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TITLE 45 LEGISLATIVE RULE DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY

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

§45-1-1. General.

- 1.1. Scope. This rule sets forth the criteria for establishing an alternative emission limitation during periods of startup, shutdown, or maintenance. This rule was developed in response to "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.
 - 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. Applicability.
- 1.5.a. Person(s) subject to 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10, 45CSR21 or 45CSR40 who may have excess emissions during periods of startup, 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" 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, shutdown, or maintenance). An alternative emission limitation is a component

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of a continuous allowable 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.
- 2.6. "Excess Emissions" means the emissions of air pollutants from a source that exceed any allowable emission limitation. In particular, this term includes those emissions above the otherwise allowable emission limitation that occur during periods of startup or shutdown or other modes of source operation.
- 2.7. "Maintenance Operation" means scheduled maintenance activities that have zero process weight rate and are not defined as a manufacturing process.
- 2.8. "Practically Enforceable" also means State and federally enforceable, in the context of an allowable 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. "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. "Shutdown" means the cessation of operation, for any purpose, of a source subject to this rule.

- 2.12. "Startup" means the setting in operation, for any purpose, of a source subject to this rule.
- 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. The Secretary may establish an alternative emission limitation as a practically enforceable permit condition for any person(s) subject to this rule, in accordance with the requirements of 45CSR13, 45CSR14, and 45CSR19 as applicable.
- 3.2. An alternative emission limitation may be a numerical limitation, a technological control requirement, or a work practice requirement that would apply during periods of startups, shutdowns, or maintenance as a component of the continuous allowable emission limitation.
- 3.3. 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 permit limitations that apply during normal modes of operation must provide for continuous compliance and must meet the applicable stringency requirements.
- 3.4. An alternative emission limitation that is expressed as a numerical limitation does not require the same numerical level of emissions as in all normal modes of operation. However, an alternative emission limitation during periods of startup, shutdown, or maintenance shall not be effectively unlimited or an uncontrolled level of emissions, as such would constitute impermissible *de facto* exemptions for emissions during startup, 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. A person(s) 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.

§45-1-4. Application Requirements.

- 4.1. A source that cannot meet the emission limitations as required by 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10, 45CSR21 or 45CSR40 on a continuous basis, including during periods of start-up, shutdown, and maintenance may apply for a permit in accordance with 45CSR13, 45CSR14 or 45CSR19 as applicable.
- 4.2. The permit application shall be specific to the emissions unit at the source and shall consist of the following:
- 4.2.a. The source shall narrowly define the startup, shutdown, or maintenance operations at the emissions unit including as appropriate the parameters that define startup, shutdown, or maintenance; the estimated duration of the events; and the estimated frequency of events for each alternative emission limitation.

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- 4.2.b. The source shall describe why the use of the control strategy used during normal operations is not achievable during periods of startup, shutdown, or maintenance.
- 4.2.c. The source 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.
- 4.2.d. The source shall propose alternative emission limitation(s) and monitoring parameter(s) during startup, shutdown, or maintenance with reasonable specificity to ensure practical enforceability of the alternative emission limitation.
- 4.2.e. The source shall provide an estimate of the worst-case emissions that may occur during periods of startup, 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 estimate would be based on the efficiency during those periods.
- 4.2.f. If the source 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, 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 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.
- 5.1.a. 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. Verify that the emission limit that applies during normal operation of the emission unit is not achievable during periods of startup, shutdown, or maintenance;
- 5.1.c. An alternative emission limitation requires that the frequency and duration of operation during periods of startup, shutdown, or maintenance are minimized to the greatest extent practicable;
- 5.1.d. Evaluate the potential worst-case emissions that could occur during periods of startup, shutdown, or maintenance based on the alternative emission limitation(s);
- 5.1.e. 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, shutdown, or maintenance;

- 5.1.f. Require practically enforceable monitoring parameters and records to ensure compliance with the alternative emission limitation(s).
- 5.2. An alternative emission limitation requires that, at all times, the source is operated in a manner consistent with good practice for minimizing emissions and that sources use 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 stand-alone as the work practice standard.

§45-1-6. Recordkeeping and Reporting.

- 6.1. The owner or operator shall maintain records during periods of startup, 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 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.
- 6.2. The owner or operator of any source subject to this rule shall maintain records of alternative emission limitation 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 an applicable permit.

§45-1-7. Inconsistency Between Rules.

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.