6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2013-0272; FRL-9911-96-Region 4]

Approval and Promulgation of Implementation Plans; Kentucky; Approval of Revisions to the Jefferson County Portion of the Kentucky SIP; Emissions During Startups, Shutdowns, and Malfunctions

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to approve part of a revision to the Kentucky State Implementation Plan (SIP), submitted by the Commonwealth of Kentucky, through the Kentucky Division for Air Quality (KDAQ), on March 22, 2011. The proposed revision was submitted by KDAQ on behalf of the Louisville Metro Air Pollution Control District (District), which has jurisdiction over Jefferson County, Kentucky. The portion of the revision that EPA is approving modifies the Regulation entitled "Emissions During Startups, Shutdowns, Malfunctions and Emergencies" in the Jefferson County portion of the Kentucky SIP. EPA is approving this portion of the March 22, 2011, SIP revision because the Agency has determined that it is in accordance with the requirements for SIP provisions under the Clean Air Act (CAA or Act). EPA will act on the other portions of KDAQ's March 22, 2011, submittal, which are severable and unrelated, in a separate action. EPA is also responding to comments received on its May 21, 2013, proposed rulemaking.

DATE: This rule will be effective [insert 30 days after date of publication in the Federal Register].

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA-R04-OAR-2013-0272. All documents in the docket are listed on the www.regulations.gov web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Joel Huey, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Mr. Huey may be reached by phone at (404) 562-9104 or via electronic mail at huey.joel@epa.gov.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. What Action Is EPA Taking?

EPA is approving a revision to the Jefferson County portion of the Kentucky SIP to incorporate revisions to Jefferson County Regulation 1.07, "Emissions During Startups, Shutdowns, Malfunctions and Emergencies" (referred to hereafter as "Rule 1.07"). The revision modifies all seven sections of the existing version of Rule 1.07 currently in the EPA-approved SIP for Jefferson County. These changes to Rule 1.07 became effective in Jefferson County on July 1, 2005. EPA believes that the changes to this rule are consistent with CAA requirements that apply to excess emissions during startup, shutdown and malfunction (SSM) events. In addition, EPA believes that these changes correct existing concerns about Rule 1.07 in the Jefferson County portion of the Kentucky SIP, as explained below. Please refer to the docket for this rulemaking for the complete text of the adopted provisions.

II. What is the Background for EPA's Action?

On March 22, 2011, KDAQ submitted a request for EPA approval of a SIP submittal containing proposed revisions to the Regulation entitled "Emissions During Startups, Shutdowns,

Malfunctions and Emergencies" in the Jefferson County portion of the Kentucky SIP. In an action published on May 21, 2013 (78 FR 29683), EPA proposed to approve the proposed revisions. As noted in that proposal notice, the Louisville Metro Air Pollution Control District proactively adopted changes on June 21, 2005, with the intent of correcting inconsistencies between its rule and the CAA and EPA guidance regarding SIP provisions that apply to the treatment of excess emissions that may occur during source SSM events. The changes to Rule 1.07, which were included in the March 22, 2011, SIP revision provided to EPA by KDAQ, include: (1) changing the name of the regulation from "Emissions During Startups, Shutdowns, Malfunctions and Emergencies" to "Excess Emissions During Startups, Shutdowns, and Upset Conditions"; (2) clarifying that excess emissions from a process or process equipment due to startup, shutdown, or upset (i.e., malfunction) condition shall be deemed in violation of the applicable emission standards; (3) removing the authority of the District to grant discretionary exemptions from compliance with SIP emission standards during SSM events; (4) augmenting the source excess emission reporting requirements to assist the District in evaluating whether ambient standards and goals have been exceeded and whether enforcement actions are needed to protect public health and welfare; and (5) removing the provisions that created exemptions for excess emissions during emergencies based upon factors comparable to an affirmative defense.

III. What is EPA's Response to Comments?

EPA received numerous comments on the May 21, 2013, rulemaking proposing to approve a revision to the Regulation entitled "Emissions During Startups, Shutdowns, Malfunctions and Emergencies" in the Jefferson County portion of the Kentucky SIP. Specifically, the Louisville Gas and Electric and Kentucky Utilities Energy Company (LG&E)

provided comments adverse to the proposed rulemaking, and a number of environmental organizations and approximately 74 citizens provided comments supporting the proposed rulemaking. All of the comments received by EPA are included in the docket for today's final action using Docket ID EPA-R04-OAR-2013-0272. A summary of the comments and EPA's responses are provided below.

