west virginia department of environmental protection

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TO: **Members of the Environmental Protection Advisory Council**
FROM: **Jason Wandling and Scott Mandirola**
DATE: **June 8, 2023**
SUBJECT: **Proposed WVDEP Legislative Rules for 2024 Legislative Session**

The WVDEP proposes the following submissions to the Legislative Rule-Making Review Committee for approval by the 2024 West Virginia Legislature.

I. Division of Air Quality (DAQ)

The DAQ proposes 12 rule changes for the 2024 legislative session.

A. Alternative Emission Limitations During Startup and Shutdown Operations 45CSR1

Promulgated last in the 2017 session, this rule sets forth the criteria and permit application requirements for establishing an alternative emission limitation during periods of startup or shutdown. Substantive changes to the rule include removing malfunction from the rule title, clarifying the scope, removing maintenance activities from rule applicability, removing 45CSR40 from applicability because the affirmative defense provisions identified in the SSM SIP Call were previously addressed, aligning several definitions with the definitions in the SSM SIP Call, removing maintenance definitions and requirements, making the requirements mandatory if a source cannot comply with applicable emission limits contained in the underlying rules during startup or shutdown, requiring the Secretary to submit any new AEL to the Administrator for inclusion into the SIP, allowing the Secretary to develop an AEL for a narrowly defined source category, and miscellaneous other clarifications. Rule numbering and text formats were revised to comport with 153CSR1.

B. Control of Particulate Matter Air Pollution from the Combustion of Fuel in Indirect Heat Exchangers 45CSR2

This rule hasn't been revisited since the turn of the century. This rule establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units and sets forth the registration, permitting, testing, monitoring, recordkeeping, reporting, and exemption requirements. The rule is being amended in response to the USEPA's "finding of

failure to submit" action [88 Fed. Reg. 23353, April 17, 2023] to address deficiencies identified in the USEPA 2015 findings of substantial inadequacy and SIP Call for provisions related to excess emissions during periods of startup, shutdown, and malfunction (SSM) (SSM SIP Call). The finding of failure to submit action triggers certain Clean Air Act deadlines for USEPA to impose sanctions if a state does not submit a complete SIP revision addressing the outstanding requirements.

The provisions identified in 45CSR2 were:

1. the "automatic exemptions" at §45-2-9.1;
2. the "discretionary exemptions" at §§45-2-10.1 and 10.2; and
3. the "affirmative defense" at §45-2-9.4.

Revisions to the rule include removing the SSM SIP Call provisions from subsections 9.1, 9.4, 10.1, and 10.2. Additional revisions include updating the title and series name, clarifying the scope and authority, adding the sunset provision and removing the former rules section, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary", adding references to state rules associated with federal regulations, removing obsolete language, and adding a provision in subsection 9.6 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The Appendix was updated to clarify the scope, update the rule name, and the add numbering as needed. Rule numbering and text formats were revised to comport with 153CSR1.

C. Control of Air Pollution from the Operation of Hot Mix Asphalt Plants 45CSR3

Promulgated last in the 2000 session. This rule establishes emission limitations for hot mix asphalt plants and the plant property and sets forth the permitting, recordkeeping, reporting, and exemption requirements. The rule is being amended in response to the USEPA's April 17, 2023 "finding of failure to submit" action (the "SIP Call" or "State Implementation Plan Call") described above.

Revisions to the rule include removing the SSM SIP Call provisions in subsections 3.2 and 7.1. Additional revisions include updating the title and series name, clarifying the scope and authority, adding the sunset provision, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary", adding references to state rules associated with federal regulations, and adding a provision in subsection 3.3 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The rule numbering and text formats were revised to comport with 153CSR1.

D. Control of Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas 45CSR5

Promulgated last in the 2000 session. This rule establishes emission standards for particulate matter from the operation of coal preparation plants, coal handling operations and coal refuse disposal areas and sets forth permitting, monitoring, testing, recordkeeping and reporting requirements. The rule is being amended in response to the USEPA's April 17, 2023

"finding of failure to submit" action (the "SIP Call" or "State Implementation Plan Call") described above. The provision identified in 45CSR5 was a "discretionary exemption" at §45-5-13.1.

Revisions to the rule include removing the SSM SIP Call provision in subsection 13.1 and the related provisions in subsections 13.2, and 13.3. Additional revisions include updating the title and series name, clarifying the scope and authority, adding the sunset provision and removing the former rules sections, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary", adding references to state rules associated with federal regulations, removing obsolete language, correcting a reference in 10.1, and adding a provision in section 15 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The rule numbering and text formats were revised to comport with 153CSR1.

E. Control of Air Pollution from Combustion of Refuse 45CSR6

Promulgated last in the 2008 session. This rule establishes emission standards for particulate matter and requirements for activities involving incineration of refuse which are not subject to or are exempted from regulation under a federal counterpart for specific combustion sources. This rule also prohibits (with limited exception) open burning and sets forth the registration, permitting, reporting, testing, emergency, natural disaster and exemption provisions for activities involving the combustion of refuse and land clearing debris. The rule is being amended in response to the USEPA's April 17, 2023 "finding of failure to submit" action (the "SIP Call" or "State Implementation Plan Call") described above. The provision identified in 45CSR6 was the "discretionary exemption" at §45-6-8.2.

Revisions to the rule include removing the SSM SIP Call provision in subsection 8.2. Additional revisions include adding the sunset provision and removing the former rules subsection, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary", updating the Table name consistent with the required format, adding references to state rules associated with federal regulations, and adding a provision in section 9 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The rule numbering and text formats were revised to comport with 153CSR1.

F. Control of Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations 45CSR7

Promulgated last in the 2000 session. This rule establishes particulate matter emission standards for manufacturing processes and associated operations and sets forth permitting, testing, reporting, and exemption provisions. The rule is being amended in response to the USEPA's April 17, 2023 "finding of failure to submit" action (the "SIP Call" or "State Implementation Plan Call") described above. The provisions identified in 45CSR7 were an "automatic exemption" at §45-7-10.3, a "discretionary exemption" at §45-7-9.1, and "discretion to establish alternative visible emissions standards during startup and shutdown upon application" at §45-7-10.4.

Revisions to the rule include removing the SSM SIP Call provisions in subsections 9.1, 10.3, and 10.4. Additional revisions include updating the title and series name, clarifying the scope and authority, adding the sunset provision and removing the former rules section, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary," removing obsolete language for existing by product coke production facilities in subsection 3.3, and adding a provision in section 12 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The rule numbering and text formats were revised to comport with 153CSR1.

G. Ambient Air Quality Standards 45CSR8

Promulgated last in the 2022 session. This rule establishes and adopts ambient air quality standards in West Virginia for carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide, equivalent to the national primary and secondary ambient air quality standards established under Section 109 of the Clean Air Act and promulgated by the USEPA under 40 C.F.R. Part 50. National primary ambient air quality standards define levels of air quality which the Administrator judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define levels of air quality which the Administrator judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. This rule also establishes and adopts ambient air monitoring reference methods and equivalent methods promulgated by the United States Environmental Protection Agency under 40 C.F.R. Part 53. Reference methods are used to determine attainment (or non-attainment) of the NAAQS. The purpose of this rule is for West Virginia to retain primacy of its air quality program and remain current with the federal counterpart regulations.

Revisions to the rule include the annual incorporation by reference (IBR) of 40 CFR Parts 50 and 53 promulgated by USEPA as of June 1, 2023 by updating the IBR date in section 1.6 and the adoption of standards dates in sections 3.1 and 3.2. Numerous rule numbering and text formats were revised to comport with 153CSR1. The IBR updates include changes to the following:

1. Ambient Air Monitoring Reference and Equivalent Methods; Designation of One New Equivalent Method. USEPA designated a new equivalent method for measuring concentrations of Particulate Matter in the 2.5-micron range (PM2.5) in ambient air. The new equivalent method is an automated method (analyzer) utilizing an optically based measurement principle and identified as EQPM–0922–260 "Ambilabs Model 2WIN PM2.5FEM Monitor"

2. Ambient Air Monitoring Reference and Equivalent Methods; Designation of One New Reference Method. USEPA designated one new reference method for measuring concentrations of nitrogen dioxide (NO2) in ambient air. The new reference method is an automated method (analyzer) utilizing the measurement principle based on gas phase chemiluminescence. This newly designated reference method is identified as RFNA–1221–259, "KENTEK Inc. Model MEZUS 210 NO2Analyzer."

3. Testing Provisions for Air Emission Sources. This action includes corrections and updates to regulations for source testing of emissions under Method 201A of Appendix M of Part

51 including corrections to typographical and technical errors, updates to outdated procedures, and revisions to add clarity and consistency with other monitoring requirements. The revisions will improve the quality of data but will not impose new substantive requirements on source owners or operators.

H. Control of Air Pollution from the Emission of Sulfur Oxides 45CSR10

This rule, not revisited since 2000, establishes emission standards for sulfur oxides from fuel burning units and sets forth the registration, permitting, reporting, testing, recordkeeping and exemption requirements. The rule is being amended in response to the USEPA's April 17, 2023 "finding of failure to submit" action (the "SIP Call" or "State Implementation Plan Call") described above. The provision identified in 45CSR10 was the "discretionary exemptions" at §45-10-9.1.

Revisions to the rule include removing the SSM SIP Call provisions in subsection 9.1. Additional revisions include updating the title and series name, clarifying the scope and authority, adding the sunset provision and removing the former rules section, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary," adding references to state rules associated with federal regulations, removing obsolete language, removing standards for retired power plants (Kammer, Willow Island, Kanawha River, Rivesville, Albright, and Philip Sporn) and adding a provision in subsection 9.2 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The rule numbering and text formats were revised to comport with 153CSR1.

I. Standards of Performance for New Stationary Sources 45CSR16

Promulgated just last year, this rule incorporates by reference the federal standards of performance for new stationary sources promulgated by the USEPA pursuant to §111(b) of the federal Clean Air Act, as amended. This rule codifies general procedures and criteria to implement standards of performance for new stationary sources set forth in 40 CFR part 60. The rule also adopts associated appendices, reference methods, performance specifications and other test methods which are appended to such standards.

Revisions to the rule include updating the annual incorporation by reference (IBR) of the New Source Performance Standards (NSPS) promulgated by the EPA under 40 CFR Part 60 as of June 1, 2023 by updating the IBR dates in subsections 1.6 and 4.1. The rule numbering and text formats were revised to comport with 153CSR1. The IBR updates include changes to permitting for the following processes:

1. Automobile and Light Duty Truck Surface Coating Operations
2. Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards
3. Industrial Surface Coating of Plastic Parts for Business Machines
4. Lead Acid Battery Manufacturing Plants
5. Stationary Internal Combustion Engines

6. Test Method 23—Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans From Stationary Sources
7. Testing Provisions for Air Emission Sources
8. Testing Provisions for Air Emission Sources; USEPA Correction

J. Control of Air Pollution from the Emission of Volatile Organic Compounds 45CSR21

This rule, another 2000 vintage, establishes reasonably available control technology to control emissions of volatile organic compounds from sources that manufacture, mix, store, use, or apply materials containing volatile organic compounds and are in Cabell, Kanawha, Putnam, Wayne, and Wood Counties. The rule is being amended in response to the USEPA's April 17, 2023 "finding of failure to submit" action (the "SIP Call" or "State Implementation Plan Call") described above. The provision identified in 45CSR21 was a "discretionary exemption" in §45-21-9.3.

Revisions to the rule include removing the SSM SIP Call provisions in subsections 9.3. Additional revisions include updating the title and series name, clarifying the scope and authority, adding the sunset provision and removing the former rules section, adding or revising the definition section consistent with the SSM SIP Call or with other DAQ rules, replacing "Director" with "Secretary," removing obsolete language, and adding a provision in subsection 3.8 requiring any owner or operator that cannot comply with the emission limits of this rule during periods of startup and shutdown to request an alternative emission limitation pursuant to 45CSR1. The rule numbering and text formats were revised to comport with 153CSR1.

K. Emission Standards for Hazardous Air Pollutants 45CSR34

This rule, last amended in 2022, incorporates by reference (IBR) the National Emission Standards for Hazardous Air Pollutants (NESHAPs) of 40 CFR parts 61 and 63 and 40 CFR part 65 to the extent referenced in 40 CFR parts 61 and 63, promulgated as of June 1, 2022. The rule adopts associated appendices, reference methods, performance specifications and other test methods which are appended to these standards and contained under 40 CFR parts 61 and 63. This rule also codifies general procedures and criteria to implement emission standards for stationary sources that emit, or have the potential to emit, one or more of the hazardous air pollutants set forth in § 112 (b) of the CAA, or one or more of the eight substances listed as hazardous air pollutants under 40 CFR § 61.01(a).

Revisions to the rule include the annual incorporation by reference amendments of the NESHAPs promulgated by the USEPA under 40 CFR part 63 as of June 1, 2023 by revising the IBR dates in subsections 1.6 and 4.1. The rule numbering and text formats were revised to comport with 153CSR1. The National Emission Standards for Hazardous Air Pollutants IBR updates include changes to the following processes or materials:

1. Industrial, Commercial, and Institutional Boilers and Process Heaters (Major Sources)
2. Lead Acid Battery Manufacturing Area Sources Technology Review
3. Test Method 23—Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans From Stationary Sources
4. Miscellaneous Coating Manufacturing Technology Review

5. Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
6. Reciprocating Internal Combustion Engines
7. Site Remediation
8. Testing Provisions for Air Emission Sources.
9. Testing Provisions for Air Emission Sources; USEPA Correction
10. Wood Preserving Area Sources Technology Review; Technical Correction for Surface Coating of Wood Building Products

L. Control of Greenhouse Gas Emissions from Existing Coal-Fired Electric Utility Generating Units
45CSR44

This rule is proposed for repeal in its entirety because the adopted federal counterpart regulation, the Affordable Clean Energy (ACE) rule, was vacated by the D.C. Circuit on January 19, 2021 and remanded to the USEPA. The rule was promulgated in the 2021 session.

II. Division of Water and Waste Management (DWWM)

The Division of Water and Waste Management will present two proposed rule changes to the Legislative Rule-Making Review Committee.

A. Hazardous Waste Management System
33CSR20

This rule makes conforming changes to regulations related to twelve hazardous waste import-export recovery and disposal operations used in hazardous waste export and import notices submitted to USEPA by U.S. exporters and importers, and in movement documents that accompany export and import shipments. The changes to regulations related to these 12 types of recovery and disposal operations are needed to reflect changes to regulations related to Canadian import-export recovery and disposal operations. This minor update incorporates "Canada Import Export Recovery and Disposal Code Changes - 86 FR 45381-45386" by reference. The only substantive edits in the rule are the applicable dates and IBR reference.

B. Underground Injection Control
47CSR13

Although this rule was just passed last year, the USEPA requested further changes to it to satisfy federal concerns related to financial protections related to facilities covered by the rule once those facilities are closed and enter the long-term maintenance stage. The rule was also reordered alphanumerically to comply with the Secretary of State's formatting rule.

III. Conclusion

As ever, Scott and I look forward to working with each of you as the 2024 legislative session approaches. In the meantime, please don't hesitate to contact me or Scott with any questions or concerns you may have.

TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY

SERIES 1
ALTERNATIVE EMISSION LIMITATIONS DURING STARTUP, AND SHUTDOWN, ~~AND MAINTENANCE~~ OPERATIONS

§45-1-1. General.

1.1. Scope. -- This rule sets forth the criteria and permit application requirements for establishing an alternative emission limitation during periods of startup, or shutdown~~, or maintenance~~. This rule was developed in ~~response to~~ accordance with "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," 80 Fed. Reg. 33840 (June 12, 2015). ~~The "SSM SIP Call" from the United States Environmental Protection Agency (U.S. EPA) for West Virginia and 35 other states finds that certain SIP provisions are substantially inadequate to meet federal Clean Air Act requirements concerning periods of startup, shutdown, or malfunction.~~ The "SSM SIP Call" identified provisions in 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10 and 45CSR21 that potentially allowed for excess emissions during SSM events. The purpose of this rule is to provide a mechanism for sources that may be unable to comply with the applicable emission limits in these rules during startup or shutdown events to request and apply for an alternative emission limitation in accordance with the requirements of this rule.

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

1.3. Filing Date. -- ~~May 15, 2017~~.

1.4. Effective Date. -- ~~June 1, 2017~~.

1.5. Sunset Provision. -- Does not apply.

1.6. Applicability.

~~1.5.a. Person(s)~~ The owner or operator of a source subject to 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10, or 45CSR21 ~~or 45CSR40 who may have excess emissions~~ which cannot comply with the established emission limitations during periods of startup, or shutdown~~, or maintenance and cannot meet an allowable emission limit indicative of normal operations may request an alternative emission limitation in accordance with Section 3 of this Rule. The alternative emission limitation would be a component of the continuous allowable emission limitation~~.

~~1.5.b. Person(s) subject to 45CSR16 or 45CSR34 shall meet the applicable startup and shutdown provisions of the applicable federal rule and are not eligible for an alternative emission limit under this rule for affected sources.~~

§45-1-2. Definitions.

2.1. "Administrator" means the Administrator of the United States Environmental Protection Agency

(U.S. EPA) or the Administrator's duly authorized representative.

2.2. "Alternative Emission Limitation" or "AEL" 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, ~~or maintenance~~). An alternative emission limitation is a component of a continuously ~~allowable~~ 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 ~~a~~ numerical ~~emission limitation exists~~).

2.3. "Clean Air Act" "(CAA") means the federal Clean Air Act, 42 U.S.C. 7401, et seq., as amended.

2.4. ~~"Continuous Allowable Emission Limitation" means a legally binding restriction (for example, as contained in a permit issued pursuant to 45CSR13, 45CSR14 or 45CSR19, in a consent order, in a federal regulation, in a State Legislative rule or in another State or federally enforceable document) on emissions from a source or source category such as a numerical emission limitation, a numerical emission limitation with higher or lower levels allowable during specific modes of operation, a specific technological control measure requirement, a work practice standard, or a combination of components as a comprehensive, continuous, and practical emission limitation.~~ "Emission Limitation" for the purpose of this rule means a legally binding restriction on emissions from a source or source category, such as a numerical emission limitation, a numerical emission limitation with higher or lower levels applicable during specific modes of source operation, a specific technological control measure requirement, a work practice standard, or a combination of these things as components of a comprehensive and continuous emission limitation.

~~2.6~~2.5. "Excess Emissions" means the emissions of air pollutants from a source that exceed any ~~allowable~~ applicable emission limitation. ~~In particular, t~~This term includes those emissions above the otherwise ~~allowable~~ applicable emission limitation that occur during ~~periods of~~ startup, ~~or~~ shutdown, malfunction or other modes of source operation.

~~2.7~~2.6. ~~"Maintenance Operation" means scheduled maintenance activities that have zero process weight rate and are not defined as a manufacturing process~~ "Malfunction" means a sudden and unavoidable breakdown of process or control equipment.

~~2.8~~2.7.. "Practically Enforceable" ~~also means State and federally enforceable,~~ means for the purpose of this rule and in the context of an emission limitation, that the limitation is enforceable as a practical matter (e.g., within a federally enforceable permit such as one issued pursuant to 45CSR13 and contains appropriate averaging times, compliance verification procedures, compliance monitoring, and recordkeeping requirements). The term uses "practically" as it means "in a practical manner" and not as it means "almost" or "nearly".

~~2.9. "Process Weight Rate" means a rate established as follows:~~

~~2.9.a. For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.~~

~~2.9.b. For cyclical or batch unit operations, or unit processes, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.~~

~~2.9.c. 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.~~

~~2.10~~2.8. "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.

~~2.11~~2.9. "Shutdown" means the cessation of operation~~, for any purpose,~~ of a source ~~subject to this rule~~ for any purpose, unless otherwise defined in a permit issued to create an alternative emission limitation.

2.10. "SIP" means or refers to a State Implementation Plan. Generally, the SIP is the collection of state statutes and rules approved by the EPA pursuant to CAA section 110 that together provide for implementation, maintenance and enforcement of a national ambient air quality standard (or any revision thereof) promulgated under CAA section 109 for any air pollutant in each air quality control region (or portion thereof) within a state.

2.11. "SSM" refers to startup, shutdown or malfunction at a source. It does not include periods of maintenance. An SSM event is a period of startup, shutdown or malfunction during which there may be exceedances of the applicable emission limitations and thus excess emissions.

2.12. "Startup" means the setting in operation~~, for any purpose,~~ of a source ~~subject to this rule~~ for any purpose, unless otherwise defined in a permit issued to create an alternative emission limitation.

2.13. Other words and phrases used in this rule, unless otherwise indicated, have the meaning ascribed to them in W. Va. Code § 22-5-2 and 40CFR § 52.01.

§~~45~~-1-3. Alternative Emission Limitation.

3.1. Any owner or operator that meets the applicability criteria set forth in subsection 1.6 shall request an alternative emission limitation by submitting a permit application to the Secretary in accordance with section 4 of this rule and 45CSR13, 45CSR14, and 45CSR19 as applicable.

3.2. The Secretary ~~may~~ shall:

3.2.1. ~~e~~Establish an alternative emission limitation as a practically enforceable permit condition for any ~~person(s)~~owner or operator of a source subject to this rule~~,~~ which has requested an AEL in accordance with subsection 4.1 of this rule and in accordance with the requirements of 45CSR13, 45CSR14, and 45CSR19 as applicable~~.~~;

3.2.2. Develop an alternative emission limitation in accordance with the criteria established under section 5 of this rule; and

3.2.3. Submit any new alternative emission limitation established under this rule to the Administrator as a revision to the SIP for approval by the Administrator. The justification shall include the potential worst-case emissions that could occur during periods of startup or shutdown as set forth in paragraph 5.1.4 of this rule.

~~3.2~~ 3.3. An alternative emission limitation may be a numerical limitation, a technological control requirement, or a work practice requirement that would apply during periods of startup~~s,~~ or shutdown~~s, or maintenance~~ as a component of ~~the~~a continuously ~~allowable~~ applicable emission limitation.

~~3.3~~ 3.4. An alternative emission limitation may be composed of a combination of numerical limitations,

specific technological control requirements or work practice requirements with each component of the emission limitation applicable during a defined mode of source operation. The alternative emission limitation in conjunction with ~~the~~other permit limitations that apply during normal modes of operation must provide for continuous compliance and must meet the applicable stringency requirements.

~~3.4~~ 3.5. An alternative emission limitation ~~that is~~ expressed as a numerical limitation does not require the same numerical level of emissions as ~~in all~~ other normal modes of operation. ~~However,~~

3.6. An alternative emission limitation ~~during periods of startup, shutdown, or maintenance~~ shall not be effectively unlimited or an uncontrolled level of emissions, ~~as~~ such as would constitute impermissible *de facto* exemptions for emissions during startup~~,~~ or shutdown~~, or maintenance~~.

~~3.5. The Secretary shall use the criteria in Section 5 of this Rule to develop an alternative emission limitation during periods of startup, shutdown, or maintenance.~~

~~3.6~~3.7. ~~A person(s)~~ The owner or operator shall not receive an alternative emission limitation without first obtaining a permit in accordance with the provisions of W. Va. Code § 22-5-1 et seq., and 45CSR13, 45CSR14, and 45CSR19 as applicable.

~~3.7~~ 3.8. The Secretary may adopt an established alternative emission limitation for other similar narrowly defined sources with similar design, operating and control characteristics as a means to establish a consistent alternative emission limitation for any identified specific narrowly defined category of sources using specific pollution control strategies.

§45-1-4. Application Requirements.

4.1. ~~A source that cannot meet~~ Any owner or operator that cannot comply with the applicable emission limitations ~~as~~ required by 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10~~,~~ or 45CSR21 ~~or 45CSR40 on a continuous basis, including~~ during periods of start-up~~,~~ or shutdown~~, and maintenance may~~ shall apply for a permit in accordance with 45CSR13, 45CSR14 or 45CSR19, as applicable and request an alternative emission limitation for periods of startup or shutdown.

4.2. The permit application shall be specific to the emissions unit at the source and shall consist of the following:

~~4.2.a~~ 4.2.1. The ~~source~~ owner or operator shall narrowly define ~~the~~ startup~~,~~ and shutdown~~, or maintenance~~ operations at the emissions unit including ~~as appropriate~~ the parameters that define startup~~,~~ and shutdown~~, or maintenance~~; the estimated duration of ~~the~~ startup and shutdown events~~;~~ and the estimated frequency of startup and shutdown events for each requested alternative emission limitation.

~~4.2.b~~ 4.2.2. The ~~source~~ owner or operator shall describe why ~~the use of~~ the control strategy used during normal operations is ~~not achievable~~ technically infeasible during periods of startup~~,~~ or shutdown~~, or maintenance~~.

