of a manufacturing process shall be exempt from subsection 4.1 for source(s) of emissions that have a potential to emit less than 1 pound per hour of particulate matter and an aggregate of less than 1000 pounds per year for all such sources of particulate matter located at the stationary source. Particulate matter, for the purposes of this subsection, will not include particulate matter classified as hazardous air pollutants pursuant to 42 U.S.C. §7412(b) the federal Clean Air Act §112(b).

10.6. The owner or operator of a manufacturing process shall be exempt from subsection 4.2 for source(s) of emissions that have a potential to emit less than one tenth of a pound (0.1) per hour of mineral acids and an aggregate of less than 100 pounds per year for all sources of mineral acids located at the stationary source. The Secretary may approve in a permit or consent order an alternative exemption from subsection 4.2 for source(s) of emissions that can demonstrate on a case-by-case basis that their emissions are insignificant.

10.7. Notwithstanding any other provisions in this rule, the Secretary may revoke any and all exemptions, except for subsections 10.1 and 10.2. The Secretary shall notify the affected source(s) in writing that an exemption will be revoked, effective date thereof, and the reasons therefore.

§45-7-11. Alternative Emission Limits for Duplicate Source Operations.

11.1. The owner or operator of a duplicate source operation subject to section 4 which has individual source operations discharging through separate stacks, may petition the Secretary to approve individual stack allowable emission rates differing from the proration calculated under subsection 4.8. The Secretary may approve such request in accordance with subsections 11.2 and 11.3 provided that there shall be no increase in the total allowable emissions from the duplicate source operation as previously provided under section 4. The Secretary shall not approve a relaxation of a technology-based emission limitation for a specific unit or stack within a duplicate source operation that has been established pursuant to any other rule nor shall the Secretary approve a relaxation in emission limits previously established for the purpose of avoiding the permitting requirements of 45CSR14 or 45CSR19.

11.2. A request for approval of alternative individual stack allowable emission rates made to the Secretary pursuant to subsection 11.1 shall be filed as an application for an existing stationary source operating permit as provided under 45CSR13 and shall contain such information as the Secretary deems necessary for acting upon the request. Such information shall include, but not be limited to, an air quality impact analysis demonstrating that the alternative emission rates would not cause or contribute to a violation of any federal or state ambient air quality standard or any applicable maximum allowable increase over the baseline concentration of particulate matter in the area affected by the duplicate source operation.

11.3. Any approval of alternative allowable emission rates by the Secretary pursuant to subsections 11.1 and 11.2 shall be embodied in a permit issued as an existing stationary source operating permit in accordance with 45CSR13.

§45-7-12. Alternative Emission Limitations for Startup or Shutdown.

12.1. Any owner or operator that cannot comply with the emission limitations established in section 3 through 6 during periods of startup or shutdown shall request an alternative emission limitation pursuant to 45CSR1.

§45-7-13. Inconsistency Between Rules.

13.1. In the event of any inconsistency between this rule and any other existing rule of the Division of Air Quality, such inconsistency shall be resolved by the determination of the Secretary and such determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

§45-7-14. Disposition of Rule; Severability.

14.1. In the event the U.S. EPA's June 12, 2015 "State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Finding of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction," at 80 Fed. Reg. 33840 (2015 SSM SIP Call) is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may terminate any permit or section of an existing permit issued pursuant to this rule.

14.2. In the event the U.S. EPA's April 17, 2023 "Air Plan Disapproval; West Virginia; Revision to the West Virginia State Implementation Plan To Add the Startup, Shutdown, Maintenance Rule 45CSR1—

45CSR7

Alternative Emission Limitations During Startup, Shutdown, and Maintenance Operations,” at 88 Fed. Reg. 23356 (45CSR1 2023 Disapproval) is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may terminate any permit or section of an existing permit issued pursuant to this rule.

14.3. In the event the U.S. EPA’s April 17, 2023 “West Virginia; Finding of Failure To Submit State Implementation Plan Revision in Response to the 2015 Findings of Substantial Inadequacy and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction,” at 88 Fed. Reg. 23353 (2023 FFS) is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may terminate any permit or section of an existing permit issued pursuant to this rule.

14.4. In the event the 2015 SSM SIP Call, 45CSR1 2023 Disapproval, and/or the 2023 FFS is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may sever requirements § 45-7-12.1 and revert to the August 31, 2000 requirements found at §§ 45-7-9.1, -10.3, and -10.4.

Table 45-7A.

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

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

² Type 'd' source operation stack emission rates do not apply to mineral acids. See subsection 4.2.

Table 45-7B

Mineral Acid	Allowable stack gas concentration in milligrams per dry cubic meter at standard conditions from source operations or duplicate source operations in existence on July 1, 1970	Allowable stack gas concentration in milligrams per dry cubic meter at standard conditions from source operations or duplicate source operations installed after July 1, 1970
Sulfuric Acid Mist	70	35
Nitric Acid Mist and/or Vapor	140	70
Hydrochloric Acid Mist and/or Vapor	420	210
Phosphoric Acid Mist and/or Vapor	6	3