The adverse comments provided by LG&E consist primarily of technical concerns associated with the administration of the revised version of Rule 1.07 during SSM events. These technical concerns, however, do not appear to have been raised by LG&E at earlier stages of the rulemaking process when these revisions were being considered at the state level.[1] EPA notes that these types of concerns are more appropriately raised first during the rule development process undertaken by a state, rather than later during EPA's evaluation of a submitted SIP revision. Nevertheless, EPA has evaluated the specific technical concerns raised by the commenter, identified as comments 1 through 8 below, and provides detailed responses. EPA has determined that the revisions to Rule 1.07 are consistent with the CAA and applicable EPA guidance, and therefore the Agency is approving these revisions into the Kentucky SIP as it applies to Jefferson County.

Comment 1: The commenter asserted that the revised version of Rule 1.07 as "written and presently enforced" is "having a negative and unnecessary impact on LG&E and KU Energy LLC's operations and customers" and that "continued enforcement could have an escalated and even more detrimental impact on electric reliability and customer costs."

[1] LG&E did provide comments to the Commonwealth, however, those comments did not reflect the issues raised here by the Company. *See* EPA Docket Number EPA-R04-OAR-2013-0272.

Response 1: The commenter provided no specific information supporting its contentions that the revised rule is having negative or unnecessary impacts on LG&E's operations and customers. EPA is aware of one action taken by the District in recent years to enforce SIP requirements consistent with revised Rule 1.07 and two other Jefferson County rules at the LG&E Cane Run Power Plant in Louisville. That enforcement action resulted in a requirement that the source take corrective action and pay penalties pursuant to an administrative settlement.[2] Such enforcement actions are intended to encourage better source compliance with applicable environmental regulations that are in place for the protection of the environment and human health.

With respect to how the revised Rule 1.07 is written, the revisions reflect the District's decision to bring it into compliance with CAA requirements and thus warrant approval by EPA into the Commonwealth's SIP. With respect to how the District elects to enforce SIP requirements consistent with Rule 1.07, that likewise reflects the District's proper exercise of its enforcement discretion authority, consistent with CAA requirements. By contrast, EPA believes that SIP provisions that allow for automatic and discretionary exemptions for excess emissions during SSM events, such as those eliminated by the District in the revised version of Rule 1.07, allow facilities to be less diligent in minimizing pollutant emissions during such times and that this can result in unnecessary adverse impacts on citizens, including customers of LG&E. The commenter's concern that it may be required to comply with SIP requirements as a result of the revisions to Rule 1.07 through enforcement actions is not a basis for EPA to disapprove a SIP revision that complies with CAA requirements.

[2] *See* Agreed Board Order No. 12-01, Louisville Metro Air Pollution Control Board, Incident Nos. 05933 and 06082 regarding, among other things, failure to report excess particulate emissions from the sludge processing plant on five days in August 2011. *See* EPA Docket Number EPA-R04-OAR-2013-0272.

Comment 2: The commenter claimed that the District's assertion that an electric generating unit (EGU) should be able to operate in compliance with emission standards during startup, shutdown and upset periods is "technically infeasible and goes against past EPA actions and findings pertaining to emissions during these periods."

Response 2: The commenter did not provide specific facts or information to support this broad claim regarding EGU operation. Furthermore, EPA disagrees with the basic premise stated by the commenter for multiple reasons. First, the commenter asserted that EGUs cannot operate in compliance with emission standards during startup and shutdown. EPA disagrees with this presumption. Startup and shutdown are normal modes of source operation, and it is technically feasible for sources to meet emission standards during such periods of operation. When appropriate, emission standards may entail imposition of different numerical levels or averaging periods allowed during startup and shutdown or may require imposition of different forms of emission control during startup and shutdown. Rather than allowing EGUs to have impermissible exemptions from applicable emission limits during SSM events, the District has elected to require sources to meet the applicable SIP emission limits at all times, and this decision is consistent with CAA requirements.