~~4.2.c~~ 4.2.3. The ~~source~~ owner or operator shall describe any alternate control strategies considered, ~~or employed and~~ why the selected alternative control strategy ~~requested~~ is appropriate and why other alternative control strategies were not ~~employed~~ proposed.

~~4.2.d~~ 4.2.4. The ~~source~~ owner or operator shall propose alternative emission limitation(s) and monitoring parameter(s) during startup~~,~~ or shutdown~~, or maintenance~~ with reasonable specificity to ensure practical enforceability of the alternative emission limitation.

~~4.2.e~~ 4.2.5. The ~~source~~ owner or operator shall provide an estimate of the worst-case emissions that may occur during periods of startup~~,~~ or shutdown~~, or maintenance~~ for which the proposed alternative emission limitation will apply. For instance, if the proposed AEL is based on a reduced efficiency of the control device during startup~~, shutdown, or maintenance,~~ then the emissions estimate would be based on the efficiency during ~~those~~ periods of startup.

~~4.2.f~~ 4.2.6. If the ~~source~~ owner or operator is proposing a work practice standard as an alternative emission limitation, it may be based on equipment manufacturer's recommendations or procedures, industry standards, or best management practices based on their unique operating requirements and current condition, usage and configuration of the unit.

4.3. The Secretary has the authority to approve a reasonable definition of startup~~,~~ or shutdown~~, or maintenance~~ events, the duration of events, and the maximum frequency of events and ~~may~~ incorporate them as permit requirements.

§45-1-5. Criteria.

5.1. The Secretary shall use the following criteria to evaluate any proposed alternative emission limitation~~(s) in accordance with Section 3 and 4 of this Rule; to develop alternative emission limitation(s) as permit requirements; and to include in the permit the recordkeeping and reporting requirements set forth in Section 6 below~~ requested by the owner or operator in the permit application submitted in accordance with subsection 3.1 of this rule and 45CSR13, 45CSR14 or 45CSR19, as applicable.

~~5.1.a~~ 5.1.1. An alternative emission limitation shall be limited to a specific emission unit using a specific control strategy (e.g., cogeneration facilities burning natural gas and using selective catalytic reduction)~~;~~.

~~5.1.b~~ 5.1.2. ~~Verify that the~~ The Secretary shall verify that the applicable emission limit that applies during normal operation of the emission unit is not achievable during periods of startup~~,~~ or shutdown~~, or maintenance;~~.

~~5.1.c~~ 5.1.3. An alternative emission limitation requires ~~that~~ the frequency and duration of operation during periods of startup~~,~~ or shutdown~~, or maintenance~~ are minimized to the greatest extent practicable~~;~~.

~~5.1.d~~ 5.1.4. The Secretary shall ~~E~~evaluate the potential worst-case emissions that could occur during periods of startup~~,~~ or shutdown~~, or maintenance~~ based on the alternative emission limitation~~(s);~~.

~~5.1.e~~ 5.1.5. An alternative emission limitation requires ~~that~~ all practical steps are taken to minimize the impact of emissions on ambient air quality during periods of startup~~,~~ or shutdown~~, or maintenance;~~.

~~5.1.f~~ 5.1.6. ~~Require p~~ Practically enforceable monitoring parameters and records are required to ensure compliance with the alternative emission limitation(s).

5.2. An alternative emission limitation requires that, at all times, the ~~source~~ emission unit is operated in a manner consistent with good practice for minimizing emissions and ~~that sources use~~ the owner or operator uses best efforts regarding planning, design, and operating procedures. An alternative emission limitation shall not be ~~established as~~ a generic requirement, such as a "general duty to minimize emissions" provision or an "exercise good engineering judgement" provision. While such provisions may serve an overarching purpose of encouraging sources to design, maintain, and operate their sources correctly, such generic clauses are not a valid substitute for more specific emission limitations. A general duty clause may

be part of a work practice standard~~,~~ but may not be a stand-alone ~~as the~~ work practice standard.

5.3. If the Secretary determines there are multiple owners or operators with emission units within a narrowly defined specific source category that meet the applicability requirements under subsection 1.6, the Secretary shall consider adopting the same consistent alternative emission limitation for all applicable owners or operators within the same narrowly defined source category. A narrowly defined source category would include multiple emission units with similar design, operating characteristics and pollution control strategies.

§45-1-6. Monitoring, Recordkeeping and Reporting.

6.1. The owner or operator shall maintain records during periods of startup~~,~~ and shutdown~~, and maintenance~~. Acceptable records may include, but are not limited to, operator logs (may be electronic), Continuous Emissions Monitoring System (CEMS) data, or other relevant evidence such as operator notes that document the date, time, duration, and estimated emissions during ~~the~~ a SSM event. The records shall demonstrate that the alternative emission limitation requirements were met and document the steps taken to minimize emissions to the extent practicable during the event, including, but not limited to, any monitored parameter established in the permit issued pursuant to 45CSR13, 45CSR14 or 45CSR19, as applicable.

6.2. The owner or operator ~~of any source subject to this rule~~ shall maintain records of ~~alternative emission limitation~~ SSM events for a period of at least five (5) years following the date of each occurrence. At a minimum, the most recent two (2) years of data shall be maintained on-site. The remaining three (3) years of data may be maintained off-site, but shall be made available to the Secretary upon request. The Secretary may request reports of such data in a reasonable manner and detail as the Secretary may specify. If requested, such reports shall be filed within thirty (30) days of the end of the established reporting period. Where appropriate, the owner or operator may maintain records electronically.

6.3. Any permit application form, report, or compliance certification submitted to the Secretary shall contain a certification by the responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

6.4. The Secretary may require the submission of reports as a condition of any ~~applicable~~ permit issued pursuant to 45CSR13, 45CSR14 or 45CSR19, as applicable.

§45-1-7. Inconsistency Between Rules.

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

TITLE 45
LEGISLATIVE RULE
~~DIVISION~~ DEPARTMENT OF ENVIRONMENTAL PROTECTION
~~OFFICE OF~~ AIR QUALITY

SERIES 2
~~TO PREVENT AND~~ CONTROL OF PARTICULATE MATTER AIR POLLUTION FROM THE COMBUSTION OF FUEL IN INDIRECT HEAT EXCHANGERS

§45-2-1. General.

1.1. Scope. -- This rule establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units and sets forth the registration, permitting, testing, monitoring, recordkeeping, reporting, and exemption requirements. ~~The~~ Appendix 45-2 to this rule ~~incorporates~~ sets forth compliance determination methods and procedures.

1.2. Authority. -- W. Va. Code ~~§22-5-1 et seq~~ §22-5-4.

1.3. Filing Date. -- ~~June 2, 2000~~.

1.4. Effective Date. -- ~~August 31, 2000~~.

1.5. ~~Former Rules. This legislative rule amends 45CSR2 "To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers" which was filed on April 28, 1995 and became effective on May 1, 1995~~. Sunset provision. -- Does not apply.

§45-2-2. Definitions.

2.1. "ASTM" means American Society for Testing and Materials.

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

2.3. "Air Pollution" or "statutory air pollution" shall have the meaning ascribed to it in W. Va. Code §22-5-2.

2.4. "Air Pollution Control Equipment" means 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.

2.5. "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).

~~2.5~~ 2.6. "Control Equipment" means 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.

~~2.6. "Director" means the director of the division of environmental protection or such other person to~~

~~whom the director has delegated authority or duties pursuant to W. Va. Code §§22-1-6 or 22-1-8.~~

2.7. "Discharge Point" means the point at which particulate matter is released from a stack into open air.

2.8. "Distillate Oil" means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oils".

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

2.10. "Fuel Burning Unit" means and includes 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 rule, all fuel burning units are classified in the following categories:

~~2.10.a~~ 2.10.1. Type 'a' means any fuel burning unit which has as its primary purpose the generation of steam or other vapor to produce electric power for sale.

~~2.10.b~~ 2.10.2. Type 'b' means 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.

~~2.10.c~~ 2.10.3. Type 'c' means any hand-fired or stoker-fired fuel burning unit not classified as a Type 'a' unit.

2.11. "Fugitive Particulate Matter" means 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.

2.12. "Fugitive Particulate Matter Control System" means 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.

2.13. "Heat Input" means the rate of heat release from all fuels fired in all similar units vented by the test stack during the test run period.

~~2.13.a~~ 2.13.1. "Design Heat Input (DHI)" means the heat input level (in MM Btu/hr) for which an individual fuel burning unit has been designed to be operated during continuous operation.

~~2.13.b~~ 2.13.2. "Total Design Heat Input (TDHI)" means the sum of the design heat inputs for all similar units located at one plant.

~~2.13.c~~ 2.13.3. "Normal Maximum Operating Load (NMOL)" means the sum of the Design Heat Input levels (in MM Btu/hr) of the similar unit(s) vented by the test stack, unless the owner/operator has elected to operate one or more of the similar units vented by the test stack at or below a specified percentage of its Design Heat Input level as part of a compliance program, permit or consent order officially accepted by the ~~Director~~ Secretary. In such event, the NMOL is the sum of the Design Heat Input levels or fractions thereof as appropriate (i.e., NMOL = 0.75 DHI_1 + DHI_2).

2.14. "Indirect Heat Exchanger" means a device that combusts any fuel and produces steam or heats

water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in subsection 2.26.

2.15. "Laboratory Official" means the person, qualified by experience or education, who is charged with overseeing or conducting the laboratory analysis of the collected samples. This person is responsible for ensuring the accuracy and validity of the laboratory results.

2.16. "Malfunction" means ~~any~~ a sudden and unavoidable ~~failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions~~ breakdown of process or control equipment.

2.17. "Natural Gas" means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-97, "Standard Specification for Liquefied Petroleum Gases".

2.18. "Normal Operation" when used in the context of fuel quality and combinations fired, means the type, quality and combination of fuel(s) fired which is representative of the fuel or fuel combination fired, in the unit(s) tested, over a reasonable period prior to the test, and the fuel or fuel combination which might reasonably be expected to continue to be fired in this unit after the test. If the type of fuel, quality or combination used in the unit is variable, use the type, quality and/or combination fired in day-to-day operation which can reasonably be expected to produce the greatest particulate matter loading to the control equipment (e.g., if coal is fired eight months out of the year and gas is fired four months out of the year, coal is to be burned during the test).

2.19. "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

2.20. "Owner or Operator" means the person responsible for the compliance of the fuel burning units subject to the provisions of 45CSR2.

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

2.22. "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.

2.23. "Plant" means and includes all fuel burning units, source operations, equipment and grounds utilized in an integral complex.

2.24. "Prefilter" means a filter used in the sampling train prior to the primary filter for the purpose of reducing the particulate matter build-up on the primary filter.

2.25. "Primary Filter" means the last filter used in the sampling train to separate the particulate matter sample from the sampled stack gas.

2.26. "Process Heater" means a device that is primarily used to heat a material to initiate or promote

a chemical reaction in which the material participates as a reactant or catalyst.

2.27. "Probe" means the part of the pitot tube assembly (nozzle, sample tube, pitot tube, filter holder(s), sensor(s)), which precedes the last filter in the sampling train and conveys the sample gas and particulate matter from the nozzle inlet to the last filter disc used for collecting stack particulate matter.

2.28. "Residual Oil" means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oils".

2.29. "Sampling Plane" means the imaginary plane located perpendicular to the gas flow in the duct or stack at the place selected for the extraction of the required samples.

2.30. "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.

~~2.30~~ 2.31. "Shipment" means any discrete, identifiable quantity of fuel for which a quality report is available. For example, a fuel shipment may be all fuel delivered from a specific lot, identified by the lot number, or fuel delivered under a specific purchase order number.

~~2.31~~ 2.32. "Shutdown" means the cessation of operation of a fuel burning unit(s) subject to this rule for any purpose, unless otherwise defined in a permit creating an alternative emission limitation.

~~2.32~~ 2.33. "Similar Unit(s)" means all Type 'a', or all Type 'b' or all Type 'c' fuel burning units located at one plant.

~~2.33~~ 2.34. "Smoke" means small gas borne and airborne particulate matter arising from a process of combustion in sufficient number to be visible.

~~2.34~~ 2.35. "Stack", for the purposes of this rule, means, but is not limited to, any duct, control equipment exhaust or similar apparatus, which vents gases and/or particulate matter into the open air.

~~2.35~~ 2.36. "Start-up" means the setting in operation of a fuel burning unit subject to this rule for any purpose, unless otherwise defined in a permit creating an alternative emission limitation.

~~2.36~~ 2.37. "Test Team Supervisor" means the person, qualified by experience or education, who is charged with supervising the stack test. This person is responsible for ensuring the validity and correctness of the submitted test results.

~~2.37~~ 2.38. "Wet Scrubber System" means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from an indirect heat exchanger to control emissions of particulate matter (PM) or SO_2.

~~2.38~~ 2.39. "Wood" means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings and processed pellets made from wood or other forest residues.

~~2.39~~ 2.40. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in W.Va. §22-5-1 et seq.

§45-2-3. Visible Emissions 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 fuel burning unit which is greater than ten (10) percent opacity based on a six-minute block average.

3.2. Compliance with the visible emission requirements of subsection 3.1 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and 45CSR16 or by using measurements from continuous opacity monitoring systems approved by the ~~Director~~ Secretary. The ~~Director~~ Secretary may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of subsection 3.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

3.3. If the owner or operator of a fuel burning unit can demonstrate to the satisfaction of the ~~Director~~ Secretary that compliance with subsection 3.1 cannot practically be achieved with respect to soot blowing operations or during the cleaning of a fire box, the ~~Director~~ Secretary may formally approve an alternative visible emission standard applicable to the fuel burning unit for soot blowing periods; provided that the exception period shall not exceed a total of six (6) six minute time periods in a calendar day with visible emissions limited to thirty percent (30%) opacity, as determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and 45CSR16, or by using measurements from a certified continuous opacity monitoring system.

3.4. The ~~Director~~ Secretary may approve an alternative visible emission standard to that required under subsection 3.1, not to exceed twenty (20) percent opacity, upon the filing of a written petition by the owner or operator, which petition shall include a demonstration satisfactory to the ~~Director~~ Secretary:

~~3.4.a~~ 3.4.1. That it is technologically or economically infeasible to comply with subsection 3.1;

~~3.4.b~~ 3.4.2. That emissions from the fuel burning unit for which an alternative visible emission standard is proposed impact no area in which the National Ambient Air Quality Standards for particulate matter are being exceeded nor will any such emissions cause or contribute to a violation of the National Ambient Air Quality Standards for particulate matter in an area which currently meets such standards;

~~3.4.c~~ 3.4.3. That the particulate weight emission standards under section 4 of this rule are being met, as determined in accordance with the Appendix 45-2 to this rule -- "Compliance Test Procedures for 45CSR2";

~~3.4.d~~ 3.4.4. That the fuel burning unit for which an alternative visible emission standard is proposed is at all times operated and maintained in accordance with the provisions of subsection 9.2;

~~3.4.e~~ 3.4.5. That the fuel burning unit for which an alternative visible emission standard is proposed and its associated air pollution control equipment are incapable of being adjusted or operated at normal operating loads to meet the applicable visible emission standard;

~~3.4.f~~ 3.4.6. That the owner or operator will install, calibrate, maintain and operate a continuous opacity monitoring system approved by the ~~Director~~ Secretary, for the fuel burning unit for which an alternative visible emission standard is proposed, and will submit the results of such monitoring system to the ~~Director~~ Secretary on a calendar monthly basis in a format approved by the ~~Director~~ Secretary, provided that this provision shall not apply to fuel burning units which employ wet scrubbing systems for emission

control; and

~~3.4.g~~ 3.4.7. That all other requirements of law and rules enforced by the ~~Director~~ Secretary will be met.

§45-2-4. Weight Emission Standards.

4.1. 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:

~~4.1.a~~ 4.1.1. 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 twelve hundred (1200) pounds per hour of particulate matter shall be discharged into the open air from all such units;

~~4.1.b~~ 4.1.2. 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 six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units; and

~~4.1.c~~ 4.1.3. For Type 'c' fuel burning units, in excess of the values listed in Table 45-2, provided however that no more than three hundred (300) pounds per hour of particulate matter shall be discharged into the open air from all such units.

~~4.1.c.1~~ 4.1.3.a. For values between any two corresponding consecutive values listed in Table 45-2, linear interpolation is to be used for both columns.

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

~~4.2.a~~ 4.2.1. 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~~ Secretary.

4.3. If the number of similar fuel burning units located at one plant, each of which is meeting the requirements of this rule, 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 subsection 4.1. are not to be exceeded:

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

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).

4.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving

emissions control equipment efficiency shall be reviewed by the ~~Director~~ Secretary. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the ~~Director~~ Secretary.

4.5. The provisions of subsection 4.4 shall not apply to combustion units in operation on or before September 1, 1974.

§45-2-5. Control of Fugitive Particulate Matter.

5.1. 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:

~~5.1.a~~ 5.1.1. Stockpiling of ash or fuel either in the open or in enclosures such as silos;

~~5.1.b~~ 5.1.2. 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

~~5.1.c~~ 5.1.3. Ash or fuel handling systems and ash disposal areas.

§45-2-6. Registration.

6.1. All persons owning or operating fuel burning units in existence on September 1, 1974 not previously registered shall have registered such units with the ~~Director~~ Secretary. The information required for registration shall be determined and provided in the manner specified by the ~~Director~~ Secretary. Registration forms should be requested from the ~~Director~~ Secretary by the owner and/or operator of fuel burning unit(s) subject to the provisions of this section.

6.2. The owner or operator of fuel burning units that were under construction or on which construction was initiated as of October 1, 1974, not previously registered shall have registered such fuel burning units with the ~~Director~~ Secretary.

§45-2-7. Permits.

7.1. No person shall construct, modify or relocate any fuel burning unit 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.

§45-2-8. Testing, Monitoring, Recordkeeping and Reporting.

8.1. Testing.

~~8.1.a~~ 8.1.1. The owner or operator of a fuel burning unit(s) shall demonstrate compliance with section 3 by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9 and 45CSR16, or a certified continuous opacity monitoring system, as approved by the ~~Director~~ Secretary, and section 4 by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the Appendix 45-2 to this rule or other equivalent EPA approved method approved by the ~~Director~~ Secretary. ~~The~~ owner or operator shall conduct such testing at a frequency to be established by the ~~Director~~ Secretary.

~~8.1.b~~ 8.1.2. At such reasonable times as the ~~Director~~ Secretary 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 4. Such tests shall be conducted in accordance with the appropriate method set forth in ~~the~~ Appendix 45-2 to this rule or other equivalent EPA approved method approved by the ~~Director~~ Secretary. The ~~Director,~~ Secretary ~~or his duly authorized representative,~~ may at his option witness or conduct such tests. Should the ~~Director~~ Secretary exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the ~~Director~~ 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.

~~8.1.b.1~~ 8.1.2.a. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the ~~Director~~ Secretary, 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.

~~8.1.c~~ 8.1.3. The ~~Director,~~ Secretary ~~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 4.1.

8.2. Monitoring.

~~8.2.a~~ 8.2.1. The owner or operator of a fuel burning unit(s) shall monitor compliance with section 3 as set forth in an approved monitoring plan for each emission unit. Such monitoring plan(s) shall include, but not be limited to, one or more of the following: continuous measurement of emissions, monitoring of emission control equipment, periodic parametric monitoring, or such other monitoring as approved by the ~~Director~~ Secretary.

~~8.2.a.1~~ 8.2.1.a. Direct measurement with a certified continuous opacity monitoring system (COMS) shall be deemed to satisfy the requirements for a monitoring plan. Such COMS shall be installed, calibrated, operated and maintained as specified in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1) and 45CSR16. COMS meeting the requirements of 40 CFR Part 75 (Acid Rain) and 45CSR33 will be deemed to have satisfied the requirements of PS1.

~~8.2.a.2~~ 8.2.1.b. ~~Monitoring plans pursuant to subdivision 8.2.a. shall be submitted to the Director within six (6) months of the effective date of this rule. Approval or denial of such plans shall be within twelve (12) months of the effective date of this rule or six (6) months after receipt of the monitoring plan, whichever is later. The owner or operator may presume approval until notified otherwise~~ Reserved.

~~8.2.a.3~~ 8.2.1.c. Excursions outside the range of operating parameters associated with control or process equipment which are established in an approved monitoring plan will not necessarily constitute a violation of this rule.

8.3. Recordkeeping and Reporting.

~~8.3.a~~ 8.3.1. The owner or operator of a fuel burning unit(s) shall maintain on-site all records of monitored data established in the monitoring plan pursuant to subdivision ~~8.2.a~~ 8.2.1. Such records shall be made available to the ~~Director~~ Secretary ~~or his duly authorized representative~~ upon request. Such records shall be retained on-site for a minimum of five years.

~~8.3.b~~ 8.3.2. The owner or operator shall submit a periodic exception report to the ~~Director~~ Secretary, in a manner and at a frequency to be established by the ~~Director~~ Secretary. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored

parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

~~8.3.c~~ 8.3.3. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the ~~Director~~ Secretary. Such records are to be maintained on-site and made available to the ~~Director~~ Secretary ~~or his duly authorized representative~~ upon request.

~~8.3.~~d 8.3.4. Where appropriate, the owner or operator of a fuel burning unit(s) may maintain such records in electronic form.

8.4. Exceptions.

~~8.4.a~~ 8.4.1. The owner or operator of a fuel burning unit(s) may petition for alternatives to testing, monitoring and reporting requirements prescribed pursuant to this rule for conditions, including, but not limited to, the following:

~~8.4.a.1~~ 8.4.1.a. Infrequent use of a fuel burning unit(s).

~~8.4.a.2~~ 8.4.1.b. Continuous emission measurement equipment that does not meet the design requirements of 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1) and 45CSR16 or 40 CFR 75 (Acid Rain) and 45CSR33, where it can be adequately demonstrated that there is a definite and consistent relationship between its measurement and the measurements of opacity by a system complying with PS1. The ~~Director~~ Secretary may require that such demonstration be performed for each fuel burning unit.

~~8.4.a.3~~ 8.4.1.c. Where a single fuel burning unit may have more than one emission point.

~~8.4.a.4~~ 8.4.1.d. Where the desired location of the continuous monitoring system does not meet the requirements of the applicable performance standard, when the owner or operator can demonstrate that installation at alternative locations will enable accurate and representative measurements.

~~8.4.b~~ 8.4.2. The owner or operator of a fuel burning unit(s) which combusts only natural gas shall be exempt from the requirements of subdivision ~~8.1.a~~ 8.1.1 and subsection 8.2.

~~8.4.c~~ 8.4.3. The owner or operator of a fuel burning unit(s) with a Design Heat Input of less than 100 mmBtu/hr shall be exempt from the periodic testing requirements of subdivision ~~8.1.a~~ 8.1.1 and the monitoring requirements of subsection 8.2. The ~~Director~~ Secretary reserves the right to require testing pursuant to subdivisions ~~8.1.b~~ 8.1.2 and ~~8.1.c~~ 8.1.3.

8.5. Requests for Information.

~~8.5.a~~ 8.5.1. The ~~Director~~ Secretary shall respond within five working days to requests for information generated or required under this rule. Requests for information not in the ~~Director's~~ Secretary's custody shall be promptly forwarded to the appropriate federal or state agency known to have such information.

~~8.5.b~~ 8.5.2. Data relating to electric utilities and fuel quality and costs of fuels are available from the Federal Energy Regulatory Commission (FERC) and the West Virginia Public Service Commission (PSC). ~~Requests for FERC data should be sent to David P. Boergers, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D. C. 20426 or online at http://www.~~

~~ferc.fed.us/electric/f423/form423.htm. Requests for PSC data should be sent to : The West Virginia Public Service Commission, Utility Division, P. O. Box 812, Charleston, W. Va. 25323-0812~~.

§45-2-9. Start-ups, Shutdowns and Malfunctions.

9.1. ~~The visible emission standards set forth in section 3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.~~ Reserved.

9.2. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the ~~Director~~ Secretary which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.

9.3. The owner or operator of a fuel burning unit(s) subject to this rule shall report to the ~~Director~~ Secretary any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in section 3 and 4 as provided in one of the following subdivisions:

9.3.1. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the ~~Director~~ Secretary:

~~9.3.a.1~~ 9.3.1.a. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

~~9.3.a.2~~ 9.3.1.b. Excess opacity does not exceed 40%.

