

45CSR1

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

**SERIES 1
ALTERNATIVE EMISSION LIMITATIONS DURING STARTUP AND SHUTDOWN
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. This rule was developed in 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” 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 2, 2024.

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

1.5. Sunset Provision. -- Does not apply.

1.6. Applicability. This rule applies to the owner or operator of a source subject to 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10 or 45CSR21 which cannot comply with the established emission limitations imposed by those rules during periods of startup or shutdown.

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

2.4. “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

45CSR1

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.

2.5. “Excess Emissions” means the emissions of air pollutants from a source that exceed any applicable emission limitation. This term includes those emissions above the otherwise applicable emission limitation that occur during startup, shutdown, malfunction or other modes of source operation.

2.6. “Malfunction” means a sudden and unavoidable breakdown of process or control equipment.

2.7. “Practically 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”.

2.8. “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.

2.9. “Shutdown” means the cessation of operation of a source 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 of a source 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 shall:

3.2.1. Establish an alternative emission limitation as a practically enforceable permit condition for any 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.

3.3. 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 or shutdown as a component of a continuously applicable emission limitation.

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 other permit limitations that apply during normal modes of operation must provide for continuous compliance and must meet the applicable stringency requirements.

3.5. An alternative emission limitation expressed as a numerical limitation does not require the same numerical level of emissions as other normal modes of operation.

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

3.7. 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.

3.8. 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. Any owner or operator that cannot comply with the applicable emission limitations required by 45CSR2, 45CSR3, 45CSR5, 45CSR6, 45CSR7, 45CSR10 or 45CSR21 during periods of startup or shutdown 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:

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

45CSR1

4.2.2. The owner or operator shall describe why the control strategy used during normal operations is technically infeasible during periods of startup or shutdown.

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

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

4.2.5. The owner or operator shall provide an estimate of the worst-case emissions that may occur during periods of startup or shutdown 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 then the emissions estimate would be based on the efficiency during periods of startup.

4.2.6. If the 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 events, the duration of events, and the maximum frequency of events and 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 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.

5.1.1. 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).

5.1.2. 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.

5.1.3. An alternative emission limitation requires the frequency and duration of operation during periods of startup or shutdown are minimized to the greatest extent practicable.

5.1.4. The Secretary shall evaluate the potential worst-case emissions that could occur during periods of startup or shutdown based on the alternative emission limitation.

5.1.5. An alternative emission limitation requires all practical steps are taken to minimize the impact of emissions on ambient air quality during periods of startup or shutdown.

5.1.6. 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 emission unit is operated in a

manner consistent with good practice for minimizing emissions and the owner or operator uses best efforts regarding planning, design, and operating procedures. An alternative emission limitation shall not be 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 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 SSM periods. 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 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 shall maintain records of SSM events for a period of at least 5 years following the date of each occurrence. At a minimum, the most recent 2 years of data shall be maintained on-site. The remaining 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 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 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.

§45-1-8. Disposition of Rule; Severability.

8.1. In the event the U.S. EPA’s June 12, 2015 “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Finding of Substantial

45CSR1

Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction,” at 80 Fed. Reg. 33840 (2015 SSM SIP Call) is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may terminate any permit or section of an existing permit issued pursuant to this rule.

8.2. In the event the U.S. EPA’s April 17, 2023 “Air Plan Disapproval; West Virginia; Revision to the West Virginia State Implementation Plan To Add the Startup, Shutdown, Maintenance Rule 45CSR1—Alternative Emission Limitations During Startup, Shutdown, and Maintenance Operations,” at 88 Fed. Reg. 23356 (45CSR1 2023 Disapproval) is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may terminate any permit or section of an existing permit issued pursuant to this rule.

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

8.4. In the event the 2015 SSM SIP Call, 45CSR1 2023 Disapproval, and/or the 2023 FFS is withdrawn by the U.S. EPA, is invalidated by a court of competent jurisdiction, and/or is invalidated by an act of the West Virginia Legislature or United States Congress, the Secretary may sever requirement §45-1-3.1 and revert to the June 1, 2017 requirements found at §§45-1-3.2 and -4.1.