Second, the commenter claimed that the District's expectation that sources meet emission standards during startup and shutdown "goes against past Agency actions." The commenter did not state which "Agency actions" it was referring to, and the commenter also failed to note that EPA's own recent regulations pertaining to various source categories do in fact impose numerical emission limits upon sources that apply at all times, including startup, shutdown and malfunction periods. For example, in 2012 EPA amended the National Emission Standards for

Hazardous Air Pollutant (NESHAP) Emissions for Steel Pickling-HCl Process Facilities by adding provisions requiring that the emission limits of the rule apply at all times, including during SSM periods.[3] As a more recent example, EPA revised the NESHAPs for Group IV Polymers and Resins, Pesticide Active Ingredient Production, and Polyether Polyols Production by eliminating the exemption for SSM periods so that the emission standards in each rule apply at all times.[4]

Third, the commenter disregarded EPA's longstanding interpretation of the CAA with respect to SIP provisions addressing emissions during SSM events. Since at least 1982, EPA's interpretation of the CAA has been that periods of startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the design and implementation or the operating procedure for the process and control equipment. Accordingly, careful planning can be reasonably expected to eliminate violations of emission limitations during such periods.[5]

Fourth, the commenter implied that because compliance with emission limits during malfunctions is "technically infeasible," sources should be entitled to exemptions from applicable SIP emission limits and thus excused for violations due to excess emissions during such events. EPA has long interpreted the CAA to prohibit exemptions for excess emissions

[3] *See* National Emission Standards for Hazardous Air Pollutant Emissions: Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks; and Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants; Residual Risk and Technology Review; Final Rule (77 FR 58219, September 19, 2012).

[4] *See* National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins; Pesticide Active Ingredient Production; and Polyether Polyols Production (79 FR 17339, March 27, 2014).

[5] *See, e.g.*, Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation to Regional Administrators, Regions I-X, September 28, 1982.

during malfunctions and to require that the excess emissions be treated as violations.[6] EPA's own recent regulations provide no such exemptions for excess emissions during malfunctions as the courts have held that no such exemptions are permissible because emission limits must apply continuously.

Finally, EPA notes that the District, in addition to be being correct that the CAA requires sources to be subject to emission limitations at all times, including during SSM events, has discretion to elect how to regulate air pollutant emissions, consistent with CAA requirements. The District has authority to develop SIP provisions that impose appropriate alternative emission limitations applicable during startup and shutdown, consistent with EPA's guidance for such provisions in the 1999 SSM Policy, but the District is not required to do so. In adopting this rule revision, the District has determined that sources do not need exemptions for SSM events and should be required to meet the otherwise applicable SIP emission limits at all times. By removing the exemptions for SSM events, the District may seek to limit the number of SSM events, the duration of such events, and the amount of excess emissions during such events in order to meet CAA requirements and to protect public health. For the District to elect to do so is reasonable and also consistent with CAA requirements. EPA's duty under section 110(k) of the CAA is to act upon submitted SIP revisions and to approve those that meet applicable CAA requirements.

[6] *See, e.g.*, State Implementation Plans (SIPs): Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown, from Steven A, Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Robert Perciasepe, Assistant Administrator for Air and Radiation, to Regional Administrators, Regions I-X, September 20, 1999 (the 1999 SSM Policy).

Comment 3: The commenter stated that emission standards are developed as limits to assure a source does not create an issue with National Ambient Air Quality Standards (NAAQS) based on "full load normal operation."

Response 3: EPA disagrees with the commenter's limited view of the purpose of emission limits in SIPs. The CAA requires the imposition of SIP emission limits on sources for a variety of purposes, including for attainment and maintenance of the NAAQS, protection of PSD increments, and protection of visibility. Even with respect to attainment and maintenance of the NAAQS, however, the commenter is incorrect concerning the way in which states may devise the required emission limits. Pursuant to the CAA, each state is required to adopt and submit to the Administrator a plan that provides for implementation, maintenance, and enforcement of the NAAQS within such state. Each such plan must include enforceable emission limitations and other control measures, means, or techniques, as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of the Act. *See* CAA sections 110(a)(1) and (2). Additional requirements apply in certain areas, such as requirements that sources meet a reasonably available control measure (RACM) or reasonably available control technology (RACT) level of control in areas designated nonattainment for purposes of the NAAQS. *See, e.g.,* CAA sections 172(c), 188, and 189 (applicable to areas designated nonattainment for purposes of particulate matter NAAQS).