~~9.3.b~~ 9.3.2. The owner or operator shall report to the ~~Director~~ Secretary any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in subdivision ~~9.3.a~~ 9.3.1, by telephone, ~~telefax,~~ or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the ~~Director~~ Secretary within thirty (30) days providing the following information:

~~9.3.b.1~~ 9.3.2.a. A detailed explanation of the factors involved or causes of the malfunction;

~~9.3.b.2~~ 9.3.2.b. The date and time of duration (with starting and ending times) of the period of excess emissions;

~~9.3.b.3~~ 9.3.2.c. An estimate of the mass of excess emissions discharged during the malfunction period;

~~9.3.b.4~~ 9.3.2.d. The maximum opacity measured or observed during the malfunction;

~~9.3.b.5~~ 9.3.2.e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

~~9.3.b.6~~ 9.3.2.f. A detailed explanation of the corrective measures or program that will be

implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

9.4. ~~A malfunction, as defined under this rule, constitutes an affirmative defense to an action brought for noncompliance with the weight emission standards under section 4 if the owner or operator demonstrates to the satisfaction of the Director that the requirements of subsections 9.2 and 9.3 have been met.~~ Reserved.

9.5. ~~In any enforcement proceeding, the owner or operator seeking to establish the occurrence of a malfunction has the burden of proof.~~ Reserved.

9.6. Any owner or operator that cannot comply with the emission limitations required by sections 3 or 4 during startup or shutdown shall request an alternative emission limitation pursuant to 45CSR1.

§45-2-10. ~~Variances~~ Reserved.

~~10.1. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary for a fuel burning unit to comply with the visible emission standards set forth in section 3 or any emergency situation or condition creating a threat to public safety or welfare, the Director may grant an exception to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during the exception period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the emission standards under section 4 will not be exceeded during the exemption period.~~

~~10.2. In the event a fuel burning unit employing a flue gas desulphurization system must by-pass such system because of necessary planned or unplanned maintenance, visible emissions may not exceed twenty percent (20%) opacity during such period of maintenance. The Director may require advance notice of necessary planned maintenance, including a description of the necessity of the maintenance activity and its expected duration and may limit the duration of the variance or the amount of the excess opacity exception herein allowed. The Director shall be notified of unplanned maintenance and may limit the duration of the variance or the amount of excess opacity exception allowed during unplanned maintenance.~~

§45-2-11. Exemptions.

11.1. Any fuel burning unit(s) having a heat input under ten (10) million B.T.U.'s per hour will be exempt from sections 4, 5, 6, 8 and 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.

§45-2-12. Inconsistency Between Rules.

12.1. In the event of any inconsistency between this rule and Appendix 45-2 and any other rule of the ~~West Virginia Division of Environmental Protection~~ Division of Air Quality, such inconsistency shall be resolved by the determination of the ~~Director~~ Secretary and such determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

TABLE 45-2

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 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

~~45CSR2~~ APPENDIX 45-2
COMPLIANCE TEST PROCEDURES FOR 45CSR2

Section 1. General.

1.1. Scope. -- ~~It is the intent and purpose of this Appendix to establish stack testing procedures for determination of compliance with the weight emission standards as set forth in 45CSR2 "To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers". To this end, it is the intent of the Division of Environmental Protection Office of Air Quality to adopt by reference, certain of the Reference Methods and other test methods set forth in 40 CFR, Part 60, Appendix A [as of July 1, 1994]. These methods set forth acceptable stack testing, calibration, and laboratory procedures including appropriate apparatus with provisions for certain minor exceptions as delineated in Section 6 of this Appendix.~~ Appendix 45-2 establishes stack testing procedures for determination of compliance with the weight emission standards set forth in 45CSR2. The test methods in subsection 4.1 of Appendix 45-2 contain acceptable stack testing, calibration, and laboratory procedures including appropriate apparatus with provisions for certain minor exceptions as provided in section 6 of Appendix 45-2.

Section 2. ~~[~~Reserved~~]~~.

Section 3. Symbols.

3.1. Ab = (Sd) x (Va), Ab is the estimate of the weight of residue, prior to use, in the acetone wash volume used (grams)

3.2. An = cross-sectional area of the sample nozzle (ft^2)

3.3. As = cross-sectional area of the sample plane (ft^2)

3.4. ASTM = American Society for Testing and Materials

3.5. B = percent moisture in the sampled gas, by volume, on a wet basis, divided by 100

3.6. BE = the boiler thermal efficiency (percent)

3.7. C = 453.592 grams/pound

3.8. °C = degrees Centrigrade

3.9. cfm = cubic feet per minute

3.10. CEM = continuous emission monitoring equipment

3.11. CO = carbon monoxide

3.12. CO_2 = carbon dioxide

3.13. d = diameter of nozzle (inches)

3.14. DGR = dry gas meter reading: the sample gas volume meter reading at meter conditions (cubic feet)

3.15. ΔDGR = difference between two consecutive DGR's, the volume sampled at each sampling point (cubic feet)

3.16. EA = excess air fraction

3.17. F-factor = a factor representing a ratio of the dry flue gases generated to the calorific value of the fuel combusted (dscf/10^6 Btu)

3.18. Fi = quantity of each fuel fired in a fuel burning unit during the total test run period (in appropriate units)

3.19. °F = degrees Fahrenheit

3.20. Fp = combined correction factor for units and pitot tube deviation

3.21. ft^3 = cubic feet

3.22. ft/min = feet per minute

3.23. gm = grams

3.24. hbd = average enthalpy of steam/water leaving boiler as blowdown (Btu/lbm)

3.25. hi = average enthalpy of steam or other working fluid entering the boiler of the fuel burning unit (Btu/lbm)

3.26. ho = average enthalpy of steam or other working fluid leaving the boiler of the fuel burning unit (Btu/lbm)

3.27. ΔH = pitot tube differential reading (inches H_2O)

3.28. ΔHp = indicated differential pressure when the test pitot tube is used at the calibration point

3.29. ΔHs = indicated differential pressure when the standard pitot tube is used at the calibration point

3.30. Hg = mercury

3.31. HI = heat input per fuel burning unit(s) (10^6 Btu per hour)

3.32. H_2S = hydrogen sulfide

3.33. HVf = higher heating value of the fuel on an as fired basis (in Btu/lbm)

3.34. HVi = average Btu value of each fuel used on an as fired basis, in appropriate units (Btu/lbm,

Btu/gal, etc.)

3.35. in. Hg = inches of mercury, pressure

3.36. ISKo = overall isokinetic factor, ratio of total actual sample volume (Qm) to the total isokinetic sample volume (Qo), both volumes adjusted to standard conditions

3.37. ISKp = point isokinetic factor, ratio of the actual sample volume to the isokinetic sample volume

3.38. %ISK = 100 (ISKo - 1)

3.39. Kp = coefficient of deviation of the Type S pitot tube used in sampling, determined by calibration

3.40. Ks = coefficient of deviation for a standard pitot tube

3.41. ibf = pounds force

3.42. lbm = pounds mass

3.43. Ma = particulate matter obtained from the evaporation of the acetone washings (grams)

3.44. Mbd = average mass flow rate of blowdown (lbm/hr)

3.45. Mf = particulate matter collected by filter(s) (grams)

3.46. Mg = molecular weight of gas sample on wet basis

3.47. mf = average mass flow rate of steam through the boiler (lbm/hr)

3.48. mg = milligram

3.49. ml = milliliter

3.50. Mn = Mf + Ma - Ab (grams), indicated weight of particulate matter collected by the sampling train

3.51. n = number of items in a set of related items

3.52. N_2 = nitrogen

3.53. O_2 = oxygen

3.54. Θ = sum of all extraction times at all points sampled per run (min.)

3.55. Pb = atmospheric pressure (in. Hg)

3.56. Pf = ash fraction of the non-metered fuel on an as fired basis

3.57. Pm = absolute pressure of gas at meter (in. Hg)

3.58. Pm = average absolute pressure of the sampled gas at meter conditions for the test run (in. Hg)

3.59. Ps = absolute pressure of gas in stack at sampling plane

3.60. qm = actual sample volume for each sample point adjusted to 68 °F and 29.92 in. Hg (ft^3)

3.61. Qm = sum of all qm for each test run (ft^3)

3.62. qo = volume of sampled gas for each point if isokinetic conditions were maintained, adjusted to 68 °F and 29.92 in. Hg (ft^3)

3.63. Qo = sum of all qo for each test run (ft^3)

3.64. Sd = residue found in acetone blank (gm/ml)

3.65. π = pi, 3.1416

3.66. Δt = elapsed time at each sampling point (minutes)

3.67. Tf = temperature of the primary out-of-stack filter holder, when used (°F)

3.68. Tm = temperature of gas sample at volume meter for each point (°F)

3.69. Tm = average temperature of gas sample at volume meter for test run (°F)

3.70. Ts = stack gas temperature (°F)

3.71. Va = volume of acetone wash (ml)

3.72. Vac = vacuum (inches of mercury)

3.73. Vm = sum of all ΔDGR for the test run (ft^3)

3.74. Vmstd = Vm corrected to standard conditions

3.75. w = 1/(1 - B), ratio of wet gas volume to dry gas volume

3.76. W = Wc + Wd (grams), amount of H_2O removed from the sampled gas

3.77. Wc = amount of water collected in the condenser or impingers (grams)

3.78. Wd = amount of water collected by the drying agent in the absorber (grams)

3.79. % = percent

Section 4. Adoption of Test Methods.

4.1. ~~For determining compliance with the mass emission rates as delineated in 45CSR2 – "To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers", a person shall utilize those Reference Methods, in particular Method 5, 5B, except as modified by subsection 4.1.a. of this section, or 17, as contained in 40 CFR, Part 60, Appendix A with the following amendments:~~ The owner or operator of a fuel burning unit shall determine compliance with the mass emission rates contained in 45CSR2 by using Reference Method 5, 5B, or 17 set forth in 40 CFR Part 60, Appendix A (incorporated by reference into state law in 45CSR16), as amended by subdivisions 4.1.1. through 4.1.4.

~~4.1.a~~ 4.1.1. Primary filter media shall be maintained at, or about, stack temperature. The temperature of the primary filter media shall not exceed that of the stack except that in cases where sampling follows a wet scrubbing device the temperature of the primary filter, initial filter tare, and oven temperature may be adjusted to a maintained temperature of up to 250 °F.

~~4.1.b~~ 4.1.2. The result of each compliance test is to be the arithmetic average of three (3) complete sampling runs conducted within a seven (7) day period.

~~4.1.c~~4.1.3. A complete sampling run shall be one complete determination of the total particulate matter emission rate through the test stack for which:

~~c.1~~ 4.13.a. the minimum total sampling time is two (2) hours; and

~~c.2~~ 4.1.3.b. the minimum total sample volume is sixty (60) cubic feet adjusted to 68 °F and 29.92 inches of Hg. Smaller sampling volumes and shorter sampling times may be approved by the ~~Director~~ Secretary on a case-by-case basis when necessitated by process variables or other factors.

~~4.1.d~~ 4.1.4. Any and all references in 40 CFR, Part 60, Appendix A and 45CSR16 to the "Administrator" is amended to be the "~~Director~~ Secretary".

4.2. In carrying out these methods for the purpose of determining mass emission rates, it is understood that other Reference Methods contained in 40 CFR, Part 60, Appendix A are integral parts of Methods 5, 5B, and 17 in particular, but not inclusive, Methods 1, 2, 3, and 4.

Section 5. Unit Load and Fuel Quality Requirements.

5.1. All compliance test runs, which are to be included in the test result for a unit or a specified number of units, shall be conducted while the unit or group of units is operated at or above the normal maximum operating load for the specified unit or group of units; while fuel or combinations of fuel representative of normal operation are being burned; and under such other relevant conditions as the ~~Director~~ Secretary may specify based on representative performance of the specified units.

Section 6. Minor Exceptions.

6.1. In the interest of practicality, the ~~Director~~ Secretary or his designee may allow minor exceptions, not related to test site safety, to the specifications of these methods, if the ~~Director~~ Secretary or his designee concludes that in a particular case, the granting of such exception would not invalidate the test results. If such exceptions are granted, alternate specifications may be prescribed.

6.2. If an exception as described above is granted, the scope of the exception and any alternative specification prescribed shall be recorded in a letter of exception signed by the authorizing official. A copy of such letter of exception shall be attached to the test report.

Section 7. Pretest and Post Test General Requirements.

7.1. The owner~~/~~ or operator required to conduct tests and his test consultants shall become familiar with the requirements of 45CSR2 ~~"To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers",~~ Reference Methods as contained in 40 CFR, Part 60, Appendix A and 45CSR16, and the requirements as delineated in ~~this~~ Appendix 45-2, including all forms, equations, and definitions. Questions of interpretation, applicability, or exception, shall be resolved with the ~~Director~~ Secretary ~~or his designee~~ prior to conducting the test.

7.2. When a compliance test conducted in accordance with ~~this~~ Appendix 45-2 is required, the owner or operator of the affected unit(s) shall be notified in writing by the ~~Director~~ Secretary ~~or his designee~~. The notice shall prescribe the following:

~~7.2.a~~ 7.2.1. the unit(s) to be tested;

~~7.2.b~~ 7.2.2. the identification number to be assigned to the test;

~~7.2.c~~ 7.2.3. the date by which the test is to be completed and the test report submitted; and

~~7.2.d~~ 7.2.4. the person, if other than the ~~Director~~ Secretary, to whom the test report is to be submitted, and with whom questions concerning the test procedure may be resolved. Test report forms for filing the results of the compliance test are available from the ~~Division of Environmental Protection~~ Secretary on request.

7.3. At least thirty (30) days prior to each compliance test, or within such other time period as requested and approved by the ~~Director~~ Secretary, a test protocol shall be furnished to the ~~Director~~ Secretary for ~~his~~ review and approval and shall include as a minimum, the following information:

~~7.3.a~~ 7.3.1. Identification and description of the unit(s) that are to be tested.

~~7.3.b~~ 7.3.2. A discussion of the manner in which the unit(s) shall be operated during the test periods with respect to operating loads, representativeness of fuel(s) fired, operating temperatures, and other factors which may affect emissions.

~~7.3.c~~ 7.3.3. A description or listing of unit and control equipment data that shall be monitored and recorded during the test runs.

~~7.3.d~~ 7.3.4. A description of test methods and equipment that shall be employed with requests for approval of any variances to test method procedures or sampling equipment designs set forth under ~~this~~ Appendix 45-2.

~~7.3.e~~ 7.3.5. A drawing of the stack or duct sections where samples shall be taken showing distances to upstream and downstream gas flow disturbances or bends and changes in duct or stack cross

sections.

~~7.3.f~~ 7.3.6. A drawing of the test plane(s) showing dimensions and number and location of sampling (traverse) points.

~~7.3.g~~ 7.3.7. The sampling time at each traverse point and total sampling time for each test run. If the sampling time per traverse point is to be less than five (5) minutes, comments shall be included concerning the variability of gas flow and temperatures during the shorter sampling time and how the sampling rate shall be monitored and adjusted to maintain isokinetic conditions.

~~7.3.h~~ 7.3.8. The minimum volume (SCF) of gas that shall be sampled per test run.

~~7.3.i~~ 7.3.9. The name of the person to contact concerning the scheduled tests and affiliation of personnel who shall conduct the tests.

~~7.3.j~~ 7.3.10. A copy of the last individual stack registration approved by the ~~Director~~ Secretary in accordance with ~~Sub-Section~~ subsection ~~4.1 (b)~~ 4.1.2 of 45CSR2.

~~7.3.k~~ 7.3.11. A statement concerning where the laboratory analyses are to be conducted and a description of the chain of custody for collected samples.

~~7.3.l~~ 7.3.12. The anticipated date that subject testing is to be performed.

7.4. Notification of the actual dates upon which compliance testing will be conducted shall be provided to the ~~Director~~ Secretary, in writing, no later than fifteen (15) days prior to the date of the first test run, or within such other time period as requested and approved by the ~~Director~~ Secretary, so that he may, at his option, have an observer present during the test runs and sample analyses. Such notification may be submitted with the test protocol, however, the actual date of initial testing shall not be less than thirty (30) days from date of protocol submittal. Within constraints imposed by available facilities, copies of test field data sheets, laboratory sheets, unit operating logs and similar relevant data collected during the test runs shall be provided to the ~~West Virginia Division of Environmental Protection~~ Secretary's observer upon request at the conclusion of the tests. Any such data or other information so made available shall be treated as confidential upon request by the operator and shall not be made available to the public. The owner~~/~~ or operator shall place the word "confidential" upon all such information which is gathered and retained by the ~~West Virginia Division of Environmental Protection~~ Secretary. If facilities and circumstances allow, the ~~West Virginia Division of Environmental Protection~~ Secretary's test observer shall, at his or her option, observe the laboratory analyses.

7.5. A compliance test report providing the information summarized below and any additional information that the ~~Director~~ Secretary may require shall be submitted to the ~~Director~~ Secretary within sixty (60) days, or within such other time period as requested and approved by the ~~Director~~ Secretary, of the completion of the compliance testing.

~~7.5.a~~ 7.5.1. General Information

~~a.1~~ 7.5.1.a. Plant name and location

~~a.2~~ 7.5.1.b. Units/stacks tested

~~a.3~~ 7.5.1.c. Name and address of company performing the tests

~~a.4~~ 7.5.1.d. Test dates and times

~~7.5.b~~ 7.5.2. Report Certification. The following persons shall certify that the test report contains true and accurate information:

~~b.1~~ 7.5.2.a. Test team supervisor

~~b.2~~ 7.5.2.b. Reviewer of test report (if applicable)

~~b.3~~ 7.5.2.c. If test is performed by source owner, the report shall also be certified by facility owner/operator

~~7.5.c~~ 7.5.3. Test Summary

~~c.1~~ 7.5.3.a. Description of emissions sources/stacks tested

~~c.2~~ 7.5.3.b. Purpose of test

~~c.3~~ 7.5.3.c. Pollutants measured

~~c.4~~ 7.5.3.d. Operating data

~~4.A~~ 7.5.3.d.1. Unit(s) configuration and air pollution control equipment flow diagrams.

~~4.B~~ 7.5.3.d.2. Summary of operating parameters including steam or electrical production rates and other relevant parameters measured and recorded and/or calculated for test periods shall be attached to the report.

~~4.C~~ 7.5.3.d.3. Pertinent control equipment and operating data recorded and/or calculated for the test period should be attached to the report. As each boiler operation and associated control equipment normally presents a unique case, pertinent data shall be determined on a case-by-case basis.

~~4.D~~ 7.5.3.d.4. Description of any unusual or non-typical operating mode, fuels, soot blowing, blowdown, etc. occurring or used during the tests.

~~7.5.d~~ 7.5.4. Test Results.

~~d.1~~ 7.5.4.a. Mass emission test results with emissions reported in units of the applicable standard and in pounds per hour.

~~d.2~~ 7.5.4.b. Visible emissions test results, if applicable, as measured by observer or transmissometer. If observed by personnel from test company or plant, evidence of observer's certification shall be attached to the report.

~~d.3~~ 7.5.4.c. Description of collected samples (if such information is deemed to be useful).

~~d.4~~ 7.5.4.d. Description and discussion of real or apparent errors involved in test or process measurements, analysis, etc.

~~7.5.e~~ 7.5.5. Test Procedures

~~e.1~~ 7.5.5.a. Description of test equipment including drawing of sampling train.

~~e.2~~ 7.5.5.b. Description of test procedures employed with detailed documentation of any deviations from methods required by ~~this~~ Appendix 45-2.

~~e.3~~ 7.5.5.c. Description of analytical procedures employed with detailed documentation of any deviations from methods required by ~~this~~ Appendix 45-2.

~~e.4~~ 7.5.5.d. Dimensioned drawing of sampling port location showing distances to upstream and downstream gas flow disturbances.

~~e.5~~ 7.5.5.e. Cross-sectional drawing of sampling plane showing location and numbers or other designations of sampling points.

~~7.5.f~~ 7.5.6. Appendix.

~~f.1~~ 7.5.6.a. Copies of original field data sheets from test runs.

~~f.2~~ 7.5.6.b. Copies of original log sheets, strip charts and other process or control equipment data recorded during tests. These attachments shall be certified by a responsible plant official. As each boiler operation and associated control equipment normally presents a unique case, pertinent data shall be determined on a case-by-case basis.

~~f.3~~ 7.5.6.c. Laboratory report including chain of custody.

~~f.4~~ 7.5.6.d. Description of test equipment calibration procedures and calibration results for test equipment used.

~~f.5~~ 7.5.6.e. Description of calibration performed on devices recording important operating data during the tests.

~~f.6~~ 7.5.6.f. Copies of strip charts or other original outputs from continuous emission monitoring (CEM) equipment on the tested source and description of CEM system calibration and operation prior to and/or during tests.

~~f.7~~ 7.5.6.g. Originals of any visible emission readings taken during test period.

~~f.8~~ 7.5.6.h. Copies of relevant correspondence such as West Virginia ~~Division~~ Department of Environmental Protection letters approving test method variances.

~~f.9~~ 7.5.6.i. Names and titles of persons involved in the test including sampling team members, company personnel, and outside observers.

7.6. Subject to the provisions of ~~S~~section 6 of ~~this~~ Appendix 45-2, Minor Exceptions, a complete sampling run is one complete determination of the total particulate matter emission rate through the test stack for which:

~~7.6.a~~ 7.6.1. ~~the~~The composite particulate matter sample is extracted from the duct or stack at a location and from the number of sampling points prescribed in Method 1 of 40 CFR, Part 60, Appendix A ~~[as of July 1, 1994]~~ and 45CSR16;

~~7.6.b~~ 7.6.2. ~~the~~The sampling equipment and its method of operation for collection of particulate sample meets the criteria and requirements prescribed in Method 5, 5B or Method 17 of 40 CFR, part 60, Appendix A ~~[as of July 1, 1994]~~ and 45CSR16;

~~7.6.c~~ 7.6.3. ~~the~~The overall sampling rate is within ± 10% of the overall isokinetic sampling rate, as calculated in Method 5, 5B or Method 17 of 40 CFR, Part 60, Appendix A ~~[as of July 1, 1994]~~ and 45CSR16; whichever is applicable;

~~7.6.d~~ 7.6.4. ~~the~~The stack gas components data is determined as prescribed by Methods 3 and 4 of 40 CFR, Part 60, Appendix A~~, [as of July 1, 1994]~~ and 45CSR16;

~~7.6.e~~ 7.6.5. ~~the~~The other provisions of ~~this~~ Appendix 45-2 are met and sufficient heat input and fuel quality data is provided to verify that the requirements of ~~S~~section 8 are met; and

~~7.6.f~~ 7.6.6. ~~s~~Sufficient data and commentary is provided with the submitted test report forms to allow the ~~Director~~ Secretary or his designee to evaluate the reported test results and the conditions under which they were obtained.

Section 8. Heat Input Data Measurements.

8.1. General.

~~8.1.a~~ 8.1.1. The data measurements required to determine the total heat input to the fuel burning unit(s) vented by the test stack during the test run period depends on the computational method applicable. ~~This~~ Appendix 45-2 prescribes three (3) computational methods: Method 1H - Fuel Use Basis, Method 2H - Steam Balance Basis and Method 3H - Flue Gas Analysis Basis.

8.1.1.a. The test supervisor is to submit data on the heat input(s) based on the Fuel Use Basis (Method 1H) whenever coal scales or other fuel meters, as appropriate, are available.

8.1.1.b. If the appropriate fuel metering device(s) are not available, Method 2H - Steam Balance Basis is to be used.

8.1.1.c. For all test runs also submit data on the heat input(s) based on Method 3H - Flue Gas Analysis Basis, in addition to the data required by Method 1H or 2H, whichever is applicable.

~~8.1.b~~ 8.1.2. The following ~~Sub-S~~subsections detail the specific data required for each method and the means of obtaining these data.

8.2. Fuel Use Method (1H).

~~8.2.a~~ 8.2.1. This computational method requires:

~~a.1~~ 8.2.1.a. The measured amount of all fuel(s) fired in the fuel burning units during each test run period, as determined by continuous coal scales or equivalent and/or oil flow and/or gas meter(s). When gas is fired, the temperature and pressure of the gas meter(s) are needed.

~~a.2~~ 8.2.1.b. The average moisture, ash, sulfur, volatile matter, and Btu value(s) of fuels fired in the fuel burning units during the test run period is to be determined and reported as follows:

~~2.A~~ 8.2.1.b.1. For coal:

~~A.1~~ 8.2.1.b.1.A. Obtain a representative sample of the coal fired in each fuel burning unit during the test run period. This sample is to be obtained in accordance with the Commercial Sampling Procedure of ASTM ~~:~~ Method D 2234-76 or its latest revision. Consult this ASTM standard for details of the required procedures. Sampling and analysis of coal entering bunkers or silos feeding the fuel burning unit to be tested is also acceptable provided that ASTM requirements are met and that such sampling/analysis properly represents the quality of the coal burned during the test periods.