In particular, the Agency disagrees that states must develop all emission standards to limit emissions only during "full load normal operation." States have discretion as to how they arrive at appropriately protective emission limitations, and their approach may or may not be based only upon evaluation of emissions during "full load normal operation." Nevertheless, the

otherwise applicable emission limitations adopted by the state and approved into the SIP apply at all times unless the applicable provisions include alternative emission limitations under specific circumstances, such as during startup or shutdown.

EPA also notes that, in accordance with CAA section 302(k), SIPs must contain emission limitations that "limit the quantity, rate, or concentration of emissions of air pollutants on a continuous basis." EPA has reiterated these requirements of the CAA with respect to SIP provisions in a recent proposal.[7] Court decisions confirm that this requirement for continuous compliance prohibits exemptions for excess emissions during SSM events.[8] Exemptions from SIP emission limits would authorize sources to emit pollutants during such periods in quantities that could interfere with attainment and maintenance of the NAAQS, protection of PSD increments, and protection of visibility.

Comment 4: The commenter stated that "[d]uring periods of startup, certain emissions control equipment (i.e., electrostatic precipitator, selective catalytic reduction, pulsed jet fabric filters) cannot be activated until specific temperatures are reached from operation of the source." Based on this assertion, the commenter argued, "[i]t follows that a source required to utilize such emission control equipment should not be held to a numerical standard that was developed for limiting emissions during full load, normal operation."

[7] *See* "State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction; Proposed Rule," 78 FR 12460 at 12470, February 22, 2013.

[8] *See, e.g., Sierra Club* v. *EPA,* 551 F.3d 1019, 1021 (D.C. Cir. 2008); *US Magnesium, LLC* v. *EPA,* 690 F.3d 1157, 1170 (10th Cir. 2012).

Response 4: The main premise of the commenter's argument is that some existing control measures at a source may not function, or function as effectively, during all modes of source operation. EPA understands that certain emission control equipment at some sources are not fully operational in some circumstances, such as when sufficient temperatures have not been reached, as described by the commenter. EPA does not agree, however, that "it follows" automatically that sources should be excused from meeting any emission limitations during startup. As noted above, SIPs must contain emission limitations that apply on a continuous basis. EPA also does not necessarily agree that sources are incapable of meeting emission limitations that may have been developed based upon full load operation. Sources that have difficulty meeting existing emission limitations during startup should take steps to reduce emissions during such events. These steps may include changes to the facility's operations or installation of supplemental control measures. As also noted above, the District has the authority to establish appropriate alternative emission limitations to apply during startup periods but is not required to do so. The District has exercised its discretion to revise Rule 1.07 such that the SIP does not provide for exemptions to otherwise applicable emission limitations during startup events.

Comment 5: The commenter claimed that "during periods of startup, although an emission rate may be exceeded, the mass emissions are actually very low in comparison to normal operation because volumetric flow is very low during startup." Based upon this assertion, the commenter argued that "concerns with emissions that affect the NAAQS are negated."

Response 5: As noted above, EPA's interpretation of the CAA is that periods of startup are part of the normal operation of a source. Here, EPA interprets the commenter's reference to "normal operation" to mean full load operation. EPA disagrees with the basis of the commenter's argument – that emissions rate exceedances are of less concern when they occur during periods of startup than during full load operation because the mass emissions may be lower in comparison to full load operation. The relatively lower flow and lower gas stream temperatures that may be associated with a startup period could result in less dispersion and transport of pollutants. As a result, communities located close to the facility could experience greater adverse impacts during startup than during full load operation, even if the rate of total pollutant emissions is lower by mass. The District's revisions to Rule 1.07 eliminated impermissible exemptions that precluded the District, the Commonwealth, EPA and citizens from taking legal action to require sources to make reasonable efforts to reduce these emissions.