~~A.2~~ 8.2.1.b.1.B. Prepare the reduced gross sample, obtained above, for laboratory analysis in accordance with ASTM~~:~~ Method D 2013-72, "Preparing Coal Samples for Analysis" or its later revision. Consult this ASTM standard for details of the required procedure. In this ASTM method, further amplification is given to the methods of reducing the gross sample to a laboratory sample and preparing the laboratory analysis. The laboratory sample is so prepared that 100% of the coal sample shall pass through a No. 60 (250 micron) sieve. The final product is thoroughly mixed prior to extracting analytical samples.

~~A.3~~ 8.2.1.b.1.C. Extract an analytical sample from the laboratory sample and determine the moisture, ash, and volatile matter content of this sample in accordance with ASTM Method D 3173-73 or ASTM Method D 2961-87 (Moisture), ASTM D 3174-82 (Ash), and ASTM D 3175-82 (Volatile Matter) or their latest revisions. Consult these ASTM standards for details of the required procedures. In these ASTM methods, procedures are prescribed for determining the moisture, ash, and volatile content of the sample.

~~A.4~~ 8.2.1.b.1.D. Extract another analytical sample from the laboratory sample and determine the Btu content of the sample in accordance with ASTM~~:~~ Method D 2015-77 "Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter" or its latest revision. Consult this ASTM standard for details of the required procedure.

~~A.5~~ 8.2.1.b.1.E. Extract another analytical sample from the laboratory sample and determine total sulfur content of the sample in accordance with ASTM Method D 3177-75 "Test for Total Sulfur in the Analysis Sample of Coal and Coke" or ASTM Method D 4239-85 or their latest revisions. Consult these ASTM standards for details of the required procedures.

~~A.6~~ 8.2.1.b.1.F. Send a sealed and marked one pint sample of the laboratory sample representative of the gross sample, to the ~~Director~~ Secretary with the test report. If drying was used in reducing the gross sample to the laboratory sample, indicate the percent loss of moisture during this process.

For each container provide the test identification number assigned by the West Virginia ~~Division~~ Department of Environmental Protection in accordance with ~~Sub-Section~~ ~~7.2.b~~ subdivision 7.2.2 of ~~this~~ Appendix 45-2 and the test run number.

~~2.B~~ 8.2.1.b.2. For ~~F~~fuel ~~O~~oils: Determine the supplier's name and address, and the specifications for the oil supplied. Use the supplier's specifications when available for the ash content and Btu value of the oil. When such specifications are not available, determine the grade of oil fired, by referring to any Standard Engineering Handbook. As such the Handbook and appropriate edition should be properly identified, for inclusion as part of any results submitted to the agency for the ash, sulfur and Btu values. Send an eight ounce, sealed and marked, sample of the oil fired during the test to the ~~Director~~ Secretary with the test report.

~~2.C~~ 8.2.1.b.3. For ~~N~~natural ~~G~~gas: Determine the supplier's name and address, and the specification of the natural gas supplied. Use the supplier's specification for the Btu value of the fuel. Ash may be considered negligible.

~~2.D~~ 8.2.1.b.4. For ~~O~~other ~~F~~fuels: Determine the name and address of the supplier(s) or producer(s) of any other materials fired during the test run period. Determine the source(s) of the fuel(s). Use the supplier(s)'/producer(s)' specifications for the ash, sulfur, and Btu value. When such specifications are not available, resolve with the ~~Director~~ Secretary or his designee, the method which shall be used to determine these values, prior to conducting the test. Submit an appropriate small sample of the fuel fired, if other than a gas, to the ~~Director~~ Secretary in a sealed and marked sample container.

8.3. Steam Balance Method (2H). This method requires a materials balance and inlet and outlet water/steam or other media pressure and temperature data during the test run period, for the boiler(s) of the fuel burning unit(s) vented by the test stack.

~~8.3.a~~ 8.3.1. Measure the mass flow rate of all water/steam or other media flowing through each boiler, including blowdown.

~~8.3.b~~ 8.3.2. Measure the inlet and outlet pressure and temperature of each water/steam circuit, including blowdown.

~~8.3.c~~ 8.3.3. Construct a flow diagram of the water/steam or other media flow circuit(s) on Form THI-II (2H). Record the measured data on this form, indicating the data points on the diagram.

~~8.3.d~~ 8.3.4. Determine the boiler manufacturer's name and address, and the boiler type and model number. From the manufacturer's specification, determine the boiler(s) thermal efficiencies. If such specifications are not available, describe in detail the basis and method of selecting the value used.

8.4. Flue Gas Analysis Method (3H).

~~8.4.a~~ 8.4.1. This method involves determining the heat input for the boiler(s) of the fuel burning unit(s) vented by the test stack utilizing:

~~a.1~~ 8.4.1.a. ~~appropriate~~ Appropriate F-factors as contained in 40 CFR, Part 60, Subpart D ~~[as of July 1, 1994]~~ and 45CSR16; and

~~a.2~~ 8.4.1.b. ~~total~~ Total volume of stack gas discharged through the stack during the test run; and

~~a.3~~ 8.4.1.c. ~~the~~ The average excess air discharged [O_2% or CO_2%] through the test stack during the test run period.

~~8.4.b~~ 8.4.2. Appropriate F-factors are to be obtained from 40 CFR, Part 60, Subpart D ~~[as of July 1, 1994]~~ and 45CSR16, unless carbon content of fly ash or bottom ash exceeds five (5) percent on a per weight basis. In these cases, consult the ~~Director~~ Secretary or his designee prior to conducting the test to determine and resolve a suitable F-factor adjustment.

~~8.4.c~~ 8.4.3. Total Volume of Stack Gas. The total volume of stack gas is determined from:

~~c.1~~ 8.4.3.a. ~~volume~~ Volume meter readings obtained during subject test run and recorded on Form TD: Test Run Data Sheet for each test run.

~~8.4.d~~ 8.4.4. Stack Excess Air.

~~d.1~~ 8.4.4.a. For low nitrogen content fuel(s) (coal, fuel oil, natural gas), the stack excess air can be computed from the data obtained from the Orsat analysis and recorded on Form TOA - Laboratory Data Sheet (Orsat) for each test run. If blast furnace gas, producer gas, or other fuel(s) of high nitrogen content are used, consult the ~~Director~~ Secretary or his designee prior to conducting the test to determine and resolve a suitable method of determining the excess air when such fuel(s) is burned.

Section 9. Computations and Data Analysis. This section prescribes the computational method to be used in computing the particulate matter stack emission rate for the test and evaluating the supporting test data. Perform the computations and analysis prescribed in this section for the data obtained from each test run which is to be part of the submitted test results. Record the measured data and the appropriate computations on the designated test report forms, which may be obtained from the ~~Director~~ Secretary upon request. Submit sufficient commentary with the test report data to fully describe the conditions under which the data was obtained and any factors which might affect the evaluation of the test results.

9.1. Particulate Matter Sample Weight Determination. (Form TLP - Laboratory Data Sheet (Particulate)).

9.1.1. Mf = particulate matter (grams) collected by the primary filter, including ~~andy~~ any prefilter if used

9.1.2. Ma = particulate matter (grams) obtained from the evaporation of the acetone washings of the internal sampling train surfaces exposed to the particulate sample prior to the primary filter

9.1.3. Ab = particulate matter residue (grams) in the volume (Va) of acetone wash used for Ma above, as determined by the acetone blank analysis [i.e., Ab = (Sd) (Va); where Sd equals the residue found in the acetone blank analysis in gm/ml, and Va equals the volume of acetone used in the acetone wash for Ma above]

9.1.4. Mn = Mf + Ma - Ab = the indicated weight of particulate matter collected, in grams

9.2. Moisture Determination. (Form TLH : Laboratory Data Sheet - Moisture; Forms TD; Test Run Data Sheet).

9.2.1. Record all measured and calculated data on the appropriate forms.

9.2.2. Compute and record the following:

9.2.2.a. Vm = (ft^3) the sum of all ΔDGR for the run, where ΔDGR is equal to the indicated amount of gas sampled at each point during the extraction interval

9.2.2.b. Tm = (°F) average temperature of the dry gas meter during the test run. Tm = average dry gas meter temperatures (°F) at each sampling point.

9.2.2.c. Pm = (in. Hg) average absolute pressure at the dry gas meter during the test run. Pm = the average absolute pressure at the dry gas meter for each sample point, where Pm = Pb - Vac; Pb = barometric pressure, Vac = meter vacuum.

9.2.2.d. Wc = amount of water collected in condenser or impingers (grams)

9.2.2.e. Wd = amount of water collected by the drying agent used after the condenser or impingers (grams)

9.2.2.f. W = Wc + Wd (grams)

9.2.2.g. B = percent moisture in the sampled gas by volume on a wet basis, divided by 100

B= W/(((374* Pm * Vm)/Tm + 460)) + W)

9.2.2.h. w = moisture correction factor; ratio of the volume of wet sample gas to the volume of dry sample gas

W = 1/(1-B)

9.3. Sample Gas Density and Excess Air Determination. (Form TOA - Laboratory Data Sheet (Orsat)).

~~9.3.a~~ 9.3.1. Gas Density.

~~a.1~~ 9.3.1.a. Record the Orsat analysis for all three runs on Form TOA (Laboratory Data Sheet) on lines 1 through 9. Compute and record the average value of CO_2, O_2, CO and N_2 for each run on line 10 or the value of these components of the composite sample, if obtained (optional), on line 11.

~~a.2~~ 9.3.1.b. Transcribe the values of w (moisture correction factor) from Form TLH to Form TOA in blocks 12 for each run. Transcribe the values of B, the percent water (wet basis) from Form TLH to Form TOA in column 13, line 14, for each run.

~~a.3~~ 9.3.1.c. Correct the average component volumetric percentages, dry basis (line 10), to volumetric fractions (wet basis), by dividing by 100w and enter these values on line 14 for each test run.

~~a.4~~ 9.3.1.d. Multiply each of these volumetric fractions (wet basis - line 14) by the corresponding molecular weights on line 15 and enter the values on line 16.

~~a.5~~ 9.3.1.e. Enter the sum of the values on line 16 for each run in the appropriate box on line 17, the apparent molecular weight of the wet gas (Mg).

~~a.6~~ 9.3.1.f. Determine the wet gas density for each run by dividing the molecular weight for the run (on line 17) by the number 29 and enter this quotient in the appropriate box on line 18.

~~9.3.b~~ 9.3.2. Excess Air. Compute and record the excess air fraction for each run using the average dry gas analysis from line 10 and the formula shown on line 20. Record excess air fraction (EA) in the appropriate box on line 19. Note: The excess air fraction equation present on line 20 of Form TOA is not applicable when producer gas, blast furnace gas or other fuels high in nitrogen content are used.

9.4. Actual Sample Gas Volume Determination. (Form TD : Test Run Data Sheet).

~~9.4.a~~ 9.4.1. For each point sampled during the run compute the actual volume ~~drown~~ drawn through the sampling nozzle adjusted to standard conditions of 68 °F and 29.92 inches of Hg as indicated below:

qm = Actual sample volume (in cubic feet) drawn through the sampling nozzle for each sampled point adjusted to 68 °F and 29.92 inches of Hg.

$qm = (\Delta DGR)(w) * ((528/(Tm + 460)) * (Pm/29.92)$

Where~~,~~:
ΔDGR, w, Tm, and Pm are defined in ~~Sub-Section~~ subsection 9.2 ~~of this Section~~ and are recorded on Form TD.

~~9.4.b~~ 9.4.2. Record the computed values of qm for each sampled point on the appropriate line of the column labeled qm on Form TD. Sum the values of qm for all points included in the run and enter this value (Qm) in the block so labeled.

9.5. Isokinetic Sample Volume Determination. (Form TD: Test Run Data Sheet).

~~9.5.a~~ 9.5.1. For each point samples during the run, compute the volume of sample gas (adjusted to 68°F and 29.92 inches of Hg) that would have been drawn through the sampling nozzle if isokinetic conditions were maintained, as indicated below:

qo = Isokinetic sample volume, the volume of sampled gas (in cubic feet) for each sampled point, if isokinetic conditions were maintained, adjusted to standard conditions of 68 °F and 29.92 inches of Hg. For conditions where static pressure in the duct or stack being tested is more than 20 in. H_2O, consult with ~~Director~~ Secretary or his designee.

$qo = 60 * (528)(Fp)(An) * ((\Delta H/ (Ts + 460))^{0.5} * \Delta t$

Where~~,~~:

Fp = combined correction factor for units and Pitot tube deviation:
Standard tube = 2.90 (units) x 1.00 (deviation) = 2.90
Type S tube = 2.90 (units) x 0.83*(deviation) = 2.41

*Note: The deviation for the Type S tube may vary for different sampling configurations and should be determined by calibration against a standard pitot tube for each Pitobe arrangement per Method 2 of 40 CFR, Part 60, Appendix A ~~[as of July 1, 1994]~~ and 45CSR16.

An = the cross-sectional area of the sampling nozzle in (ft^2)
ΔH = Pitot tube differential reading** in inches of H_2

**Note: If the particular pitot tube differential indicator used is calibrated to give a reading of the square root of ΔH ($\sqrt{\Delta H}$), change the heading of the "ΔH" column on Form TD to $\sqrt{\Delta H}$ and modify your computations for qo as appropriate.

Ts = Average stack gas temperature (in °F) at each sampled point during the extraction time at that point.
Δt = elapsed time at each sampling point (minutes)

~~9.5.b~~ 9.5.2. Record the computed values of qo for each sampled point on the appropriate line of the column labeled qo on Form TD. Sum the values of qo for all points included in the run and enter this value (Qo) in the block so designated.

9.6. Fractional Isokinetic Rate Determination. (Form TD: Test Run Data Sheet).

~~9.6.a~~ 9.6.1. For each point sampled during the run, compute the point isokinetic factor (ISKp), which indicates the average degree of deviation from isokinetic conditions during the sampling (extraction) time at that point. ISKp is computed as follows:

ISKp = the point isokinetic factor, the ratio of the actual sample volume to the isokinetic sample volume, both volumes adjusted to standard conditions of 68 °F and 29.92 inches of Hg
ISKp = (qm/qo)

Where~~,~~:
qm is defined in ~~Sub-Section~~ subsection 9.4 and qo is defined in ~~Sub-Section~~ subsection 9.5 of ~~this~~ Appendix 45-2, both values are recorded for each point on Form TD.

~~9.6.b~~ 9.6.2. Record the computed value of ISKp for each sampled point on the appropriate line of the column labeled ISKp on Form TD. The value of ISKp for each sampled point should not vary greatly from the overall isokinetic factor (ISKo).

~~9.6.c~~ 9.6.3. For each run, compute the overall isokinetic factor (ISKo), which indicates the overall degree of deviation from isokinetic conditions during the run, and which is used in the weight emission rate computations of the next section. ISKo is computed as follows:

ISKo = the overall isokinetic factor, the ratio of the total actual sample volume to the total isokinetic sample volume, both volumes adjusted to standard conditions of 68 °F and 29.92 inches of Hg.

ISKo = (Qm/Qo)

Where~~,~~:
Qm is defined in ~~Sub-Section~~ subsection 9.4 and Qo is defined in ~~Sub-Section~~ subsection 9.5 of ~~this~~ Appendix 45-2, both values are recorded for each run on Form TD.

~~9.6.d~~ 9.6.4. Record the computed value of ISKo for each run in the block so designated on Form TD. If the value of ISKo is outside the range of 0.9 to 1.10, reject the run result.

~~9.6.e~~ 9.6.5. Compute the value %ISK as follows: retain the sign and record on Form TR-II: Summary of Test Run Results.

$$\%ISK = 100(ISKo - 1)$$

9.7. Particulate Matter Emission Rate Determination. (Form TD: Test Run Data Sheet, Form TR-II: Summary of Test Run Results).

The particulate matter emission rate for each run is computed from the following equation:

$$M(P)n = (Mn/C) * (As/An) * (60/\Theta) * (1/ISKo)$$

Where~~,~~:
M(P)n = the particulate matter emission rate (in pounds per hour) for the test run
Mn = Mf + Ma - Ab indicated weight of particulate matter (in grams) collected by the sampling train.
C = 453.592 grams/pound
As = the cross-sectional area of the sampling plane (ft^2)
An = the cross-sectional area of the sampling nozzle (ft^2)
60 = 60 minutes per hour
Θ = the sum of all extraction times at all points sampled per run (the sum of Δt's). The total sampling time, not including movement time from port to port.

ISKo = Qm/Qo = the overall isokinetic factor for the run. The ratio of total actual volume sampled to the total isokinetic volume, both values adjusted to 68 °F and 29.92 inches of Hg on a wet basis.

The values of Mn, As, An, Θ and ISKo for each run are recorded on Form TD: Test Run Data Sheet.

Record the value of M(P)n for each test run on Form TR-II: Summary of Test Run Results.

9.8. If more than one sampling plane was required to evaluate the total stack emission rate, perform the computation specified in 9.7 of ~~this~~ Appendix 45-2 for each sampling plane, then sum the values of M(P)n for all sampling planes used. Record the total emission rate for each run (all sampling planes) on Form TR-II as above, then compute the average stack emission rate for the test. Note the number and designations of the sampling planes used under comments. If more than one sampling train was used simultaneously to sample the required number of sampling points at one sampling plane, the values of Mn, Qm, and Qo are the sum total values for all the sampling trains used for the one sampling plane.

9.9. Heat Input Determinations. (Forms THI-II: Heat Input Data Sheets: Form TOA; Laboratory Data Sheet (Orsat); Form TR-II: Summary of Test Run Results).

~~9.9.a~~ 9.9.1. This ~~Sub-Section~~ subsection prescribes three (3) methods of computing the total heat input to the (similar) fuel burning unit(s) vented by the test stack: Method 1H, Fuel Use Basis, Method 2H, Steam Balance Basis, and Method 3H, Flue Gas Analysis Basis. Submit data and computations on the appropriate forms.

~~9.9.b~~ 9.9.2. Summarize the results of the selected computational methods on ~~From~~ Form TR-II: Summary of Test Run Results for each run. Record the type units tested (see definitions for type), the total number of similar units associated with the test run results, the two values of the total heat input for all the units associated with the test run results, as computed by the two selected methods, the total design heat input and the total maximum normal operating load for the units associated with the test result (see definitions for the heat input terms).

9.10. Method 1H - Fuel Use Basis.

~~9.10.a~~ 9.10.1. From the data obtained in accordance with ~~Sub-Section~~ subsection 8.2, Heat Input Data Measurements, compute the heat input for each fuel burning unit for which this method is to be used, as follows:

$$HI = (60/\Theta) * \sum_{i=1}^{n} ((Fi * HVi)/10^6$$

Where~~,~~:
HI = Heat input per fuel burning unit(s) in 10^6 Btu per hour
Fi = The quantity of each fuel fired in this fuel burning unit during the total test run period (Θ) in appropriate dimension units (e.g., pounds, gallons, SMCF)
HVi = The average Btu value of each fuel used, in appropriate dimensional units related to the Fi units (e.g., Btu/lb, Btu/gal, Btu/SMCF), on an as fired basis
Θ = The total test run period in minutes. The sum of all extraction intervals (Δt)
n = The number of different fuels fired in the fuel burning unit during the test run period

~~NOTE =~~ Note: When more than one fuel burning unit is vented by the test stack, sum the individual heat input values for all units of the same type vented by the test stack to obtain the total heat input for the test.

~~9.10.b~~ 9.10.2. Record the values used in the computations, and the results on Form THI-II (1H)

9.11. Method 2H - Steam Balance Basis.

~~9.11.a~~ 9.11.1. From the data obtained in accordance with ~~Sub-Section~~ subsection 8.3 of ~~this~~ Appendix 45-2, compute the heat input for each fuel burning unit for which this method is to be used, as follows:

$$HI = ((((mf * (ho - hi)) + (Mbd * hbd)))/(10^4 * BE))$$

Where~~,~~:
HI = Heat input per fuel burning unit in 10^6 Btu per hour
ho = Average enthalpy of steam/water or other media leaving the boiler of the fuel burning unit in Btu/lbm
hi = Average enthalpy of steam/water or other media entering the boiler of the fuel burning unit in Btu/lb

mf = Average mass flow rate of steam/water or other media through the boiler in lbm/hour
Mbd = Average mass flow rate of blowdown in lbm/hour
hbd = Average enthalpy of steam/water or other media leaving the boiler as blowdown in Btu/lbm
BE = The boiler thermal efficiency (percent)

~~NOTE~~Note: The enthalpy values for the above equation can be determined from the inlet and outlet temperatures and pressures of the steam/water or other media flowing through the boiler using appropriate steam tables.

~~9.11.b~~ 9.11.2. Record the steam flow, temperatures, pressures, and enthalpy values on the steam/water or other media circuit flow diagram required on Form THI-II (2H). Also record the necessary calculations and results on Form THI-II (2H) or attached sheet(s). Sum the heat input values of all fuel burning units of the same type vented by the test stack.

9.12. Method 3H - Flue Gas Analysis Basis:

~~9.12.a~~ 9.12.1. From data obtained in accordance with ~~Sub-Section~~ subsection 8.4 of ~~this~~ Appendix 45-2, compute the heat input for each fuel burning unit for which this method is to be used, as follows:

$HI = ((mf * (ho - hi) + (Mbd * hbd))/(10^4 * BE)$

Where~~,~~:
HI = Heat input per fuel burning unit in 10^6 Btu per hour
Vmstd = Volume of gas sample measured by the dry gas meter during run corrected to standard conditions of 68 °F and 29.92 inches Hg.
As = Cross-sectional area of the sampling plane (ft^2)
An = Cross-sectional area of the sampling nozzle (ft^2)
$\%O_2$ = Percent oxygen content by volume as taken from Orsat analysis on Form TOA
F-factor = a factor representing a ration of the dry flue gases generated to the calorific value of the fuel combusted (dscf/10^6 Btu), See 40 CFR, Part 60, Subpart D and 45CSR16
Θ = Sum of all extraction time at all points sampled per run (minutes)

~~9.12.b~~ 9.12.2. Record Vmstd, $\%O_2$, F-factor, and Θ on Form THI-II (3H). Record calculations.

TITLE 45
LEGISLATIVE RULE
~~DIVISION~~ DEPARTMENT OF ENVIRONMENTAL PROTECTION
~~OFFICE OF~~ AIR QUALITY

SERIES 3
~~TO PREVENT AND~~ CONTROL OF AIR POLLUTION FROM THE OPERATION OF HOT MIX ASPHALT PLANTS

§45-3-1. General.

1.1. Scope. -- ~~The purpose of this~~ This rule ~~is to~~ establishes emission limitations for hot mix asphalt plants and the plant property and sets forth the permitting, recordkeeping, reporting, and exemption requirements.

1.2. Authority. -- W. Va. Code ~~§22-5-1 et seq~~ §22-5-4.

1.3. Filing Date. -- ~~June 2, 2000~~.

1.4. Effective Date. -- ~~August 31, 2000~~.

1.5. ~~Former Rules. -- This legislative rule amends 45CSR3 "To Prevent and Control Air Pollution from the Operation of Hot Mix Asphalt Plants" which was filed on March 30, 1979 and became effective October 27, 1979~~. Sunset provision. -- Does not apply.

§45-3-2. 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" is defined as:

~~2.2.a~~ 2.2.1. "Primary Collection" -- is that equipment including, but not limited to, cyclones or multicyclones incorporated for the collection of fine particulate matter generated and emitted principally from the drying operation and from which all collected material may or may not be reinjected into the main aggregate flow.

~~2.2.b~~ 2.2.2. "Secondary Collection" -- is that equipment including, but not limited to, multicyclones, scrubbers, bag filters and electrostatic precipitators, incorporated for the collection of that particulate matter not collected by the primary collection equipment and from which such collected material may or may not be reinjected into the main aggregate flow.

2.3. ~~"Director" means the director of the division of environmental protection or such other person to whom the director has delegated authority or duties pursuant to W. Va. Code §§22-1-6 or 22-1-8.~~

"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. "Fuel" means any gaseous, liquid or solid substance or any combination thereof burned in fuel burning equipment.

2.5. "Fuel Burning Equipment" means and includes any chamber, apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat for direct heat transfer as applied to a hot mix asphalt plant excluding internal combustion engines.

2.6. "Fugitive Particulate Matter" means any ~~and all~~ particulate matter generated by the operation of a hot mix asphalt plant which, if not confined, would be emitted directly to the atmosphere from points other than a stack outlet.

2.7. "General Permit" means a general permit issued pursuant to 45CSR13.

2.8. "Malfunction" means ~~any~~ a sudden and unavoidable ~~failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or equipment breakdown shall not be considered malfunctions~~ breakdown of process or control equipment.

2.9. "Opacity" means the degree to which smoke and/or particulate matter emissions reduce the transmission of light and obscure the view of an object in the background.

2.10. "Operating Permit" means a general permit issued pursuant to 45CSR13 or a permit issued pursuant to 45CSR30, or section 5 of this rule.