Comment 6: The commenter advocated that EPA should make clear that "certain measures, including good engineering combustion and pollution control practices, are an appropriate limitation to apply during startup, shutdown and upset condition periods." The commenter asserted that EPA has promulgated work practice standards to minimize emissions during these periods in both the utility Mercury and Air Toxics Standards (MATS) and the boiler Maximum Achievable Control Technology (MACT) rules and should, to the extent possible, address such emissions in a consistent manner under all CAA regulatory programs. The implication of the commenter's statements is that EPA should require the District to adopt some other mode or means of control of sources to apply during SSM events.

Response 6: EPA agrees that states have discretion to determine how to regulate emissions during startup and shutdown events in most SIP provisions, consistent with CAA requirements, but SIP emission limits may not include exemptions for emissions during startup and shutdown events. Instead, states may include alternative emission limits for such modes of source operation so long as they are consistent with CAA requirements. EPA's 1999 SSM Policy includes guidance to states that elect to develop such alternative limits to apply during startup and shutdown. EPA notes that emission limits that apply during specific modes of source operation such as startup and shutdown do not necessarily need to be expressed as a numerical limit, so long as they meet other CAA requirements with respect to enforceability and the requisite level of control (e.g., RACT or RACM). Similarly, the emission limits applicable during startup and shutdown do not necessarily have to be set at the same numerical level as during other modes of source operation, so long as they otherwise meet all CAA requirements. By contrast, however, EPA considers it impracticable to develop alternative SIP emission limits (whether stated numerically or as requirement for a particular control or technique) that apply specifically during malfunctions because, by definition, malfunctions are events that are not reasonably foreseeable, are not avoidable through appropriate source design, operation and maintenance, and are not controllable. Accordingly, sources are required to meet the otherwise applicable SIP emission limits during malfunctions, and any excess emissions during such events are considered violations. To the extent, however, that the commenter suggests that EPA should require states to develop alternative emission limits that apply during startup and shutdown, in lieu of the otherwise applicable SIP emission limits, EPA disagrees that its role is to require states to do so.

The commenter also suggests that SIP rules should be consistent with federally promulgated standards and points to, as examples, the rules often referred to as the MATS and Boiler MACT rules. The MATS rule established standards for hazardous air pollutant (HAP) emissions from coal- and oil-fired electric utility steam generating units (40 CFR part 63 subpart UUUUU). *See* 77 FR 9304 (February 16, 2012). In the same rulemaking that promulgated the MATS rule, EPA also finalized changes to the New Source Performance Standards (NSPS) that apply to coal- and oil-fired EGUs, industrial-commercial-institutional steam generating units, and small industrial commercial-institutional steam generating units (40 CFR part 60 subparts D, Da, Db, and Dc), often referred to as the Utility NSPS rule.[9] The major source Boiler MACT rule was published on March 21, 2011 (76 FR 15608), and applies to industrial, commercial, and institutional boilers and process heaters that are located at, or are part of, a major source[10] of HAP emissions (40 CFR 63 subpart DDDDD). The area source Boiler MACT, also published on March 21, 2011 (76 FR 15554), applies to industrial, commercial, and institutional boilers that are located at, or are part of, an area source[11] of HAP emissions (40 CFR 63 subpart JJJJJJ).[12]

[9] Following promulgation of the MATS NESHAP and Utility NSPS, the EPA received petitions for reconsideration of numerous provisions of both rules pursuant to CAA section 307(d)(7)(B). Subsequently, EPA proposed reconsideration of specific provisions of those rules, including the requirements applicable during periods of startup and shutdown. 77 FR 71323 (November 30, 2012). In that action, EPA proposed to revise the definitions of "startup" and "shutdown" as set forth in 40 CFR 63.10042 and to revise the work practice standard provisions as set forth in Table 3 to Subpart UUUUU. The EPA has not yet taken final action on the proposed revisions to those requirements.

[10] For the purposes of subpart DDDDD, a major source of HAPs is as defined in 40 CFR 63.2, except that for oil and natural gas production facilities a major source of HAPs is as defined in 40 CFR 63.761.

[11] For the purposes of subpart JJJJJJ, an area source of HAPs is as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.

[12] Revisions to the major source Boiler MACT and the area source Boiler MACT were published on January 31, 2013 (78 FR 7138), and on February 1, 2013 (78 FR 7488), respectively. In those actions, EPA revised the definitions of "startup" and "shutdown" as set forth in 40 CFR 63.7575 and 40 CFR 63. 11237 and revised the work practice standard provisions as set forth in Table 3 to subpart DDDDD and in Table 3 to subpart JJJJJJ.

Under the MATS, Utility NSPS, and Boiler MACT rules, numeric emission limits generally apply for all relevant air pollutants and their surrogates (except organic HAPs) and for all periods of operation. For periods of startup and shutdown, however, these rules require facilities to comply with work practice standards[13] for minimizing emissions in lieu of numeric emission limits.

EPA understands the commenter's suggestion that regulatory requirements applicable to sources for purposes of SIPs should be consistent, "to the extent possible," with the requirements of other CAA programs. On this point, EPA notes that the rules established under the NSPS and NESHAP programs are designed to achieve different objectives of the CAA than that of SIPs. They are technology-based, industry-specific standards that are nationally uniform in limiting the amount of emissions allowed from sources. Under section 111 of the CAA, an NSPS must reflect the degree of emission limitation and the percentage reduction achievable by new sources or modified existing sources through application of the best technological system of continuous emission reduction that the Administrator determines has been adequately demonstrated. Similarly, under section 112 of the CAA, a NESHAP must require the maximum degree of reduction in emissions of hazardous air pollutants achievable by new sources and existing sources as determined by the Administrator. In setting standards under sections 111 and 112, the Administrator must take into consideration the cost of achieving such emission reductions and any non-air quality health and environmental impact and energy requirements; under section 112, the statute requires a minimum stringency standard for existing sources based on the

[13] The work practice standards under these rules are contained in Table 3 of Subpart UUUUU, Table 3 of subpart DDDDD, and Table 3 of subpart JJJJJJ. These standards require several actions by sources, such as following manufacturer's recommended procedures for minimizing startup and shutdown periods, tuning, maintaining and inspecting burners and associated combustion controls, keeping records of activity and measurements, using either natural gas or distillate oil for ignition during startup, and operating all control devices necessary to meet the normal operating standards.

average emission limitation achieved in practice by the best controlled 12 percent of sources and a minimum stringency standard for new sources based on the best controlled similar source.

In contrast to the NSPS and NESHAP programs, SIPs are EPA-approved state plans to provide for the attainment and maintenance of the NAAQS and to meet other requirements such as protecting PSD increments and visibility. Under section 110 of the Act, each state must adopt a plan that it determines will provide for air quality that meets the primary and secondary NAAQS within the state. Consequently, SIPs must be consistent with attainment and maintenance of the NAAQS and prevention of significant deterioration of air quality throughout the state. Exemptions from SIP emission limits, such as that allowed under the prior version of Rule 1.07, are not appropriate because any emissions above the SIP allowable rate may cause or contribute to violations of the ambient air quality standards and interfere with enforcement of those SIP limits. Thus, EPA's interpretation of the CAA, upheld by the courts, is that all periods of excess emissions must be considered violations.

While the NSPS and NESHAP may provide good models of emission control technology and emission limits, they do not necessarily address all of the issues relevant to SIP provisions and they do not dictate state choices with respect to control measures or emission limitations. To the extent that a particular NSPS or NESHAP imposing a specific control measure or emission limit is relevant to a given source category, states may elect to consider imposing comparable controls to meet SIP requirements, as appropriate. In addition, to the extent that imposition of a specific control measure or emission limit in an EPA regulation helps to establish that a given control measure is technologically or economically feasible for a given source category, states may need to take such controls into account when evaluating emission limits for SIP purposes. EPA emphasizes, however, that any such consideration would need to be based on the specific

facts and circumstances of a given source category, as the considerations relevant to the development of the NSPS or NESHAP may or may not be useful for SIP purposes.

Further, while some emission sources may have difficulty complying with emission standards during startup, shutdown and upset periods, there are other sources of similar type that are capable of complying continuously during such events, especially events that are planned for in advance, such as startups and shutdowns. Thus, an appropriately protective SIP rule encourages compliance by all sources at all times through generally applicable emission limits that apply during full load operation as well as during startup and shutdown events. Where such generally applicable limits are not feasible for an emission source during startup or shutdown events, the SIP may contain appropriately established alternative emission limitations that apply during those events. In instances in which an exceedance of an emission limit is truly unavoidable because of a malfunction, exercise of enforcement discretion by potential enforcers, or exercise of discretion with respect to penalties by courts in the event of citizen enforcement, consistent with the provisions of CAA section 113, allows for proper consideration of the relevant circumstances during the event.