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

2.12. "Particulate Matter Capture System" means any equipment or method used to confine, collect and transport particulate matter from elevators, screens, mixers, weighing equipment, bins and other plant components to air pollution control equipment. Particulate matter capture systems shall include, but not be limited to, hoods, bins, ductwork, enclosures and fans.

2.13. "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.

2.14. "Plant" or "Hot Mix Asphalt Plant" means a hot mix asphalt plant which shall mean and include all the equipment utilized in the manufacture of asphaltic hot mix concrete, including, but not limited to, burner(s), drier(s), elevators, screens, mixer(s), weighing equipment, bins, and air pollution control equipment.

2.15. "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.

~~2.15~~ 2.16. "Shutdown" means the cessation of operation of a plant subject to this rule for any purpose,

unless defined otherwise in a permit issued to create an alternative emission limitation.

~~2.16~~ 2.17. "Smoke" means small gasborne and airborne particles arising from a process of combustion in sufficient numbers to be visible.

~~2.17~~ 2.18. "Standard Conditions" for the purpose of this rule means a temperature of 68° F, 20° C and a pressure of 29.92 inches of mercury (760 mm of Hg).

~~2.18~~ 2.19. "Start-up" means the setting in operation of a plant subject to this rule for any purpose, unless defined otherwise in a permit issued to create an alternative emission limitation.

~~2.19~~ 2.20. 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.

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

3.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning equipment which is twenty percent (20%) opacity or greater based on six minute averages using 40 CFR Part 60, Appendix A, Method 9, and 45CSR16 or other equivalent EPA approved method as approved by the ~~Director~~ Secretary.

3.2. ~~The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted during the start-up or shutdown of an operation which is less than forty percent (40%) opacity for a period of six (6) minutes per start-up or shutdown based on six minute averages using 40 CFR Part 60, Appendix A, Method 9, or other equivalent EPA approved method as approved by the Director~~ Reserved.

3.3. Any owner or operator that cannot comply with the emission limitation required by section 3.1 during periods of startup or shutdown shall request an alternative emission limitation pursuant to 45CSR1.

3.4. Where the ~~Director~~ Secretary believes that start-ups and shutdowns are excessive in duration and/or frequency, the ~~Director~~ Secretary may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.

§45-3-4. Emission of Smoke and/or Particulate Matter Prohibited and Standards of Measurement - Weight Emissions.

4.1. For those plants placed in operation after June 11, 1973 or that have since been modified to cause such plant to be regulated pursuant to 40 CFR Part 60, Subpart I and 45CSR16, no person shall cause, suffer, allow or permit total particulate matter emissions to be discharged into the open air from such plant in excess of 0.04 grains per dry standard cubic foot.

4.2. For those plants not subject to 40 CFR Part 60, Subpart I and 45CSR16, no person shall cause, suffer, allow or permit particulate matter emissions from a plant into the open air in excess of the quantity as listed in ~~the following t~~Table 45-3:

TABLE 45-3

Aggregate Process Rate (Pounds Per Hour)	Stack Emission Rate (Pounds Per Hour)
10,000	10

20,000	16
30,000	22
40,000	28
100,000	33
200,000	37
300,000	40
400,000	43
500,000	47
600,000	50

~~4.2.a~~ 4.2.1. For a process weight between any two consecutive process weights stated in ~~this t~~ Table 45-3, the emission limitation shall be determined by interpolation.

4.3. No person shall cause, suffer, allow or permit total particulate matter emissions to be discharged into the open air from any stack of a plant located in the following counties and magisterial districts in excess of 0.04 grains per dry standard cubic feet.

~~4.3.a~~ 4.3.1. Counties -- Brooke, Hancock, Ohio, Marshall and Kanawha.

~~4.3.b~~ 4.3.2. Magisterial Districts -- Valley (Fayette County), Scott and Pocatalico (Putnam County), Tygart (Wood County), Union and Winfield (Marion County, west of Interstate I-79).

4.4. In the case of more than one stack to a hot mix asphalt plant, the emission limitation of subsection 4.2 of this section will be based on the total emission from all stacks.

4.5. No person shall cause, suffer, allow or permit a plant to operate that is not equipped with a particulate matter capture system. This system shall be designed, operated and maintained in such a manner as to prevent the emission of particulate matter from any point other than a stack outlet.

4.6. The owner or operator of the plant shall maintain control of fugitive particulate matter on the plant premises and plant owned, leased or controlled access roads by paving, chemical treatment or other suitable measures. Good operating practices shall be observed in relation to the stockpiling, screen changing and general maintenance to prevent fugitive particulate matter generation and atmospheric entrainment. Good operating practices, including water spraying or other suitable measures, shall be employed to minimize fugitive particulate matter generation and atmospheric entrainment when hot bins are pulled.

§45-3-5. Permits.

5.1. No person shall construct, modify or relocate a hot mix asphalt plant without first obtaining any permit(s) required by 45CSR13, 45CSR14 or 45CSR19.

5.2. No person shall operate a hot mix asphalt plant without first obtaining an operating permit. The possession of an operating permit issued pursuant to 45CSR30 or a general permit issued pursuant to 45CSR13 will satisfy the requirements of this subsection.

5.3. Applications for permits shall be made upon forms available from the ~~Director~~ Secretary and shall include such information as in the judgement of the ~~Director~~ Secretary will enable him or her to determine whether such source(s) will be so designed as to operate in conformance with the provisions of this rule and other applicable rules, the W. Va. Code §22-1-1 et seq., and will not cause or contribute to the violation

of applicable ambient air quality standards.

5.4. An operating permit, issued pursuant to this rule, will be granted for plants provided they meet and maintain the requirements as set forth in this rule. These permits will be valid for one (1) calendar year and must be renewed annually. Any person failing to maintain the requirements of this rule shall, at the discretion of the ~~Director~~ Secretary, have their operating permit revoked.

5.5. When operating permits are revoked, the ~~Director~~ Secretary will consider reissuing permits when such changes as necessary to meet the requirements of this rule are made by the owner or operator of the plants.

5.6. Plants operating without all applicable permits will be in violation of this rule.

§45-3-6. Reports and Testing.

6.1. At such reasonable times as the ~~Director~~ Secretary may designate, the owner or operator of any hot mix asphalt plant may be required to conduct or have conducted stack tests to determine the particulate matter concentration in exhaust gases. Such tests shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5 and 45CSR16 or other equivalent EPA approved method approved by the ~~Director~~ Secretary.

~~6.1.a~~ 6.1.1. All such tests shall be conducted under such reasonable operating conditions as the ~~Director~~ Secretary may specify. The ~~Director~~ Secretary~~, or his duly authorized representative,~~ may at his option witness or conduct such stack tests. Should the ~~Director~~ 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 ~~Director~~ 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.

6.2. At such time as the ~~Director~~ Secretary may request, the operator of the plant will submit data, including, but not limited to, on type, sizing and quantity of the aggregate used and the hours of operation.

6.3. Any stack serving a hot mix asphalt plant shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

§45-3-7. ~~Variance~~ Reserved.

~~7.1. Due to unavoidable malfunctions of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed two (2) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction or within such other time period as the Director may specify. When parts are not available for repair the Director may grant an extension of time for a period longer than two (2) days, but not to exceed ten (10) days.~~

§45-3-8. Circumvention.

8.1. No owner or operator subject to the provisions of this rule shall build, erect, install or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

§45-3-9. Inconsistency Between Rules.

9.1. In the event of any inconsistency between this rule and any other rule of the West Virginia ~~Division of Environmental Protection~~ Division of Air Quality, such inconsistency shall be resolved by the determination of the ~~Director~~ Secretary and such determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

TITLE 45
LEGISLATIVE RULE
~~DIVISION~~ DEPARTMENT OF ENVIRONMENTAL PROTECTION
~~OFFICE OF~~ AIR QUALITY

SERIES 5
~~TO PREVENT AND~~ CONTROL OF AIR POLLUTION FROM THE OPERATION OF COAL PREPARATION PLANTS, COAL HANDLING OPERATIONS AND COAL REFUSE DISPOSAL AREAS

§45-5-1. General.

1.1. Scope. -- ~~The purpose of this rule is to prevent and control air pollution~~ This rule establishes emission standards for particulate matter from the operation of coal preparation plants, coal handling operations and coal refuse disposal areas and sets forth permitting, monitoring, testing, recordkeeping and reporting requirements.

1.2. Authority. -- W. Va. Code ~~§22-5-1 et seq~~ §22-5-4.

1.3. Filing Date. -- ~~June 2, 2000.~~

1.4. Effective Date. -- ~~August 31, 2000~~.

1.5. ~~Repeal of Former Rule. -- This legislative rule repeals and replaces 45CSR1 "To Prevent and Control Air Pollution from Coal Refuse Disposal Areas" which was filed on January 1, 1965 and became effective on January 1, 1965.~~ Sunset provision. -- Does not apply.

~~1.6. Former Rules. -- This legislative rule amends 45CSR5 "To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations" which was filed on April 28, 1995 and became effective May 1, 1995~~.

§45-5-2. 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 gasborne particulate matter for the purpose of preventing or reducing particulate matter emissions into the open air.

2.3. "Air Table" means a device using a gaseous separating media for the primary purpose of improving the product quality.

2.4. "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).

2.5. "Coal Preparation Plant" means and includes any facility (excluding underground mining operations) that prepares coal by one or more of the following processes: screening, breaking, crushing,

wet or dry cleaning and thermal drying, and further such definition of a coal preparation plant shall include all coal handling operations associated with the processes described above, but shall not include:

~~2.4.a~~2.5.1. Any facility that is designed to process less than two hundred (200) tons of coal per day;

~~2.4.b~~ 2.5.2. Any facility or equipment subject to the requirements of 45CSR2, 45CSR3, 45CSR7; or

~~2.4.c~~ 2.5.3. Any facility which would be defined as a coal preparation plant solely because it incorporates a stationary grizzly or scalping screen to separate oversized refuse from coal.

~~2.5~~ 2.6. "Coal Refuse" means any combination of carbonaceous waste with rock, shale, culm boney, slate, clay and related materials associated with or near a coal seam, which are either brought above ground or otherwise removed from the mine in the process of mining coal, or which are separated from coal during the cleaning or preparation operations: Provided that coal refuse shall not mean overburden from strip-mining operations or incombustible materials from mine shafts and mine tunnels.

~~2.6~~ 2.7. "Coal Refuse Disposal Area" means any area or plot of land which is used as a place for dumping, storage or disposal of coal refuse. A coal refuse pile must be contained in a single coal refuse disposal area; however, a coal refuse disposal area may contain two (2) or more coal refuse piles if the area is so designated.

~~2.7~~ 2.8. "Coal Refuse Pile" means any deposit of coal refuse on the surface which is intended as a permanent disposal of or long-term storage of such material. Continuous deposits of coal refuse and deposits, which are not separated, shall be considered a single coal refuse pile.

~~2.8. "Director" means the director of the division of environmental protection or such other person to whom the director has delegated authority or duties pursuant to W. Va. Code §§ 22-1-6 or 22-1-8.~~

2.9. ~~"Division of Environmental Protection" or "DEP" means that Division of the West Virginia Division of Environmental Protection which is created by the provisions of W. Va. Code §22-1-1, et seq~~ Reserved.

2.10. "Fuel" means a fuel such as a solid, gaseous or liquid fuel which is fired in fuel burning equipment.

2.11. "Fuel Burning Equipment" means and includes 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 dryer.

2.12. "Fugitive Dust" means any ~~and all~~ particulate matter generated, which, if not confined or suppressed by water or chemical treatment, would be emitted directly into the open air from points other than a stack outlet.

2.13. "Fugitive Dust Control System" means any equipment or method used to confine, collect and dispose of fugitive dust, including, but not limited to, hoods, bins, duct work, fans, air pollution control equipment and equipment used to prevent or minimize the emission of fugitive dust by water or chemical treatment.

2.14. "Handling Operation" means and includes, but is not limited to, all coal grinding, crushing, picking, screening, conveying, storing and stockpiling operations not associated with a coal preparation

plant as defined in this rule, and which are not also subject to the emission control requirements of 45CSR2, 45CSR3 or 45CSR7.

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

~~2.15.~~ 2.16. "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

~~2.16.~~ 2.17. "Operation of a Coal Refuse Disposal Area" means the act of disposing, depositing or dumping of coal refuse upon a coal refuse disposal area or of physically altering the coal refuse disposal area, except by removal of ashes, red dog or other material from a burned-out coal refuse pile.

~~2.17.~~ 2.18. "Particulate Matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

~~2.18.~~ 2.19. "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.

~~2.19.~~ 2.20. "Plant" means and includes all equipment and grounds utilized in an integral complex for coal preparation and associated handling.

~~2.20.~~ 2.21. "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.

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

2.23. "Stack", for the purpose of this rule, means, but is not 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.

~~2.21.~~ 2.24. "Standard Cubic Foot" means one (1) cubic foot of dry gas, measured at standard conditions of sixty-eight degrees Fahrenheit (68° F) and 29.92 inches of mercury column.

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

~~2.22.~~ 2.26. "Thermal Dryer" means a device using fuel burning equipment for the primary purpose of reducing the moisture content of coal.

~~2.23.~~ 2.27. 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.

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

3.1. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any stack which is twenty percent (20%) opacity or greater, except as noted in subsection 3.2.

3.2. The provisions of subsection 3.1 shall not apply to particulate matter emitted, which is less than sixty percent (60%) 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 subsections 3.1 and 3.2 shall not apply to particulate matter emitted, which is less than sixty percent (60%) 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 dryer.

3.4. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.

§45-5-4. Control and Prohibition of Particulate Emissions From Coal Thermal Drying Operations of a Coal Preparation Plant.

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

~~4.1.a~~ 4.1.1. Thermal dryers which commenced construction or modification after October 24, 1974, shall meet emission limitations set forth under 45CSR16.

~~4.1.b~~ 4.1.2. Thermal dryers installed before October 24, 1974, that are not subject to subdivision ~~4.1.a~~ 4.1.1, shall comply with the limitations and requirements set forth in ~~the~~ Appendix 45-5 to this rule.

4.2. No person shall circumvent this rule by adding additional gas to any dryer exhaust or group of dryer exhausts for the purpose of reducing the grain loading.

4.3. No person shall cause, suffer, allow or permit the exhaust gases from a thermal dryer 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 dryer 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 a plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, the stack emission rate and good engineering practice as set forth in 45CSR20.

§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 rule by adding additional gas to any air table exhaust or group of air table exhausts for the purpose of reducing the grain loading.

§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 coal preparation 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 a coal preparation 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. Fugitive emissions from coal preparation plants and handling 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 W. Va. Code §22-5-3 relating to statutory air pollution.

6.4. Owners or operators of coal handling operations and coal 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:

~~6.4.a~~ 6.4.1. Particulate matter mass emissions shall not exceed 0.001 pounds per ton of coal input from any coal crusher or coal screening operation.

~~6.4.b~~ 6.4.2. Visible particulate emissions shall not exceed five percent (5%) opacity from any coal crushing or screening operation or from any coal conveying system.

~~6.4.c~~ 6.4.3. 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 ~~Director~~ Secretary and such a plan shall be embodied in a consent order approved by the ~~Director~~ Secretary . ~~For plants or handling operations in existence on the effective date of this rule, the plan shall be submitted to the Director on or before May 1, 1993.~~ For plants or handling operations not in existence on ~~the effective date of this rule~~ August 31, 2000, the plan shall be deemed filed upon filing of an application for construction, modification or relocation pursuant to section 10.

~~6.4.c.1~~ 6.4.3.a. 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 ninety-five percent (95%) as determined by methods and procedures in the document, "Control of Open Fugitive Dust Sources" (EPA 450/3-88-008, September, 1988) or other measures which achieve equivalent emission reductions as determined in accordance with the reference document.

~~6.4.c.2~~ 6.4.3.b. Provide for daily monitoring and recordkeeping and not less than monthly reporting of dust control measures to the ~~Director~~ Secretary 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.

~~6.4.c.3~~ 6.4.3.c. 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 reentrainment.

~~6.4.c.4~~ 6.4.3.d. Provide that the wheels, tires and underbodies of all coal trucks be fully cleaned by an automatic washing system or equivalently effective 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.

~~6.4.c.5~~ 6.4.3.e. 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 paragraph ~~6.4.c.1~~ 6.4.3.a.

~~6.4.c.6~~ 6.4.3.f. 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~~ Secretary.

~~6.4.c.7~~ 6.4.3.g. 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.

~~6.4.d~~ 6.4.4. The ~~Director~~ Secretary may consider or incorporate exceptional provisions to the fugitive dust control plans or schedules approved pursuant to subdivision ~~6.4.c~~ 6.4.3 taking into consideration such conditions as rainfall, snow cover and freezing weather.

§45-5-7. Standards for Coal Refuse Disposal Areas.

7.1. ~~In order to~~ To prevent and control air pollution from coal refuse disposal areas, the operation of coal refuse disposal areas shall be conducted in accordance with the standards established by this section.

7.2. Coal refuse is not to be deposited on any coal refuse disposal area unless the coal refuse is deposited in such a manner as to minimize the possibility of ignition of the coal refuse.

7.3. Coal refuse disposal areas shall not be so located with respect to mine openings, tipples or other mine buildings, unprotected coal outcrops or steam lines, that these external factors will contribute to the ignition of the coal refuse on such coal refuse disposal areas.

7.4. Vegetation and combustible materials shall not be left on the ground at the site where a coal refuse pile is to be established, unless it is rendered inert before coal refuse is deposited on such site.

7.5. Coal refuse shall not be dumped or deposited on a coal refuse pile known to be burning, except for the purpose of controlling the fire or where the additional coal refuse will not tend to ignite or where such dumping will not result in statutory air pollution.

7.6. Materials with low ignition points used in the production or preparation of coal, including, but not limited to, wood, brattice cloth, waste paper, rags, oil and grease, shall not be deposited on any coal refuse disposal area or in such proximity as will reasonably contribute to the ignition of a coal refuse disposal area.

7.7. Garbage, trash, household refuse and like materials shall not be deposited on or near any coal refuse disposal area.

7.8. The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited.

§45-5-8. Burning Coal Refuse Disposal Areas.

8.1. Each burning coal refuse disposal area which allegedly causes air pollution shall be investigated

by the ~~Director~~ Secretary.

8.2. Each burning coal refuse disposal area which causes air pollution shall be considered on an individual basis by the ~~Director~~ Secretary. Consistent with the declaration of policy and purpose set forth in W. Va. Code §22-5-1, as well as the established facts and circumstances of the particular case, the ~~Director~~ Secretary shall determine and may order the effectuation of those air pollution control measures which are adequate for each such coal refuse disposal area.

8.3. With respect to all burning coal refuse disposal areas, the person responsible for the coal refuse disposal areas or the land on which the coal refuse disposal areas are located shall use due diligence to control air pollution from the coal refuse disposal areas. Consistent with the declaration of policy and purpose set forth in W. Va. Code §22-5-1, the ~~Director~~ Secretary shall determine what constitutes due diligence with respect to each such burning coal refuse disposal area. When a study of any burning coal refuse disposal area by the ~~Director~~ Secretary establishes that air pollution exists or may be created, the person responsible for the coal refuse disposal area or the land on which the coal refuse disposal area is located shall submit to the ~~Director~~ Secretary a report setting forth satisfactory methods and procedures to eliminate, prevent or reduce the air pollution. The report shall be submitted within such time as the ~~Director~~ Secretary shall specify. The report for the elimination, prevention or reduction of air pollution shall contain sufficient information, including, completion dates, to establish that the corrective measures can be executed with due diligence. If approved by the ~~Director~~ Secretary, the corrective measures and completion dates shall be embodied in a consent order issued pursuant to W. Va. Code §§ 22-5-1 et seq. If the report is not submitted as requested or if the ~~Director~~ Secretary determines that the methods and procedures set forth in the report are not adequate to reasonably control the air pollution he or she shall issue an order requiring the elimination, prevention or reduction of the air pollution.

§45-5-9. Monitoring of Operations.

9.1. Thermal dryers subject to subsection 4.1 shall meet the monitoring and calibration requirements set forth under 45CSR16.

9.2. The owner or operator of a thermal dryer subject to subdivision ~~4.1.b~~ 4.1.2 shall install, calibrate, maintain and continuously operate monitoring devices, as set forth in ~~the~~ Appendix 45-5 to this rule.

§45-5-10. Construction, Modification and Relocation Permits.

10.1. 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 W. Va. Code §§22-5-1 et seq. and the ~~Director's~~ Secretary's rules for review and permitting of new or modified sources, except that coal handling operations which are not "stationary sources" as defined by subdivision ~~2.25.b~~ 2.24.2 of 45CSR13 are not required to obtain a permit under 45CSR13. The terms "construction", "modification" and "relocation" shall have the meaning ascribed to them in 45CSR13.

§45-5-11. Operating Permits.

11.1. The owner or operator of each coal preparation plant shall submit a complete application for an operating permit to the ~~Director~~ Secretary.

~~11.1.a~~ 11.1.1. The operating permit application shall contain sufficient information as in the judgement of the ~~Director~~ Secretary is necessary to enable him to determine whether the preparation plant and air pollution control equipment or measures comply with this rule and other applicable rules. Information to be furnished in the permit application shall include but not be limited to:

~~11.1.a.1~~ 11.1.1.a. A description of the nature, location, design capacity and typical and maximum operating schedules of the facility, including, specifications and drawings showing its design and plant lay-out; and

~~11.1.a.2~~ 11.1.1.b. A detailed description as to what systems of continuous emission reduction are employed by the facility, emission estimates and any other information as necessary to determine the required emissions control technology or measures that must be applied.

11.2. It shall be unlawful for any person to operate a coal preparation plant, which was in existence on May 1, 1995, that has not submitted a completed operating permit application to the ~~Director~~ Secretary in accordance with this section by August 1, 1995.

11.3. Any owner or operator of a coal preparation plant which is constructed, modified or relocated after May 1, 1995 pursuant to a preconstruction permit as provided under section 10, shall submit a completed application for a new operating permit, or an amendment to an existing permit in the case of a modification, within sixty (60) days of the date of start-up of such new facility, modification or relocation~~, or within ninety (90) days of the effective date of this rule, whichever comes later~~.

11.4. No owner or operator of a coal preparation plant shall be deemed to be in violation of this section during the pendency of the ~~Director~~ Secretary 's operating permit review period, provided that such owner or operator has submitted a complete operating permit application in accordance with this section and is otherwise in compliance with the Code and the rules promulgated thereunder.

~~11.4.a~~ 11.4.1. The owner or operator shall expeditiously correct any deficiencies and errors found in the permit application or provide necessary omitted or supplemental information identified to the owner or operator by the ~~Director~~ Secretary ~~or his or her duly authorized representative~~.

~~11.4.b~~ 11.4.2. The owner or operator shall submit a written and certified response to any written Notice of Deficiency (NOD) forwarded by the ~~Director~~ Secretary ~~or his or her duly authorized representative~~ within twenty (20) days of receipt of the NOD.

11.5. If, after any investigation made by the ~~Director~~ Secretary~~, or his designated representative~~, the ~~Director~~ Secretary shall be of the opinion that an operating permit holder is violating the provisions of this rule, the ~~Director~~ Secretary may issue an order suspending or revoking the operating permit in the manner provided under W. Va. Code §22-5-5. Such order shall be considered a cease and desist order for purposes of administrative and judicial review. Operating permits revoked or suspended may be renewed by the ~~Director~~ Secretary upon a showing of compliance with the provisions of this rule, the permit, the Code and all other rules.

11.6. The possession of an operating 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 rule or W. Va. Code §22-5-1 et seq.; provided:

~~11.6.a~~ 11.6.1. That the owner or operator of a source for which an operating permit is required under this rule and under 45CSR30 shall only be required to submit an operating permit application and to obtain an operating permit pursuant to 45CSR30; and

~~11.6.b~~ 11.6.2. That the owner or operator of a source for which an operating permit is required under this rule who chooses to obtain a general permit relating to coal preparation plants and coal handling operations pursuant to 45CSR13 shall only be required to submit the required registration and obtain

coverage under the general permit.

11.7. Upon determination by the ~~Director~~ Secretary that the applicant for a permit for a coal preparation plant may violate applicable emissions standards or other applicable rules or may cause violations of ambient air standards, the ~~Director~~ Secretary shall issue an order denying an operating permit for such facility in the manner provided under W. Va. Code §22-5-12. Such order shall be considered a cease and desist order for purposes of administrative and judicial review.

11.8. The ~~Director~~ Secretary shall not issue an operating permit to any person who has not paid in full all fees required under 45CSR22 or any other applicable fee rule. Failure to pay applicable fees shall be cause for operating permit denial, suspension or revocation, provided that the payment of fees required under 45CSR22 and possession of a 45CSR22 certificate to operate shall not constitute possession of a valid operating permit as required under this rule.