Comment 7: The commenter expressed concerns about the accuracy of emission rates that are calculated for startup and shutdown periods. The commenter stated that:

> "From a technical viewpoint, emission limits with measurement units of mass per heat input (e.g., pounds per million British thermal units) pose significant concern with respect to startup and shutdown periods. Some emission rates are calculated using monitored inputs of both pollutant concentration and diluent (e.g., carbon dioxide (CO_2)) concentration. During startup of a coal-fired EGU, there is a period of time when the

combustion airflow is much higher than during normal operation which inversely yields much lower CO_2 [concentration] than normal. When calculating the emission rate, [concentration of the diluent] CO_2 is used in the denominator of these calculations. The resulting low CO_2 value can yield calculated emission rates that are skewed high and are not representative of actual emission concentrations to the atmosphere. EPA should take into consideration that skewed emission indications during these periods will not have an adverse impact on NAAQS attainment or maintenance, interfere with PSD increments, or otherwise cause adverse impacts."

In essence, the commenter explains that the methodology for calculating emissions may sometimes be based upon assumptions that reflect certain modes of source operation, which would make such calculations less accurate with respect to emissions during other modes of operation.

Response 7: EPA does not dispute that emission rates calculated for a coal-fired EGU during startup and shutdown may be less accurate than during full load operation, assuming that the formula used for the calculations only reflects full load operation. In some instances, a calculated emission rate may indicate exceedance of an applicable SIP emission limit only because existing parameters, such as combustion airflow, are not consistent with the assumptions inherent to the calculation method.

To the extent that the commenter advocates that calculated emission rates should be adjusted so that they more accurately reflect the emissions that may occur during startup and shutdown, EPA believes such an approach would be appropriate and would serve to assure that emissions estimates are more accurate for the purposes of compliance determination and

emissions inventories. EPA notes that some existing Federal rules provide options for dealing with the concern expressed by the commenter. For example, for computing nitrogen oxide emission rates and using CO_2 as a diluent, the continuous emission monitoring procedures of 40 CFR Part 75 allow boiler operators to substitute a minimum concentration of 5.0 percent CO_2 whenever the measured concentration is less than 5.0 percent. *See* 40 CFR Part 75, Appendix F, paragraph 3.3.4.1. This prevents the calculation of disproportionately high emission rates due to very a low CO_2 concentration, which, as indicated by the commenter, is a factor in the denominator of the calculation.

As noted in response to Comment 2 above, an appropriately protective SIP provision is designed to impose appropriate emission limits or controls and to require compliance at all times. However, if a source cannot demonstrate compliance based upon the applicable method in use, enforcement discretion may be used to determine whether to bring an enforcement action and, in the event that there is enforcement, the extent of any actual violation will be based upon all relevant factual information that is credible evidence. By eliminating the impermissible exemptions in the prior version of Rule 1.07, the District has taken steps to properly account for all emissions.

Comment 8: The commenter expressed concerns about the accuracy of PM CEMS for determining compliance with PM emission limits during startup and shutdown events. The commenter argued that:

> "Sources that use PM continuous emission monitoring systems (PM CEMS) as a continuous indication of compliance are required to provide a periodic correlation of the PM CEMs output to values derived through EPA Reference Method testing. The

correlation testing occurs at three separate and distinct levels of operation and PM emissions. As PM reference method testing cannot occur during periods of startup and shutdown due to isokinetic requirements, there is no correlation provided during these periods. As a result, the output of the PM CEMS during periods of startup and shutdown will not be adequately tied to an EPA reference test method and cannot be considered accurate or representative."

Response 8: EPA disagrees that the output of the PM CEMS during periods of startup and shutdown cannot be considered representative of actual emissions, regardless of whether Reference Method stack testing has been performed during startup and shutdown periods. The accuracy of PM CEMS data would be questionable if those data were recorded when the response of the PM CEMS falls outside the correlation range obtained during Reference Method testing. During periods of startup and shutdown, at times some PM CEMS responses may fall outside the correlation range, but any data measurements recorded within that range would be considered useful in assessing PM control device performance.

Furthermore, the subject rule of this action does not require that PM CEMS data must be used to determine compliance status during startup and shutdown periods; it merely requires that that the applicable emission limit applies at all times, including SSM periods. PM CEMS data is not the only type of information that a court may find credible when evaluating whether or not a source would have been in violation of an emission standard. For example, opacity data from continuous opacity monitors (which may be required by another provision of the statute or the SIP) and recordkeeping data on emission control equipment use may also provide relevant information. The validity of all data is a consideration that must be taken into account, along

with all other available credible evidence, when evaluating whether a source is in compliance with SIP emission limits.

Comment 9: One commenter, a national environmental group, submitted comments in support of EPA's proposed approval of the District's revisions to Rule 1.07. The commenter provided its own analysis of the merits of the revisions to Rule 1.07 and its own explanation of why these revisions are consistent with CAA requirements and EPA's interpretation of the CAA with respect to proper treatment of excess emissions during SSM events. In particular, the commenter supported the clarification that excess emissions are violations of emission standards, the elimination of the prior discretionary exemptions for excess emissions, and the improved notification and reporting requirements.

In addition, the commenter emphasized that these revisions to Rule 1.07 will help to reduce excess emissions during SSM events from sources that "jeopardize[] public health and quality of life in nearby communities." As an example, the commenter stated that an environmental justice community in Kentucky has been impacted by such emissions from specific sources. The commenter supported the District's revisions to Rule 1.07 and EPA's approval of those revisions as a means "to help mitigate the impacts of large pollution events on local communities in Jefferson County, directly improving people's lives." EPA notes that 74 individual citizens from Kentucky also filed supportive comments, echoing the key points raised by the environmental group.

Response 9: EPA agrees with the commenters who supported the Agency's approval of the District's revisions to Rule 1.07 on the grounds that this will help to assure that sources take

appropriate action to reduce their emissions in order to meet CAA requirements and thereby help to protect public health and welfare. Although the commenters did not provide detailed information concerning the specific sources and specific events that they described, EPA agrees that exemptions for excess emissions during SSM events in SIP provisions have the potential to expose surrounding communities to higher levels of pollutants and to remove incentives for sources to control and minimize such emissions during SSM events. As a result of such exemptions, communities near such sources may have no adequate legal recourse to address these problems. For the protection of public health, the CAA imposes obligations upon both states and EPA. States are required to develop SIPs that meet CAA requirements; EPA is required to evaluate the SIPs to assure that they meet CAA requirements. A key CAA requirement for SIP provisions is that they must impose emission limitations upon sources that apply continuously, thereby precluding exemptions for excess emissions from sources during SSM events and allowing for effective enforcement by air agencies, EPA, and the public to assure that sources comply with CAA requirements.

IV. Final Action

EPA is approving part of a revision to the Kentucky SIP submitted by the Commonwealth of Kentucky, through KDAQ, on March 22, 2011. This approval includes the changes to Rule 1.07 in the Jefferson County portion of the Kentucky SIP noted in section II above. After review and consideration of the relevant information and data, including the comments received, EPA has determined that this portion of Kentucky's March 22, 2011, SIP revision is consistent with the CAA and EPA's SSM policy.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq*.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the Commonwealth, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq*., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this

action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* section 307(b)(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: May 29, 2014.

Heather McTeer Toney

Regional Administrator,

Region 4.

40 CFR part 52 is amended as follows:

PART 52-[APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart S – Kentucky

2. Section 52.920(c) Table 2 is amended under "Reg 1—General Provisions" by revising the entry for "1.07" to read as follows:

§52.920 - Identification of plan.

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(c)* * *

Table 2 - EPA-Approved Jefferson County Regulations for Kentucky

Reg	Title/subject	EPA approval date	Federal Register notice	District effective date	Explanation
**	*	*	*	*	*
Reg 1—General Provisions					
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions	[Insert date of publication in Federal Register]	[Insert citation of publication]	7/21/2005	
**	*	*	*	*	*

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[FR Doc. 2014-13429 Filed 06/09/2014 at 8:45 am; Publication Date: 06/10/2014]