11.9. Operating permits issued under this rule shall be continuous unless revised, renewed, revoked, suspended or otherwise changed under the provisions of this rule or any other applicable legislative rule.

11.10. If not previously submitted, a complete application for an operating permit shall be submitted to the ~~Director~~ Secretary at least sixty (60) days prior to the date that an inactive plant subject to this section is to be reactivated.

§45-5-12. Reporting and Testing.

12.1. At such reasonable times as the ~~Director~~ Secretary 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 and mass emission rates of particulate matter. 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 Part 60, Appendix A and 45CSR16 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~~ Secretary 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~~ Secretary 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.

12.2. The ~~Director~~ Secretary~~, 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 12.1.

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

12.4. 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 Part 60, Appendix A and 45CSR16.

12.5. Nothing in subsection 12.4, however, shall preclude any owner or operator or the ~~Director~~ Secretary from using opacity data from a properly installed, calibrated, maintained and operated continuous opacity monitor from being used as evidence to demonstrate compliance or a violation of visible emission requirements of this rule.

12.6. Any stack venting thermal dryer 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.

§45-5-13. ~~Variance~~ Reserved.

~~13.1. Due to unavoidable malfunctions of equipment, emissions exceeding those set forth in this rule may be permitted by the 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.~~

~~13.2. In the case of major equipment failure, an additional time period may be granted by the Director provided a corrective program including a final compliance date is submitted to the Director by the applicant. Upon determination by the Director that a variance beyond ten (10) days should be granted, the Director shall cause to be published in the State Register and within the county wherein the source lies and all contiguous West Virginia counties a Class I legal advertisement of notice that such a variance has been granted. Within fifteen (15) days of the publication of the later of either the State Register notice or Class I legal advertisement notice, any person whose interest may be affected by the granting of such variance may request a conference with the Director to show cause why the variance should be terminated. After such conference or, if no conference is requested, fifteen (15) days after publication of the later of either the State Register notice or Class I legal advertisement notice, the Director may issue an order terminating such variance. If the Director determines that additional time shall not be granted the Director shall provide prompt notice in writing to the applicant of this determination.~~

~~13.3. Any person, whose interest may be affected by the granting of a variance in excess of ten (10) days and who requests a conference with the Director pursuant to the provisions of subsection 13.2, may appeal an order of variance to the Air Quality Board in the same manner as appeals of cease and desist orders under the provisions of W. Va. Code §22-5-5. Any person, whose interest may be affected by the termination of a variance or the denial of a variance in excess of ten (10) days, pursuant to the provisions of subsection 13.2, may appeal such action to the Air Quality Board in the same manner as appeals of cease and desist orders under the provisions of W. Va. Code §22-5-5.~~

§45-5-14. Transfer of Permits.

14.1. Any person holding a valid operating permit under this rule may request that the ~~Director~~ Secretary transfer the operating permit to another person providing the following conditions are met:

~~14.1.a~~ 14.1.1. The permit holder describes, in writing, the reasons for or circumstances of the transfer, lists all relevant air quality permit numbers and certifies that the facility to which the permit pertains is in compliance with all air permits issued by the ~~Director~~ Secretary and all applicable rules of the ~~Director~~ Secretary;

~~14.1.b~~ 14.1.2. The transferee identifies and acknowledges, in writing, that it accepts and will comply with all permit(s) issued by the ~~Director~~ Secretary as identified in the notice of transfer filed pursuant to subdivision ~~14.1.a~~ 14.1.1 and that it will comply with all applicable rules; and

~~14.1.c~~ 14.1.3. The permit holder or transferee pays, at the time of the request for transfer, a transfer fee of two hundred dollars ($200) payable to the Air Pollution Control Fund. Such payment satisfies the requirement of subsection 4.2 of 45CSR22.

14.2. Once the permittee and proposed transferee have complied with subsection 14.1, such a transfer

shall be deemed approved unless the ~~Director~~ Secretary notifies the permittee and proposed transferee in writing, within thirty (30) days, that:

~~14.2.a~~ 14.2.1. Additional information is required in order to process and act on the transfer; or

~~14.2.b~~ 14.2.2. Such a transfer is denied, in which event the supporting findings of fact and legal authority for said denial shall be set forth in writing.

~~14.2.b.1~~ 14.2.2.a. Any such denial may be appealed in the same manner as an appeal from permit denial under W. Va. Code §22-5-14 and applicable rules.

§45-5-15 Alternative Emission Limitations.

15.1. Any owner or operator that cannot meet the emission limitations established in sections 3, 4 or 5 during periods of startup or shutdown shall request an alternative emission limitation pursuant to 45CSR1.

~~§45-5-15~~§45-5-16. Inconsistency Between Rules.

~~15.1~~16.1. In the event of any inconsistency between this rule and Appendix 45-5 and any other existing rule of the ~~West Virginia Division of Environmental Protection~~ Division of Air Quality, such inconsistency shall be resolved by the determination of the ~~Director~~ Secretary and such determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

Appendix 45-5
~~Particulate Emission Limitations and Operational Monitoring Requirements Applicable to Thermal Dryers Installed Before October 25, 1974~~

1.0. Particulate Emission Limitations Applicable to Thermal Dryers Installed Before October 25, 1974.

1.1. Thermal dryers installed on or before March1, 1970, shall not exceed the emission limitations of ~~the following t~~ Table 45-5-A:

Table 45-5-A

Total Plant Volumetric Flow Rate (Standard Cubic Feet Per Minute)	Maximum Allowable Particulate Loading Per Dryer (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

1.2. Thermal dryers installed after March 1, 1970, but before October 24, 1974 shall not exceed the emission limitations of ~~the following t~~Table 45-5-B:

Table 45-5-B

Total Plant Volumetric Flow Rate (Standard Cubic Feet Per Minute)	Maximum Allowable Particulate Loading Per Dryer (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

1.3. For the volumetric flow rate between any two consecutive volumetric flow rates stated in subsection 1.1. and subsection 1.2. of ~~this~~ Appendix 45-5, 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 dryers at one plant location. This value shall be determined by methods which are acceptable to the ~~Director~~ Secretary.

1.4. When modifications were made to plants after March 1, 1970 but before October 24, 1974, that resulted in a significant increase in the total gas volume passing through a thermal dryer(s), said dryer(s) will be subject to the emission limitations of subsection 1.2. of ~~this~~ Appendix 45-5 even though such modifications do not include the installation of a new thermal dryer(s).

2.0. Monitoring of Operations Applicable to Thermal Dryers Installed Before October 25, 1974.

2.1. A monitoring device for the continuous measurement of the temperature of the gas stream at the exit of the thermal dryer. The monitoring device is to be certified by the manufacturer to be accurate within plus or minus three degrees Fahrenheit (±3°F).

2.2. For thermal dryers that use venturi scrubber emissions control equipment:

~~2.2.a~~ 2.2.1. 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 (± 1 in.) water gauge.

~~2.2.b~~ 2.2.2. 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 (±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~~ Secretary.

2.3. All monitoring devices required under subsection 2.2. of ~~this~~ Appendix 45-5 are to be recalibrated at least once annually.

TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

SERIES 6
CONTROL OF AIR POLLUTION FROM COMBUSTION OF REFUSE

§45-6-1. General.

1.1. Scope.

~~1.1.a~~ 1.1.1. This rule establishes emission standards for particulate matter and requirements for activities involving incineration of refuse which are not subject to, or are exempted from regulation under a federal counterpart for specific combustion sources. This rule also prohibits (with limited exception) open burning and sets forth the registration, permitting, reporting, testing, emergency, natural disaster and exemption provisions for activities involving the combustion of refuse and land clearing debris.

~~1.1.b~~ 1.1.2. Neither compliance with the provisions of this rule nor the absence of specific language to cover particular situations constitutes approval or implies consent or condonement of any emission which is released in any locality in such manner or amount as to cause or contribute to statutory air pollution. Neither does it exempt nor excuse anyone from complying with other applicable laws, ordinances, regulations or orders of governmental entities having jurisdiction over combustion of refuse or open burning.

~~1.1.c~~ 1.1.3. All persons engaged in any form of combustion of refuse shall give careful consideration to the effects of the resultant emissions on the air quality of the area(s) affected by such burning. Important considerations include, but are not limited to, the location and time of burning, the type of material being burned and the potential emissions and the prevailing meteorological conditions. Persons failing to give due consideration to these factors will be in violation of this rule.

~~1.1.d~~ 1.1.4. It is the intent of the Secretary that all incorporated areas and other local governmental entities prohibit open burning and develop alternative methods for disposal of refuse. If such action is not taken in any air basin, air quality control region or other such areas as the Secretary may designate, then such action may be taken by the Secretary to ensure compliance with air quality standards.

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

1.3. Filing Date. -- ~~April 23, 2008~~.

1.4. Effective Date. -- ~~June 1, 2008~~.

1.5. ~~Former Rules. -- This legislative rule amends 45CSR6 "To Prevent and Control Air Pollution From Combustion of Refuse" which was filed on June 21, 2001, and which became effective July 21, 2001~~. Sunset provision. -- Does not apply.

§45-6-2. Definitions.

2.1. "Agency Administrator" means a National Park Service Park Superintendent, Bureau of Indian Affairs Agency Superintendent, U.S. Forest Service Forest Supervisor, Bureau of Land Management District Manager, Fish and Wildlife Service Refuge Manager, State Forest Officer, Fire Chief, or an authorized designee thereof.

2.2. "Air Curtain Incinerator" means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. (Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.)

2.3. "Air Pollution" or "statutory air pollution" shall have the meaning ascribed to it in W.Va. Code §22-5-2.

2.4. "Air Pollution Control Equipment" means any equipment used for collecting or converting gasborne particulate or gaseous materials for the purpose of preventing or reducing emission of these materials into the open air.

2.5. "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).

~~2.5~~ 2.6. "CFR" means the Code of Federal Regulations published by the Office of the Federal Register, National Archives and Records Service, General Services Administration.

~~2.6~~ 2.7. "Flare" or 'flare stack' means and includes a combustion source normally comprised of, but not limited to, a length of stack or pipe which has an attached burner mechanism designed to destroy liquid or gaseous material with an open or semi-enclosed flame.

~~2.7~~ 2.8. "Incineration" means the destruction of combustible refuse by burning in a furnace designed for that purpose. For the purposes of this rule, the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack, thermal oxidizer or thermal catalytic oxidizer stack shall be considered incineration.

~~2.8~~ 2.9. "Incinerator" means any device used to accomplish incineration.

~~2.9~~ 2.10. "Incinerator Capacity" shall be the manufacturer's or designer's guaranteed maximum charging rate or such other rate as may be determined by the Secretary in accordance with good engineering practices. In case of conflict the determination by the Secretary shall govern. For the purpose of this rule, the total of the capacities of all furnaces within one system shall be considered as the "Incinerator Capacity".

~~2.10~~ 2.11. "Industrial Waste Incinerator" means an incinerator which is used to incinerate gaseous, liquid, semi-liquid and/or solid by-product waste from industrial sources.

~~2.11~~ 2.12. "Land Clearing Debris" means that vegetative material generated by clearing of land for purposes of preparation for development, construction, mining or other such activity. Non-vegetative refuse is not included in this meaning.

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

~~2.12~~ 2.14. "Opacity" means the degree to which smoke or particulate matter emissions reduce the transmission of light and obscure the view of an object in the background.

~~2.13~~ 2.15. "Open Burning" means the combustion of refuse whereby the gaseous products of combustion are not conveyed through man-made means from one point to another and are discharged directly to the open air. This term includes 'burn barrels', but does not include air curtain incinerators.

~~2.14~~ 2.16. "Particulate Matter" means any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

~~2.15~~ 2.17. "Pathological Waste " means waste material consisting of only human or animal remains, anatomical parts or tissue, the bags or containers used to collect and transport the waste material, and animal bedding (if applicable).

~~2.16~~ 2.18. "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.

~~2.17~~ 2.19. "Prescribed burning" means the controlled application of fire to vegetation under specified environmental conditions and precautionary measures, which allows the fire to be confined to a predetermined area for the purpose of accomplishing specifically planned wildlife and forest management objectives.

~~2.18~~ 2.20. "Refuse" means the useless, unwanted or discarded solid, liquid or gaseous waste materials resulting from community, commercial, industrial or citizen activities.

~~2.19~~ 2.21. "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.

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

~~2.20~~ 2.23. "Sewage Sludge Incinerator" means an incinerator which is used to incinerate the sludge produced by municipal or industrial sewage treatment plants.

~~2.21~~ 2.24. "Smoke" means small gasborne and airborne particles emitted as the result of the combustion of refuse in sufficient numbers to be visible.

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

~~2.22~~ 2.26. 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.

§45-6-3. Open Burning Prohibited.

3.1. General Provisions. -- The open burning of refuse by any person is prohibited except for the following exceptions:

~~3.1.a~~ 3.1.1. Vegetation grown on the premises of a home or farm, provided that there is compliance with the provisions of subdivision ~~1.1.b~~ 1.1.2, and the health, safety, comfort and property of persons are protected from the effects of such burning.

~~3.1.b~~ 3.1.2. Fires set for the purpose of bona fide instruction and training of public and industrial employees and members of volunteer fire departments in the methods of fighting fires, provided that approval to conduct such burning is received from the Secretary. Burning of structures for fire training is subject to specific requirements of 45CSR34 and 40 CFR Part 61 Subpart M.

~~3.1.c~~ 3.1.3. Open burning of land clearing debris provided that all the following conditions are met:

~~3.1.c.1~~ 3.1.3.a. There is no practical alternate method for the disposal of the material to be burned;

~~3.1.c.2~~ 3.1.3.b. The health, safety, comfort and property of persons are protected from the effects of such burning; and

~~3.1.c.3~~ 3.1.3.c. Approval to conduct such burning is received from the Secretary.

~~3.1.d~~ 3.1.4. Open burning of propellant and explosive wastes, provided that the open burning is conducted in accordance with 45CSR25.

~~3.1.e~~ 3.1.5. Prescribed burning, in accordance with a written prescribed fire plan approved by the West Virginia Division of Forestry, or in the case of federal lands, approved by the appropriate Agency Administrator and endorsed by the West Virginia Division of Forestry, prior to ignition for the following wildlife, forest and associated land management purposes:

~~3.1.e.1~~ 3.1.5.a. To improve forest health;

~~3.1.e.2~~ 3.1.5.b. To maintain and restore wildlife habitat;

~~3.1.e.3~~ 3.1.5.c. To reduce forest fuels and minimize the effect of wildfires;

~~3.1.e.4~~ 3.1.5.d. To prepare land for planting or seeding (site preparation);

~~3.1.e.5~~ 3.1.5.e. To restore fire-dependent forest ecosystems; and

~~3.1.e.6~~ 3.1.5.f. To integrate with other control methods for use in eradication of non-native invasive plants.

3.2. The exemptions listed in subsection 3.1 are subject to the following stipulation:

~~3.2.a~~ 3.2.1. Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such

means as the Secretary may deem necessary and feasible.

§45-6-4. Emission Standards for Incinerators and Incineration.

4.1. No person shall cause or allow particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table ~~I~~ 45-6 below:

Table ~~I~~45-6: Factor, F, for Determining Maximum Allowable Particulate Emissions.

Incinerator Capacity	Factor F
Less than 15,000 lbs/hr	5.43
15,000 lbs/hr or greater	2.72

4.2. 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), the City of Fairmont and those portions of Union and Winfield Magisterial Districts west of I-79 (Marion County), no person shall cause or allow the operation of any incinerator during the period starting one (1) hour before sunset and extending until two (2) hours after sunrise. This subsection shall not apply to the operation of flares, pathological waste, industrial, or sewage sludge incinerators.

4.3. Emission of Visible Particulate Matter. -- No person shall cause or allow emission of smoke into the atmosphere from any incinerator which is twenty percent (20%) opacity or greater.

4.4. The provisions of subsection 4.3 shall not apply to smoke which is less than forty percent (40%) opacity, for a period or periods aggregating no more than eight (8) minutes per start-up, or six (6) minutes in any sixty (60)-minute period for stoking operations.

4.5. No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.

4.6. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

4.7. Incineration of Pathological Waste. -- Persons responsible for the incineration of pathological waste shall give the utmost care and consideration to the effects of the emissions resulting from such activities. Evaluation of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Secretary, working in conjunction with other appropriate governmental agencies.

4.8. Temporary Air Curtain Incinerators. -- Air curtain incinerators that are temporarily sited and operated only for the disposal of on-site land clearing debris shall not be subject to the emission standards of this rule or to the preconstruction permitting requirements of 45CSR13, provided that the following conditions are met:

~~4.8.a~~ 4.8.1. There is no practical alternative method for the disposal of the material to be incinerated;

~~4.8.b~~ 4.8.2. The health, safety, comfort and property of persons are protected from the effects of

such incineration;

~~4.8.c~~ 4.8.3. Approval to conduct such incineration is received from the Secretary; and

~~4.8.d~~ 4.8.4. The temporary air curtain incinerator is not subject to the requirements of section 9 of this rule, 45CSR14, 45CSR18, 45CSR19, or 45CSR30.

4.9. Except for flares and temporary air curtain incinerators under subsection 4.8, the owner or operator of an incinerator shall post operating instructions for the incinerator clearly visible by the operator from the incinerator charging area. Such posting shall provide instruction for proper operation in order to prevent a violation of this rule.

4.10. The owner and operator of an incinerator shall design, construct and operate the facility in accordance with all applicable rules promulgated by the Secretary including, but not limited to, this rule, 45CSR13, 45CSR14, 45CSR18, 45CSR19, 45CSR25, 45CSR30 and 45CSR34, as applicable.

§45-6-5. ~~Registration~~ Reserved.

~~5.1. Within thirty (30) days after the effective date of this rule, all persons owning and/or operating an incinerator in West Virginia shall have registered with the Secretary on forms made available by the Secretary, 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 such other reasonable information as the Secretary may require including, but not limited to, make, model, capacity, operating temperature, fuel used, stack parameters and description of air pollution control equipment.~~

§45-6-6. Permits.

6.1. Except for temporary air curtain incinerators under subsection 4.8, no person shall construct, modify or relocate any incinerator without first obtaining a permit in accordance with the provisions of W.Va. Code §22-5-1 et seq., 45CSR13, 45CSR14, 45CSR19, and 45CSR30, as applicable, provided that, and notwithstanding the provisions of 45CSR13, flares and flare stacks meeting the following requirements shall not be required to obtain a preconstruction permit under 45CSR13:

~~6.1.a~~ 6.1.1. Temporary flares used in conjunction with maintenance and repair of natural gas pipelines, combusting only the gas contained therein, which meet the following conditions:

~~6.1.a.1~~ 6.1.1.a. The flare or flare stack exists on-site for a cumulative period of less than thirty (30) days in any twelve (12) consecutive month period;

~~6.1.a.2~~ 6.1.1.b. The maximum emissions from the flare or flare stack, based on the potential to emit for the period of time that the flare or flare stack is in use, do not exceed the threshold amounts specified in the definitions of "stationary source" and "modification" in 45CSR13;

~~6.1.a.3~~ 6.1.1.c. The flare or flare stack is not subject to the requirements of 45CSR14, 45CSR16, 45CSR19, 45CSR25, 45CSR30 or 45CSR34; and

~~6.1.a.4~~ 6.1.1.d. The source maintains records of emissions, monitoring results or other records sufficient to determine compliance with the requirements of paragraphs ~~6.1.a.1~~ 6.1.1.a through ~~6.1.a.3~~ 6.1.1.c for a minimum period of three (3) years and makes such records available upon the Secretary's

request.

~~6.1.b~~ 6.1.2. Temporary flares, other than those identified in subdivision ~~6.1.a~~ 6.1.1, which meet the following conditions:

~~6.1.b.1~~ 6.1.2.a. The flare or flare stack exists on-site for a cumulative period of less than ten (10) days in any twelve (12) consecutive month period;

~~6.1.b.2~~ 6.1.2.b. The maximum emissions from the flare or flare stack, based on the potential to emit for the period of time that the flare or flare stack is in use, do not exceed the threshold amounts specified in the definitions of "stationary source" and "modification" in 45CSR13;

~~6.1.b.3~~ 6.1.2.c. The flare or flare stack is not subject to the requirements of 45CSR14, 45CSR16, 45CSR19, 45CSR25, 45CSR30 or 45CSR34;

~~6.1.b.4~~ 6.1.2.d. The flare or flare stack meets all of the general control device requirements of 40 CFR §60.18 and 45CSR16 including, but not limited to, the requirement to monitor the flare to ensure it is operated and maintained in conformance with its design and the opacity standard in 40 CFR §60.18(c)(1);

~~6.1.b.5~~ 6.1.2.e. The flare or flare stack is designed and operated in a manner to prevent violations of any national ambient air quality standard;

~~6.1.b.6~~ 6.1.2.f. The source notifies the Secretary within ten (10) working days of locating any flare or flare stack on-site, which notification shall include the location and anticipated duration that such flare will remain on-site; and

~~6.1.b.7~~ 6.1.2.g. The source maintains records of emissions, monitoring results or other records sufficient to determine compliance with the requirements of paragraphs ~~6.1.b.1~~ 6.1.2.a through ~~6.1.b.6~~ 6.1.2.f for a minimum period of three (3) years and makes such records available upon the Secretary's request.

6.2. Nothing contained in this rule shall be construed or inferred to mean that permit requirements in accordance with applicable rules shall be in any way limited or inapplicable, including but not limited to the permitting requirements under 45CSR13, 45CSR14, 45CSR19, 45CSR25 and 45CSR30.

§45-6-7. Reports and Testing.

7.1. At such reasonable times as the Secretary may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 and 45CSR16 or other equivalent U.S. EPA approved method approved by the Secretary, 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 the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her 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.

7.2. The Secretary may conduct such other tests as the Secretary may deem necessary to evaluate air pollution emissions other than those noted above.

§45-6-8. Variances.

8.1. If it can be demonstrated to the Secretary that the disposal of certain materials by any method other than burning leads to ground water contamination, then the person responsible for the disposal of such materials shall submit to the Secretary within sixty (60) days of such demonstration a program and preconstruction permit application under 45CSR13 leading to the construction of a suitable incinerator. If such program and permit is approved by the Secretary, the person shall not be in violation as long as such incineration is in accordance with the approved program and permit issued by the Secretary.

8.2. ~~Due to an unavoidable malfunction of equipment, emissions exceeding any limitation in this rule may be permitted by the Secretary for periods not to exceed five (5) days upon specific application to the Secretary. 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 Secretary provided a corrective program has been submitted by the owner or operator and approved by the Secretary.~~ Reserved.

§45-6-9. Alternative Emission Limitations

9.1. Any owner or operator that cannot meet the emission limitations established in section 4 during periods of startup or shutdown shall request an alternative emission limitation pursuant to 45CSR1.

~~§45-6-9~~ §45-6-10. Emergencies and Natural Disasters.

~~9.1~~ 10.1. In situations involving flood, tornado, ice storm, high winds or other natural disaster the Secretary may, based on demonstrated need, approve temporary open burning of vegetation, non-hazardous building debris and other non-hazardous debris from such natural disaster which would otherwise be subject to the requirements of sections 3 or 6, provided that:

~~9.1.a~~ 10.1.1. There is no practical alternative method for disposal of the material to be burned;

~~9.1.b~~ 10.1.2. The health, safety, comfort and property of persons are protected from such burning; and

~~9.1.c~~ 10.1.3. Approval to conduct such burning is received from the Secretary.

~~9.2~~ 10.2. During a declared state of emergency under Annex W of the West Virginia Emergency Operations Plan involving a highly contagious animal or poultry disease, the Secretary may approve temporary incineration or open burning of animal or poultry remains and related pathological waste which would otherwise be subject to the requirements of sections 3, 4 or 6 or 45CSR18, provided that:

~~9.2.a~~ 10.2.1. There is no practical alternative method for carcass and pathological waste disposal;

~~9.2.b~~ 10.2.2. The health, safety, comfort and property of persons are protected from such incineration or burning; and

~~9.2.c~~ 10.2.3. Approval to conduct such incineration or burning is received from the Secretary.

~~§45-6-10~~ §45-6-11. Exemptions.

~~10.1~~ 11.1. The following combustion units are subject to the requirements of 45CSR18 and shall be exempt from the requirements of this rule:

~~10.1.a~~11.1.1. Large municipal waste combustors, small municipal waste combustion units, hospital/ medical/ infectious waste incinerators, commercial and industrial solid waste incineration units, and other solid waste incineration units;

~~10.1.b~~11.1.2. Air curtain incinerators which are a distinct operating unit of any commercial or industrial facility;

~~10.1.c~~11.1.3. Any air curtain incinerator that burns less than 35 tons per day of municipal solid waste, or is located at an institutional facility burning any amount of institutional waste generated at that facility; and

~~10.1.d~~11.1.4. Incinerators or air curtain incinerators used on a temporary basis to combust vegetation or debris from disaster recovery or a state of emergency.

~~10.2~~11.2. Any pathological waste incinerator subject to 45CSR18 or 45CSR25 shall be exempt from the requirements of this rule.

~~10.3~~ 11.3. Any facility which incinerates low-level radioactive waste or chemotherapeutic waste shall be exempt from the requirements of this rule.

~~10.4~~ 11.4. Any hazardous waste combustor subject to 40 CFR Part 63, Subpart EEE and 45CSR34 shall be exempt from the requirements of this rule.

~~10.5~~ 11.5. Any hazardous waste incinerator subject to 40 CFR Parts 264 or 265 and 45CSR25 shall be exempt from the requirements of this rule.

~~§45-6-11~~ §45-6-12. Effect of the Rule.

~~11.1~~ 12.1. Nothing in this rule shall be construed to allow or permit the installation, establishment or construction of a new municipal or commercial solid waste facility utilizing incineration technology for the purpose of solid waste incineration in violation of W.Va. Code §22-15-19.

~~§45-6-12~~ §45-6-13. Inconsistency Between Rules.

~~12.1~~ 13.1. In the event of any inconsistency between this rule and any other rule of the ~~West Virginia Department of Environmental Protection~~ Division of Air Quality, the inconsistency shall be resolved by the determination of the Secretary and the determination shall be based upon the application of the more stringent provision, term, condition, method, or rule.

TITLE 45
LEGISLATIVE RULE
~~DIVISION~~ DEPARTMENT OF ENVIRONMENTAL PROTECTION
~~OFFICE OF~~ AIR QUALITY

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

§45-7-1. General.

1.1. Scope. -- ~~The purpose of this~~ This rule ~~is to prevent and control~~ establishes particulate matter ~~air pollution from~~ emission standards for manufacturing processes and associated operations and sets forth permitting, testing, reporting, and exemption provisions.

1.2. Authority. -- W. Va. Code ~~§22-5-1 et seq~~ §22-5-4.

1.3. Filing Date. -- ~~June 2, 2000~~.

1.4. Effective Date. -- ~~August 31, 2000~~.

1.5. ~~Former Rules. This legislative rule amends 45CSR7 "To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations" which was filed on May 1, 1998, and which became effective May 1, 1998.~~ 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.

~~2.4~~ 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.

~~2.5~~ 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 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.

~~2.6~~ 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~~.~~

~~2.7~~ 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.

~~2.8~~ 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.

~~2.9~~ 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.

~~2.10. "Director" means the director of the division of environmental protection or such other person to whom the director has delegated authority or duties pursuant to W. Va. Code §§22-1-6 or 22-1-8.~~

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 two (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 ~~any~~ a sudden and unavoidable ~~failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions~~ 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.a~~ 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.b~~ 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.c~~ 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.

~~2.37~~ 2.39. "Smoke" means small gasborne and airborne particulate matter emitted in sufficient numbers to be visible.

~~2.38~~ 2.40. "Source Operation" means the last operation in a manufacturing process preceding the emission of air contaminants which operation:

~~2.38.a~~ 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

~~2.38.b~~ 2.40.2. Is not an air pollution abatement operation.

~~2.39~~ 2.41. "Source Operation Type" means a categorization established as follows:

~~2.39.a~~ 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.

~~2.39.b~~ 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.

~~2.39.c~~ 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.

~~2.39.d~~ 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.

~~2.39.e~~ 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 ~~Director~~ Secretary shall apply.

~~2.40~~ 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.

~~2.41~~ 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.

~~2.42~~ 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.

~~2.43~~ 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.

~~2.44~~ 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.

~~2.45~~ 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 twenty (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 forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

3.3. ~~Existing 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 by-product coke production facility, in production on the effective date of this rule or a by-product coke production facility which is constructed as a replacement for a by-product coke production facility which shut down not more than three (3) years prior to the effective date of this rule:~~

~~3.3.a. Charging emissions from charging of any four consecutive ovens shall not exceed an aggregate time of more than one hundred (100) seconds.~~

~~3.3.b. Pushing emissions from pushing shall be vented into air pollution control equipment. Particulate matter emissions discharged from this air pollution control equipment shall not exceed a mass particulate rate as determined by the following formula:~~

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

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

~~3.3.b.1. The smoke and/or particulate matter emissions discharged from this air pollution control equipment and noncaptured pushing emissions shall not exceed twenty percent (20%) opacity.~~

~~3.3.c. Transport emissions from an enclosed quench car shall not exceed twenty percent (20%) opacity. Transport emissions from an open quench car shall not exceed ten percent (10%) opacity except that batteries employing pushing emissions control systems that were constructed prior to July 1, 1982 and which do not involve enclosed quench cars during transport shall meet the provisions of subsections 3.1 and 3.2.~~

~~3.3.d. Coke side sheds and similar structures used to capture pushing emissions shall be designed and operated so as to prevent the escape of smoke and/or particulate matter from points other than the stack of the air pollution control equipment.~~

~~3.3.e. Coke oven topside emissions shall not exceed the following:~~

~~3.3.e.1. No more than two percent (2%) of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.~~

~~3.3.e.2. No more than ten percent (10%) of the off-take piping shall have smoke and/or particulate matter emissions.~~

~~3.3.e.3. No smoke and/or particulate matter emissions are permitted from the coke oven gas collector main or any other topside point except as provided by 3.3.e.1 or 3.3.e.2.~~

~~3.3.f. No more than ten percent (10%) of the door areas of operating coke ovens shall have door area emissions, excluding the door areas representing the last oven charged.~~

~~3.3.g. Quench towers shall employ as a minimum good baffle design with make-up water from~~

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

~~3.3.h. 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 concentration of 0.040 grains per dry standard cubic foot.~~

~~3.3.i. Good operating practices must be maintained to prevent the atmospheric entrainment of particulate matter resulting from the spillage or other deposition of coal and/or coke.~~ 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:

~~3.4.a~~ 3.4.1. Charging emissions from the charging of any four (4) consecutive ovens shall not exceed an aggregate time of more than sixty (60) seconds.

~~3.4.b~~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 twenty percent (20%) opacity.

~~3.4.c~~3.4.3. Transport emissions from an enclosed quench car shall not exceed twenty percent (20%) opacity. Transport emissions from an open quench car shall not exceed ten percent (10%) opacity.

~~3.4.d~~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.e~~3.4.5. Coke oven topside emissions shall not exceed the following:

~~3.4.e.1~~3.4.5.a. No more than two percent (2%) of the charging ports or charging port lids shall have smoke and/or particulate matter emissions excluding the last oven charged.

~~3.4.e.2~~3.4.5.b. No more than five percent (5%) of the offtake piping shall have smoke and/or particulate matter emissions.

~~3.4.e.3~~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 ~~3.4.e.1 and 3.4.e.2~~ paragraphs 3.4.5.a and 3.4.5.b.

~~3.4.f~~3.4.6. No more than eight percent (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 ninety percent (90%)

particulate control efficiency.

~~3.4.g~~3.4.7. Quench towers shall employ, as a minimum, multiple row baffles and use make-up water not to exceed eight hundred (800) milligrams per liter of total dissolved solids and one hundred (100) milligrams per liter of total suspended solids.

~~3.4.h~~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.i~~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.a~~3.5.1. Charging emissions from charging of any five (5) consecutive ovens shall not exceed an aggregate time of more than fifty (50) seconds.

~~3.5.b~~3.5.2. No more than two percent (2%) of the coal charging ports shall have smoke and/or particulate matter emissions.

~~3.5.c~~3.5.3. No more than two percent (2%) of the coke oven doors shall have smoke and/or particulate matter emissions excluding the ovens being charged and/or pushed.

~~3.5.d~~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.d.1~~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 twenty percent (20%) opacity.

~~3.5.e~~3.5.5. Transport emissions from an enclosed quench car shall not exceed twenty percent (20%) opacity. Transport emissions from an open quench car shall not exceed ten percent (10%) opacity.

~~3.5.f~~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.g~~3.5.7. Quench towers shall employ as a minimum, multiple row baffles and use make-up water not to exceed eight hundred (800) milligrams per liter of total dissolved solids and one hundred (100) milligrams per liter of total suspended solids.

~~3.5.h~~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.i~~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.a~~ 3.6.1. Visible emissions from a basic oxygen process roof monitor shall not exceed twenty percent (20%) opacity except for a period or periods aggregating no more than three (3) minutes in any sixty (60) minute period where the average opacity for the aggregated period shall not exceed forty percent (40%) opacity.

~~3.6.b~~ 3.6.2. Visible emissions from a blast furnace cast house shall not exceed twenty percent (20%) opacity except for a period or periods aggregating no more than five (5) minutes in any sixty (60) minute period where the average opacity for the aggregated period shall not exceed forty percent (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 five (5) year operating period.

4.7. Except as noted in subdivisions ~~4.7.a~~ 4.7.1 through ~~4.7.c~~ 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.a~~ 4.7.1. Type 'b' duplicate source operations whose air pollution control equipment efficiency is a minimum of ninety-nine percent (99%) by weight and whose total process weight rate is less than two hundred fifty thousand (250,000) pounds per hour shall be exempted from the requirements of subsection 4.1provided that smoke emitted into the open air from any such duplicate source operation is less than twenty percent (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 two hundred fifty thousand (250,000) pounds per hour, the allowable emission rates from the source operation which resulted in the increase above two hundred fifty thousand (250,000) pounds per hour shall be determined as per subsection 4.4.

~~4.7.b~~ 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.b.1~~ 4.7.2.a. At least ninety-nine percent (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.b.2~~ 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.b.3~~ 4.7.2.c. The smoke emitted into the open air from any such duplicate source operation is less than twenty percent (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 two hundred fifty thousand (250,000) pounds per hour, the allowable emission rates from the source operation which resulted in the increase above two hundred fifty thousand (250,000) pounds per hour shall be determined as per subsection 4.4.

~~4.7.c~~ 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 ninety percent (90%) fluoride emissions capture efficiency through its primary collection system and at least ninety-nine percent (99%) fluoride emissions removal efficiency through its primary removal system; and

~~4.7.d~~ 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 in the manufacturing of steel. The following provisions shall apply:

~~4.10.a~~ 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.b~~ 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.c~~ 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.d~~ 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.e~~ 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.f~~ 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.g~~ 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.h~~ 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 ~~actually~~ 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.a~~ 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 fifty (50) pounds per hour.

~~4.11.b~~ 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 two hundred (200) pounds per hour.

~~4.11.c~~ 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 twelve (12) seconds or longer when calcining regular coke and twenty-four (24) seconds or longer when calcining graphite coke, and provided further that, in the event a plant has more than one kiln, such plant shall be operated so that only one (1) of such kilns shall calcine graphite coke at any one time.

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 ~~Director~~ Secretary working in conjunction with other appropriate governmental agencies.

4.14. Flame Attenuation Fiberglass Process.

~~4.14.a~~ 4.14.1. No person shall cause, suffer, or allow or permit the discharge of particulate matter in excess of 48.63 actual pounds per hour from all collection stacks in existence at any plant on June 1, 1993 which produces fiberglass insulation or other fiberglass products using the flame attenuation method.

~~4.14.b~~ 4.14.2. The owner or operator of any facility subject to this subsection shall meet the following specific allowable emission rates for the designated collection stacks through which particulate matter is discharged; provided, however, the stacks may not exceed the total allowable emission rate set forth in subsection ~~4.14.a~~ 4.14.1. The particulate matter concentration discharged from any collection stack may not exceed .018 gr/dscf; the source may, however, vary the emission rates among the stacks by filing written notice thereof with the ~~Director~~ Secretary at least seven (7) business days in advance of any such alteration. The written notice shall contain the following: 1) the altered emission rates for each affected stack; 2) the rationale and supporting data, information or calculations used to derive the altered emissions rates; 3) an indication of whether any new product not previously produced by the plant will be made on the affected lines; 4) whether any new binder or resins not previously used by the plant will be used in the altered operating scenario subject to the notice; and 5) whether any other parameters and/or related recordkeeping forms are impacted by the alteration. Such changes must comply with the total allowable emission rate from all such stacks and may not exceed the per stack concentration limit set forth herein.

Stack ID	**Proposed Emission Rate (lbs/hr)**
41N	3.25 (total)
41S	
42N	4.64 (total)
42S	
43N	4.88 (total)
43S	
44N	2.68 (total)
44S	
45N	9.25 (total)
45S	
46N	10.00 (total)
46S	
47	6.49
48	4.38
49	3.06

~~4.14.c~~ 4.14.3. Source operations subject to this subsection shall not be subject to the other provisions of section 4 except for subsections 4.2, 4.3, and 4.13.

§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 five (5) minutes in duration during any poling operation.

§45-7-6. Registration.

6.1. ~~After July 1, 1970 a~~ All persons owning and/or operating an existing manufacturing process source operation not previously registered shall register such source operation with the ~~Director~~ Secretary. The information required for registration shall be determined by the ~~Director~~ Secretary, and shall be provided in the manner specified by the ~~Director~~ Secretary.

§45-7-7. Permits.

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 ~~Director~~ 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 ~~Director~~ Secretary may specify and be filed on forms and in a manner acceptable to the ~~Director~~ Secretary. The ~~Director,~~ Secretary ~~or his duly authorized representative,~~ may at his option witness or conduct such stack tests. Should the ~~Director~~ 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 ~~Director~~ 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 ~~Director,~~ Secretary ~~or his duly authorized representative,~~ may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

§45-7-9. ~~Variance~~ Reserved.

~~9.1. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this rule 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 Director provided a corrective program has been submitted by the owner or operator and approved by the Director.~~

§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. ~~Maintenance operations shall be exempt from the provisions of section 4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.~~ Reserved.

10.4. ~~An owner or operator may apply for an alternative visible emission standard for start-up and shutdown periods, on a case-by-case basis, by filing a written petition with the Director. The Director may approve an alternative visible emission standard for start-ups and shutdowns to the visible emission standard required under section 3. The petition shall include a demonstration satisfactory to the Director:~~ Reserved.

~~10.4.a. That it is technologically or economically infeasible to comply with section 3;~~

~~10.4.b. That establishes the need for approval of a start-up or shutdown plan based upon information including, but not limited to, monitoring results, opacity observations, operating procedures and source inspections.~~

~~10.4.c. That the particulate matter weight emission standards under section 4 are being met, as determined in accordance with 45CSR7A "Compliance Test Procedures For 45CSR7 ' To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations'"; and~~

~~10.4.d. That during periods of start-ups and shutdowns the owner or operator shall, to the extent practicable, maintain and operate any manufacturing process including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.~~

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 one (1) pound per hour of particulate matter and an aggregate of less than one thousand (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 one hundred (100) pounds per year for all sources of mineral acids located at the stationary source. The ~~Director~~ 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 ~~Director~~ Secretary may revoke any and all exemptions, except for subsections 10.1 and 10.2. The ~~Director~~ Secretary shall notify the affected source(s) in writing that an exemption will be revoked, effective date thereof, and the reasons therefore.

§45-4-7-11. 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 ~~Director~~ Secretary to approve individual stack allowable emission rates differing from the proration calculated under subsection 4.8. The ~~Director~~ 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 ~~Director~~ 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 ~~Director~~ 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 ~~Director~~ 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 ~~Director~~ 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 ~~Director~~ 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.

~~§45-4-12~~ §45-7-13. Inconsistency Between Rules.

~~12.1~~ 13.1. In the event of any inconsistency between this rule and any other existing rule of the ~~West Virginia Division of Environmental Protection~~Division of Air Quality, such inconsistency shall be resolved

by the determination of the ~~Director~~ Secretary and such determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

~~TABLE 45-7A~~

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

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~~

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

TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY

SERIES 8
AMBIENT AIR QUALITY STANDARDS

§45-8-1. General.

1.1. Scope. -- This rule establishes and adopts ambient air quality standards in West Virginia for carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide, equivalent to the national primary and secondary ambient air quality standards established under Section 109 of the Clean Air Act and promulgated by the United States Environmental Protection Agency under 40 C.F.R. Part 50. National primary ambient air quality standards define levels of air quality which the Administrator judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define levels of air quality which the Administrator judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. This rule also establishes and adopts ambient air monitoring reference methods and equivalent methods promulgated by the United States Environmental Protection Agency under 40 C.F.R. Part 53. The Secretary hereby adopts these standards and methods by reference. The Secretary also adopts the appendices to these standards and methods. These standards and methods are subject to revision, and additional primary and secondary standards may be promulgated as the Administrator deems necessary to protect the public health and welfare.

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

1.3. Filing Date. -- ~~April 1, 2022~~.

1.4. Effective Date. ~~April 1, 2022~~.

1.5. Sunset Provision. -- Does not apply.

1.6. Incorporation by Reference. -- Federal Counterpart Regulation. The Secretary has determined that a federal counterpart regulation exists, and in accordance with the Secretary's recommendation this rule incorporates by reference 40 C.F.R. Part 50, "National Primary and Secondary Ambient Air Quality Standards," and 40 C.F.R. Part 53, "Ambient Air Monitoring Reference and Equivalent Methods," effective June 1, ~~2021~~2023.

§45-8-2. Definitions.

2.1. "Administrator" means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

2.2. "Clean Air Act" ("CAA") means the federal Clean Air Act, as amended, 42 U.S.C. § 7401, et seq..

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

2.4. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in 40 C.F.R. § 50.1. Words and phrases not defined therein shall have the meaning given to them in the federal Clean Air Act.

§45-8-3. Adoption of standards.

3.1. The Secretary hereby adopts and incorporates by reference the national primary and secondary ambient air quality standards promulgated by the United States Environmental Protection Agency under 40 C.F.R. Part 50, effective June 1, ~~2021~~2023. These standards are adopted for the purpose of establishing ambient air quality standards in West Virginia that are equivalent to those established under Section 109 of the Clean Air Act, as amended.

3.2. The Secretary hereby adopts and incorporates by reference the ambient air monitoring reference methods and equivalent methods promulgated by the United States Environmental Protection Agency under 40 C.F.R. Part 53, effective June 1, ~~2021~~2023. These standards are adopted for the purpose of establishing ambient air monitoring reference methods and equivalent methods in West Virginia.

§45-8-4. Inconsistency between rules.

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

TITLE 45
LEGISLATIVE RULE
~~DIVISION~~ DEPARTMENT OF ENVIRONMENTAL PROTECTION
~~OFFICE OF~~ AIR QUALITY

SERIES 10
~~TO PREVENT AND~~ CONTROL OF AIR POLLUTION FROM THE EMISSION OF SULFUR OXIDES

§45-10-1. General.

1.1. Scope.

~~1.1.a~~ 1.1.1. ~~The purpose of this~~ This rule ~~is to prevent and control air pollution from the~~ establishes emission standards ~~of~~ for sulfur oxides from fuel burning units and sets forth the registration, permitting, reporting, testing, recordkeeping and exemption requirements.

~~1.1.b~~ 1.1.2. Fuel Quality Goals. -- It is the intent of the ~~Director~~ Secretary that all persons engaged in the burning of fuel make a maximum effort to utilize the best quality fuel available regardless of the requirements of this rule.

1.2. Authority. -- W. Va. Code ~~§22-5-1 et seq~~ §22-5-4.

1.3. Filing Date. -- ~~June 2, 2000~~.

1.4. Effective Date. -- ~~August 31, 2000~~.

1.5. ~~Former Rules. This legislative rule amends 45CSR10 "To Prevent and Control Air Pollution From the Emission of Sulfur Oxides" which was filed April 27, 1994, and which became effective April 27, 1994~~. Sunset provision. -- Does not apply.

§45-10-2. Definitions.

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

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

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).

~~2.3~~ 2.4. "Continuous Emission Monitoring System" means the total equipment required for the determination of a gas concentration or emission rate, in the units of the standard.

~~2.4. "Director" means the director of the division of environmental protection or such other person to whom the director has delegated authority or duties pursuant to W.Va. Code §§22-1-6 or 22-1-8.~~

2.5. "Distillate Oil" means fuel oil that complies with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oils".

2.6. "Equivalent Fuel Sulfur Content" means that quantity of sulfur dioxide in pounds per million British Thermal Units (BTU's) which corresponds to a given percent sulfur in fuel being burned and is calculated on the basis of one hundred percent (100%) conversion of the sulfur to sulfur dioxide and assuming that no sulfur or sulfur dioxide recovery or control measures are employed.

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

2.8. "Fuel Burning Unit" means 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 rule, all fuel burning units are classified in the following categories:

~~2.8.a~~ 2.8.1. Type 'a' means any fuel burning unit which has as its primary purpose the generation of steam or other vapor to produce electric power for sale.

~~2.8.b~~ 2.8.2. Type 'b' means 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.

~~2.8.c~~ 2.8.3. Type 'c' means any hand-fired or stoker-fired fuel burning unit not classified as a Type 'a' unit.

2.9. "Indirect Heat Exchanger" means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in subsection 2.18.

2.10. "Malfunction" means ~~any~~ a sudden and unavoidable ~~failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions~~ breakdown of process or control equipment.

2.11. "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, pipe stills, reformers, furnaces associated with manufacturing processes, driers, crushers, grinders, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit sulfur dioxide or other sulfur compounds.

2.12. "Natural Gas" means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-97, "Standard Specification for Liquefied Petroleum Gases".

2.13. "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.

2.14. "Plant" means and includes all fuel burning units, source operations, equipment and grounds utilized in an integral complex.

2.15. "Pollution Control Equipment" means any equipment used for collecting, confining or converting air pollutants for the purpose of preventing or reducing the emission of these pollutants into the open air.

2.16. "Potential To Emit" for the purpose of subdivision ~~4.1.e~~ 4.1.5 means the maximum capacity of a source, on an annual basis, to emit any air pollutant under its physical and operational design, prior to any air pollution control equipment.

2.17. "Priority I Regions", "Priority II Regions" and "Priority III Regions" are defined in Table 45-10A found at the end of this rule.

2.18. "Process Heater" means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

2.19. "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.

2.20. "Shutdown" means the cessation of operation of a source subject to this rule for any reason, unless otherwise defined by a permit issued to create an alternative emission limitation.

~~2.19~~ 2.21. "Source Operation" means the last operation in a manufacturing process preceding the emission of air pollutants which operation:

~~2.19.a~~ 2.21.1. Results in the separation of the air pollutant from the process materials or in the conversion of the process materials into air pollutants; and

~~2.19.b~~ 2.21.2. Is not an air pollution abatement operation.

~~2.20~~ 2.22. "Stack", for the purposes of this rule, means, but is not limited to, any duct, control equipment exhaust, or similar apparatus, which vents gases and/or particulate matter into the open air.

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

~~2.21~~ 2.24. "Sulfur Dioxide" is an air pollutant which is a nonflammable, nonexplosive, colorless, gaseous molecule composed of one (1) atom of sulfur and two (2) atoms of oxygen. In concentrations of 0.3 to 1.0 parts per million and above, most people can detect it by taste; in concentrations greater than 3.0 parts per million it has a pungent, irritating odor to most people.

~~2.22~~ 2.25. "Waste Heat Boiler" means any boiler which derives all or part of its heat input from the waste heat of a manufacturing process operation.

~~2.23~~ 2.26. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in W. Va. §22-5-1 et seq.

§45-10-3. Sulfur Dioxide Weight Emission Standards for Fuel Burning Units.

3.1. Total Allowable Emission Rates for Similar Units in Priority I and Priority II Regions. -- No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

~~3.1.a~~ 3.1.1. ~~For fuel burning units of the Kammer Plant of Ohio Power Company, located in Air Quality Control Region I, the product of 2.7 and the total design heat inputs for such units discharging through those stacks in million British Thermal Units (BTU's) per hour~~Reserved.

~~3.1.b~~ 3.1.2. For fuel burning units of the Mitchell Plant of ~~Ohio~~ Kentucky Power Company, located in Air Quality Control Region I, the product of 7.5 and the total actual operating heat inputs for such units discharging through those stacks in million BTU's per hour.

~~3.1.c~~ 3.1.3. ~~For fuel burning units of the Willow Island Station of Monongahela Power Company, located in Air Quality Control Region II, the product of 2.7 and the total design heat inputs for such units discharging from those stacks in million BTU's per hour~~ Reserved.

~~3.1.d~~ 3.1.4. For fuel burning units of the Mt. Storm Plant of Virginia Electric and Power Company, located in Air Quality Control Region VII, the product of 2.7 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

~~3.1.e~~ 3.1.5. For Type 'b', and Type 'c' fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

3.2. Maximum Allowable Emission Rates for Similar Units in Region IV (Kanawha Valley Air Quality Control Region: Kanawha County, Putnam County, and Falls and Kanawha Magisterial Districts of Fayette County). -- No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

~~3.2.a~~ 3.2.1. For fuel burning units of the John Amos Plant of Appalachian Power Company, located in Air Quality Control Region IV, the product of 1.6 and the total design heat input for such units discharging from those stacks in million BTU's per hour.

~~3.2.b~~ 3.2.2. ~~For fuel burning units of the Kanawha River Plant of Appalachian Power Company, located in Air Quality Control Region IV, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour~~ Reserved.

~~3.2.c~~ 3.2.3. For Type 'b' and Type 'c' fuel burning units, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour, provided however, that no more than 5,500 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.

3.3. Maximum Allowable Emission Rates for Similar Units in All Priority III Regions Except Region IV. -- No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from

all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

~~3.3.a~~ 3.3.1. For fuel burning units of the Harrison Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 5.12 and the total actual operating heat inputs for such units discharging from those stacks in million BTU's per hour.

~~3.3.b~~ 3.3.2. ~~For fuel burning units of the Rivesville Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 3.2 and the total design heat inputs for such units discharging from those stacks in million BTU's per hour~~ Reserved.

~~3.3.c~~ 3.3.3. ~~For fuel burning units of the Albright Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 3.2 and the total design heat inputs for such units discharging from those stacks in million BTU's per hour~~ Reserved.

~~3.3.d~~ 3.3.4. For fuel burning units of the Fort Martin Power Station of Monongahela Power Company, located in Air Quality Control Region VI, the product of 3.1 and the total actual operating heat inputs for such units discharging from those stacks in million BTU's per hour.

~~3.3.e~~ 3.3.5. ~~For fuel burning units of the Philip Sporn Plant of Central Operating Company, located in Air Quality Control Region III, the product of 3.2 and the total design heat inputs for such units discharging from those stacks in million BTU's per hour~~ Reserved.

~~3.3.f~~ 3.3.6. For Type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

3.4. Allowable Emission Rates for Individual Stacks.

~~3.4.a~~ 3.4.1. Unless otherwise approved by the ~~Director~~ Secretary, the maximum allowable emission rate for an individual stack shall not exceed by more than twenty-five percent (25%) the emission rate determined by prorating the total allowable emission rate specified in subsections 3.1, 3.2, or 3.3, on the basis of individual unit heat input at design capacity for all fuel burning units discharging through that stack.

~~3.4.a.1~~ 3.4.1.a. Subject to the provisions of this section, allowable emission rates for individual stacks shall be determined by the owner and/or operator and registered with the ~~Director~~ Secretary at the request of and on forms provided by the ~~Director~~ Secretary. Such rates shall be subject to review and approval by the ~~Director~~ Secretary.

~~3.4.a.2~~ 3.4.1.b. The approved set of individual stack allowable emission rates shall become an official part of the compliance schedule and any permits concerning such source or sources, and shall not be changed without the prior written approval of the ~~Director~~ Secretary.

~~3.4.b~~ 3.4.2. The owner or operator of a source subject to subsections 3.1, 3.2 or 3.3 of this rule which has more than one stack, may petition the ~~Director~~ Secretary for individual stack allowable emission rates differing from those calculated under subdivision ~~3.4.a~~ 3.4.1. The ~~Director~~ Secretary may approve such request provided that:

~~3.4.b.1~~ 3.4.2.a. For each scenario the sum of the maximum allowable emission rates for each stack shall not exceed the total allowable emission rate specified in subsection 3.1, 3.2 or 3.3 for all stacks located at one plant;

~~3.4.b.2~~ 3.4.2.b. The application shall include, but not be limited to, the maximum proposed emission rate for each individual stack for each proposed operating scenario;

~~3.4.b.3~~ 3.4.2.c. The owner or operator shall install a certified continuous emissions monitoring system (CEMS) to monitor sulfur dioxide emissions for each stack. Such CEMS shall be installed, certified, operated and maintained as specified in 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) and 45CSR16. Sources meeting the requirements of 40 CFR Part 75 (Acid Rain) and 45CSR33 shall be deemed to have satisfied the requirements of PS2;

~~3.4.b.4~~ 3.4.2.d. The owner or operator shall demonstrate to the ~~Director~~ Secretary's satisfaction that for each operating scenario approved the source will not cause or contribute to a violation of the National Ambient Air Quality Standard for sulfur dioxide, and demonstrate compliance with any other applicable emissions banking and trading rules;

~~3.4.b.5~~ 3.4.2.e. The ~~Director~~ Secretary shall not approve a relaxation of a technology-based emission limitation for a specific unit or stack that has been established pursuant to any other rule, permit or consent order nor shall the ~~Director~~ Secretary approve a relaxation in emission limits previously established for the purpose of avoiding the permitting requirements of 45CSR14 or 45CSR19; and

~~3.4.b.6~~ 3.4.2.f. Any approval of an individual stack allowable emission rate by the ~~Director~~ Secretary pursuant to subdivision ~~3.4.b~~ 3.4.2 shall be embodied in a permit issued as an existing stationary source permit in accordance with 45CSR13.

3.5. The design heat input of a waste heat boiler shall not be included in computing the total plant design heat input for the purposes of subsections 3.1, 3.2, 3.3 or 3.4.

3.6. No person shall circumvent the provisions of this rule by constructing fuel burning unit(s) larger than would be necessary to provide heat and/or power for an existing manufacturing plant, with a reasonable margin for plant expansion, in order to use that design heat input to raise the allowable sulfur content in fuel.

3.7. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide to the open air from the combustion of fuel in a fuel burning unit of a waste heat boiler in excess of 2.2 pounds of sulfur dioxide per million BTU's of heat input per hour. This limitation is based on the heat input provided to the boiler by the combustion of this auxiliary fuel.

~~3.7.a~~ 3.7.1. The provision of this ~~subsection~~ subdivision applies only to the fuel used for the waste heat boiler(s) and does not replace or supersede the provisions of subsection 4.1.

3.8. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The owner and/or operator of a fuel burning unit shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in this rule, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four (24) hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of this rule. A continuous twenty-four (24) hour period is defined as one (1) calendar day.

§45-10-4. Standards for Manufacturing Process Source Operations.

4.1. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions ~~4.1.a~~ 4.1.1 through ~~4.1.e~~ 4.1.5.

~~4.1.a~~ 4.1.1. No person shall cause, suffer, allow or permit sulfur dioxide tail gas emissions from sulfuric acid manufacturing plants to exceed the following:

~~4.1.a.1~~ 4.1.1.a. For plants using elemental sulfur as a feed stock, 30 pounds per ton of acid produced.

~~4.1.a.2~~ 4.1.1.b. For plants using other materials as a feed stock, 40 pounds per ton of acid produced.

~~4.1.b~~ 4.1.2. No person shall cause, suffer, allow or permit the emission of sulfur oxides, calculated as sulfur dioxide, from a sulfur recovery plant to exceed 0.06 pounds per pound of sulfur processed.

~~4.1.c~~ 4.1.3. No person shall cause, suffer, allow or permit the emission of sulfur oxides, calculated as sulfur dioxide, from primary non-ferrous smelters to exceed that determined by the following equations:

Copper Smelters: $Y = 0.2X$
Zinc Smelters: $Y = 0.564X^{0.85}$
Lead Smelters: $Y = 0.98X^{0.77}$

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

~~4.1.d~~ 4.1.4. No person shall cause, suffer, allow or permit the total sulfite pulp mill emissions of sulfur oxides, calculated as sulfur dioxide, from operations such as blow pits, washer vents, storage tanks, digester relief and recovery system, to exceed nine (9.0) pounds per air-dried ton of pulp produced.

~~4.1.e~~ 4.1.5. Any owner or operator of a manufacturing process source operation(s) which has the potential to emit less than 500 pounds per year of sulfur oxides.

4.2. Compliance with the allowable sulfur dioxide concentration limitations from manufacturing process source operation(s) set forth in this rule shall be based on a block three (3) hour averaging time.

§45-10-5. Combustion of Refinery or Process Gas Streams.

5.1. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the ~~Director~~ Secretary and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the ~~Director~~ Secretary, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.

5.2. Any owner or operator of a by-product coke production facility in existence on ~~the effective date of this rule~~ August 31, 2000 who can demonstrate to the ~~Director~~ Secretary that there is no practical alternative to scheduled maintenance (including shutdown) of desulfurization equipment may request the approval of an enforceable, temporary sulfur dioxide emissions control and mitigation plan for such maintenance period. In order for a plan under this ~~paragraph~~ subsection to be approved the plan must meet the following conditions:

~~5.2.a~~ 5.2.1. Provide that all feasible control measures and process changes will be employed at the coke production facility to reduce emissions of sulfur dioxide (including reduction of coke oven gas generation) during the control system outage.

~~5.2.b~~ 5.2.2. Provide for a definitive reduction in sulfur dioxide emissions by the establishment of unit-specific allowable emission rates for all emissions units of the stationary source sufficient to prevent any violation of federal and state ambient air quality standards or applicable air quality increments for sulfur dioxide.

~~5.2.c~~ 5.2.3. Provide that system down-time and excess sulfur dioxide emissions be reduced to the greatest extent possible by use of increased or contract maintenance personnel, maximized maintenance labor shifts and optimization of available spare parts inventories.

~~5.2.d~~ 5.2.4. Provide for emissions and compliance monitoring as required by the ~~Director~~ Secretary in the approved plan during the maintenance periods and for the submission of reports of such monitoring and tests within time-frames specified by the ~~Director~~ Secretary in the approved plan. All approved plans shall require that a certified report of excess sulfur dioxide emissions from the by-product coke production facility and offsetting emission units be submitted to the ~~Director~~ Secretary within thirty (30) days after the end of the maintenance period.

~~5.2.e~~ 5.2.5. Provide that no maintenance period exceed fourteen (14) days in length nor occur more than twice in any calendar year.

~~5.2.f~~ 5.2.6. Provide at least two weeks notice of all scheduled maintenance periods, the anticipated length of the maintenance period, work to be completed, measures to be taken to minimize the length of desulfurization system down-time and such other information as the ~~Director~~ Secretary may specify.

~~5.2.g~~ 5.2.7. Provide for annual review, if necessary, modification or termination of the plan by the ~~Director~~ Secretary.

~~5.2.h~~ 5.2.8. Provide that the ~~Director~~ Secretary may impose limitations on emission units that are more restrictive than those provided for in the plan as necessary to assure attainment of air quality standards for sulfur dioxide in light of data provided pursuant to subdivision ~~5.2.f~~ 5.2.6, or any other information available to the ~~Director~~ Secretary.

5.3. The ~~Director~~ Secretary shall, in making a determination concerning plan modification or termination, review the plant's compliance history and records to determine whether the plan has prevented or minimized, to the extent feasible, desulfurization system outages and excess emissions. The initial approval of the plan and any modification of the plan shall be accomplished as a revision to the State Implementation Plan.

5.4. Compliance with the allowable hydrogen sulfide concentration limitations for combustion sources set forth in this rule shall be based on a block three (3) hour averaging time.

§45-10-6. ~~Registration.~~ Reserved.

~~6.1. Within thirty (30) days after the effective date of this rule all persons owning and/or operating a source(s) of sulfur dioxide subject to this rule and not previously registered shall have registered such source(s) with the Director. The information required for registration shall be determined and provided in the manner specified by the Director. Registration forms should be requested from the Director by the owner and/or operator of such source(s).~~

~~6.2. The owner and/or operator of a source(s) of sulfur dioxide that is under construction or on which construction is initiated within thirty (30) days after the effective date of this rule shall register such source(s) within this thirty (30) day period.~~

§45-10-7. Permits.

7.1. No person shall construct, modify or relocate any source of sulfur dioxide 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.

§45-10-8. Testing, Monitoring, Recordkeeping and Reporting.

8.1. Testing.

~~8.1.a~~ 8.1.1. At such reasonable times as the ~~Director~~ Secretary may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of sections 3, 4 or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 and 45CSR16 or other equivalent EPA testing method approved by the ~~Director~~ Secretary. The ~~Director, Secretary or his or her duly authorized representative,~~ may at his or her option witness or conduct such tests. Should the ~~Director~~ Secretary exercise his or her 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~~ 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.

~~8.1.b~~ 8.1.2. The ~~Director, Secretary or his duly authorized representative,~~ may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in section 3.

8.2. Monitoring.

~~8.2.a~~ 8.2.1. At the request of the ~~Director~~ Secretary the owner and/or operator of a source shall install such stack gas monitoring devices as the ~~Director~~ Secretary deems necessary to determine compliance with the provisions of this rule. The data from such devices shall be readily available at the source location or such other reasonable location that the ~~Director~~ Secretary may specify. At the request of the ~~Director, Secretary or his or her duly authorized representative,~~ such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this rule.

~~8.2.b~~ 8.2.2. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.

~~8.2.c~~ 8.2.3. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with sections 3, 4 and 5 of this rule by testing and /or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15 and 45CSR16, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

~~8.2.c.1~~ 8.2.3.a. The installation, operation and maintenance of a continuous monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 2 (PS2) or Performance Specification 7 (PS7) and 45CSR16 shall be deemed to fulfill the requirements of a monitoring plan for a fuel burning unit(s), manufacturing process source(s) or combustion source(s). CEMS meeting the requirements of 40 CFR Part 75 (Acid Rain) and 45CSR33 will be deemed to have satisfied the requirements of PS2.

~~8.2.c.1.A~~ 8.2.3.a.1. The owner or operator of a continuous emissions monitoring system installed pursuant to this rule shall follow the quality assurance requirements as set forth in 40 CFR Part 60, Appendix F and 45CSR16.

~~8.2.c.2~~ 8.2.3.b. Monitoring plans pursuant to ~~subsection 8.2.c~~ subdivision 8.2.3 shall be ~~submitted to the Director within six (6) months of the effective date of this rule. Approval or denial of such plans shall be within twelve (12) months of the effective date of this rule~~ included in an air quality permit pursuant to 45CSR13 and 45CSR30, if applicable.

~~8.2.c.3~~ 8.2.3.c. A fuel sampling and analysis program, including a record of fuel consumption, may fulfill the requirements of a monitoring plan for a fuel burning unit(s). The minimum requirements for a fuel sampling and analysis program, including fuel consumption records, shall be established by the ~~Director~~ Secretary.

~~8.2.d~~ 8.2.4. Excursions outside the range of operating parameters associated with control or process equipment which are established in an approved monitoring plan will not necessarily constitute a violation of this rule.

8.3. Recordkeeping and Reporting.

~~8.3.a~~ 8.3.1. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to sections 3, 4 or 5 shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to subdivision ~~8.2.c~~ 8.2.3. Such records shall be made available to the ~~Director~~ Secretary ~~or his duly authorized representative upon request~~. Such records shall be retained on-site for a minimum of five years.

~~8.3.b~~ 8.3.2. The owner or operator shall submit a periodic exception report to the ~~Director~~ Secretary, in a manner specified by the ~~Director~~ Secretary. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

~~8.3.c~~ 8.3.3. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the ~~Director~~ Secretary. Such records are to be maintained on-site and made available to the ~~Director~~ Secretary ~~or his duly authorized representative~~ upon request.

~~8.3.c.1~~ 8.3.3.a. The owner or operator of a fuel burning unit(s) utilizing CEMS to fulfill the requirements of subdivision ~~8.2.c~~ 8.2.3 shall be exempt from the requirements of subdivision ~~8.3.c~~ 8.3.3.

~~8.3.d~~ 8.3.4. Where appropriate the owner or operator of a fuel burning unit(s), manufacturing process unit(s) or combustion source(s) may maintain such records in electronic form.

~~8.3.e~~ 8.3.5. Requests for Information.

~~8.3.e.1~~ 8.3.5.a. The ~~Director~~ Secretary shall respond within five working days to requests for information generated or required under this rule. Requests for information not in the ~~Director~~ Secretary's custody shall be promptly forwarded to the appropriate federal or state agency known to have such information.

~~8.3.e.2~~ 8.3.5.b. Data regarding the compliance reporting of electric utility SO_2 emissions is available from the U.S. Environmental Protection Agency (EPA). ~~Requests for~~ EPA emissions data ~~should be sent to: EPA Clean Air Marketing Division, 501 3rd Street NW, Washington, D.C. 20001 or online at http://www. epa.gov/acidrain/edata.html~~ is available from the Clean Air Markets Program Data website. Data relating to fuel quality and costs of fuels are available at the Federal Energy Regulatory Commission (FERC) and the West Virginia Public Service Commission. ~~Requests for FERC data should be sent to David P. Boergers Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426 or online at http://www.ferc.fed.us/ electric/f423/form423.htm. Requests for PSC data should be sent to: The West Virginia Public Service Commission, Utility Division, P. O. Box 812, Charleston, W. Va. 25323 0812~~.

§45-10-9. ~~Variance~~ Alternative Emission Limitations.

9.1. ~~Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.~~ Reserved.

9.2. Any owner or operator that cannot comply with the emission limitations established in sections 3 through 5 during periods of startup or shutdown shall request an alternative emission limitation pursuant to 45CSR1.

§45-10-10. Exemptions and Recommendations.

10.1. Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 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.

10.2. In an effort to avoid the necessity for such mandatory controls the ~~Director~~ Secretary strongly recommends that specific fuel quality objectives be met. In Priority I and Priority II regions and in cities in Priority III regions with a population of more than 10,000 (based on the latest census) the ~~Director~~ Secretary recommends that no person use or provide for sale fuel having a sulfur content greater than that listed in the following table (at the end of this rule) Table 45-10B for use in residential and other fuel burning units not otherwise restricted by this rule.

10.3. The owner or operator of a fuel burning unit(s) which combusts natural gas, wood or distillate oil, alone or in combination, shall be exempt from the requirements of section 8. Manufacturing operations in which the process is to partially combust wood during the manufacture of charcoal shall be exempt from the requirements of section 8.

§45-10-11. Circumvention.

11.1. No owner or operator subject to the provisions of this rule shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

§45-10-12. Inconsistency Between Rules.

12.1. In the event of any inconsistency between this rule and any other rule of the ~~West Virginia Division of Environmental Protection~~ Division of Air Quality, such inconsistency shall be resolved by the determination of the ~~Director~~ Secretary and such determination shall be based upon the application of the more stringent provision, term, condition, method or rule.

~~TABLE 45-10A~~

~~Priority Classification~~	~~Federal Air Quality Control Region~~	~~Included West Virginia Counties~~
~~I~~	~~Region I, Steubenville-Weirton-Wheeling Interstate Air Quality Control Region (Ohio - West Virginia)~~	~~Brooke~~ ~~Hancock~~ ~~Marshall~~ ~~Ohio~~
	~~Region VII, Cumberland-Keyser Interstate Air Quality Control Region (West Virginia - Maryland)~~	~~Grant (Union District only)~~ ~~Mineral (Elk, New Creek, and Piedmont Districts)~~
~~II~~	~~Region II, Parkersburg-Marietta Interstate Air Quality Control Region (West Virginia - Ohio)~~	~~Jackson~~ ~~Pleasants~~ ~~Tyler~~ ~~Wetzel~~ ~~Wood~~
~~III~~	~~All other regions~~	~~All other counties or districts not listed above~~

Table 45-10A

Priority Classification	**Federal Air Quality Control Region**	**Included West Virginia Counties**
I	Region I, Steubenville-Weirton-Wheeling Interstate Air Quality Control Region (Ohio – West Virginia)	Brooke Hancock Marshall Ohio
	Region VII, Cumberland-Keyser Interstate Air Quality Control Region (West Virginia – Maryland)	Grant (Union district only) Mineral (Elk, New Creek, and Piedmont Districts)
II	Region II, Parkersburg-Marietta Interstate Air Quality Control Region (West Virginia-Ohio)	Jackson Pleasants Tyler

		Wetzel Wood
III	All other regions	All other counties or districts not listed above

~~TABLE 45-10B~~

~~EFFECTIVE DATE~~	~~PERCENT SULFUR CONTENT OF FUELS~~	
	~~Coal~~	~~Oil~~
~~June 30, 1972~~	~~3.0~~	~~2.0~~
~~June 30, 1975~~	~~2.0~~	~~1.5~~
~~June 30, 1978~~	~~1.0~~	~~0.5~~

Table 45-10B

Effective Date	Percent Sulfur Content of Fuels	
	Coal	Oil
June 30, 1978	1.0	0.5

TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY

SERIES 16
STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

§45-16-1. General.

1.1. Scope. -- This rule establishes and adopts standards of performance for new stationary sources promulgated by the United States Environmental Protection Agency pursuant to section 111(b) of the federal Clean Air Act, as amended. This rule codifies general procedures and criteria to implement the standards of performance for new stationary sources set forth in 40 C.F.R. part 60. The Secretary hereby adopts these standards by reference. The Secretary also adopts associated reference methods, performance specifications and other test methods which are appended to these standards.

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

1.3. Filing date. -- ~~March 31, 2023~~.

1.4. Effective date. -- ~~June 1, 2023~~.

1.5. Sunset provision. -- Does not apply.

1.6. Incorporation by reference. -- federal counterpart regulation. The Secretary has determined that a federal counterpart rule exists, and in accordance with the Secretary's recommendation, with limited exception, this rule incorporates by reference 40 C.F.R. parts 60 and 65, to the extent referenced in 40 C.F.R. part 60, effective June 1, ~~2022~~ 2023.

§45-16-2. Definitions.

2.1. "Administrator" means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

2.2. "Clean Air Act" ("CAA") means the federal Clean Air Act, as amended, 42 U.S.C. § 7401, et seq.

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

2.4. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in 40 C.F.R. part 60. Words and phrases not defined therein shall have the meaning given to them in the federal Clean Air Act.

§45-16-3. Requirements.

3.1. No person may construct, reconstruct, modify, or operate or cause to be constructed, reconstructed, modified, or operated any source subject to the provisions of 40 C.F.R. part 60 which results or will result in a violation of this rule.

§45-16-4. Adoption of standards.

4.1. Standards. -- The Secretary hereby adopts and incorporates by reference the provisions of 40 C.F.R. parts 60 and 65, to the extent referenced in 40 C.F.R. part 60, including any reference methods, performance specifications and other test methods which are appended to these standards and contained in 40 C.F.R. parts 60 and 65, effective June 1, ~~2022~~ 2023, for the purposes of implementing a program for standards of performance for new stationary sources, except as follows:

~~4.1.a~~ 4.1.1. 40 C.F.R. § 60.9 is amended to provide that information shall be available to the public in accordance with W.Va. Code §§ 22-5-1 et seq., 29B-1-1 et seq., and 45CSR31; and

~~4.1.b~~ 4.1.2. Subparts B, C, Ca, Cb, Cc, Cd, Ce, Cf, Ea, Eb, Ec, WWW, XXX, AAAA, BBBB, CCCC, DDDD, EEEE, FFFF, LLLL and MMMM of 40 C.F.R. part 60 shall be excluded.

~~4.1.c~~ 4.1.3. The following subparts of 40 C.F.R. part 60 relating to wood-burning heaters and appliances are expressly excluded and are not adopted or incorporated by reference in this rule:

~~4.1.c.1~~ 4.1.3.a. Subpart AAA; and

~~4.1.c.2~~ 4.1.3.b. Subpart QQQQ.

§45-16-5. Secretary.

5.1. Any and all references in 40 C.F.R. parts 60 and 65 to the "Administrator" are amended to be the "Secretary" except as follows:

~~5.1.a~~ 5.1.1. Where the federal regulations specifically provide that the Administrator shall retain authority and not transfer authority to the Secretary;

~~5.1.b~~ 5.1.2. Where provisions occur which refer to:

~~5.1.b.1~~ 5.1.2.a. Alternate means of emission limitations;

~~5.1.b.2~~ 5.1.2.b. Alternate control technologies;

~~5.1.b.3~~ 5.1.2.c. Innovative technology waivers;

~~5.1.b.4~~ 5.1.2.d. Alternate test methods;

~~5.1.b.5~~ 5.1.2.e. Alternate monitoring methods;

~~5.1.b.6~~ 5.1.2.f. Waivers/adjustments to recordkeeping and reporting;

~~5.1.b.7~~ 5.1.2.g. Emissions averaging;

~~5.1.b.8~~ 5.1.2.h. Applicability determinations; or

~~5.1.b.9~~ 5.1.2.i. The authority to require testing under Section 114 of the Clean Air Act, as amended; or

~~5.1.c~~ 5.1.3. Where the context of the regulation clearly requires otherwise.

§45-16-6. Permits.

6.1. Nothing contained in this adoption by reference shall be construed or inferred to mean that permit requirements in accordance with applicable rules shall be in any way be limited or inapplicable.

§45-16-7. Inconsistency between rules.

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