6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2015-0699; EPA-R05-OAR-2017-0165; FRL-9982-31-Region 5]

Air Plan Approval; Ohio; Attainment Plan for the Lake County SO_2 Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a State Implementation Plan (SIP) revision which Ohio submitted to EPA on April 3, 2015, and supplemented in October 2015 and March 2017, as its plan for attaining the 1-hour sulfur dioxide (SO_2) primary national ambient air quality standard (NAAQS) for the Lake County SO_2 nonattainment area. This plan (herein called a "nonattainment plan") includes Ohio's attainment demonstration, enforceable emission limitations and control measures, and other elements required under the Clean Air Act (CAA). EPA proposes to conclude that Ohio has appropriately demonstrated that the nonattainment plan provides for attainment of the 2010 1-hour primary SO_2 NAAQS in Lake County by the applicable attainment date and that the plan meets the other applicable requirements under the CAA.

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register].**

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2015-0699 (nonattainment SIP) or EPA-R05-OAR-2017-0165 (SO_2 rule revisions) at http://www.regulations.gov, or via email to Blakley.pamela@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia

submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Mary Portanova, Environmental Engineer, Control Strategies Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-5954, portanova.mary@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, whenever "we," "us," or "our" is used, we mean EPA. The docket number EPA-R05-OAR-2015-0699 refers to Ohio's nonattainment SIP submittal of April 3, 2015, supplemented on October 13, 2015. This state submittal addressed Ohio's Lake County, Muskingum River, and Steubenville OH-WV SO_2 nonattainment areas. The docket number EPA-R05-OAR-2017-0165 refers to Ohio's OAC 3745-18 SO_2 rules SIP submittal of March 13, 2017. EPA is proposing action on only the Lake County portion of Ohio's nonattainment SIP submittal and the portions of OAC 3745-18 that are specifically pertinent to Ohio's Lake County nonattainment SIP at this time. The Muskingum River and Steubenville portions of the nonattainment SIP and the remainder of the OAC 3745-18 rule revisions will be addressed in subsequent rulemaking actions.

The following outline is provided to aid in locating information regarding EPA's proposed action on Ohio's Lake County SO_2 nonattainment plan.

Table of Contents

I. Why was Ohio Required to Submit an SO_2 Plan for the Lake County area?

On June 22, 2010, EPA promulgated a new 1-hour primary SO_2 NAAQS of 75 parts per billion (ppb), which is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of the daily maximum 1-hour average concentrations does not exceed 75 ppb, as determined in accordance with appendix T of 40 CFR part 50. *See* 75 FR 35520, codified at 40 CFR 50.17(a)-(b). The 3-year average of the annual 99th percentile of daily maximum 1-hour average concentrations is called the air quality monitor's SO_2 "design value." For the 3-year period 2009-2011, the design value at the SO_2 monitor in Painesville, Lake County (39-085-0007) was 157 ppb, which is a violation of the SO_2 NAAQS. Lake County's SO_2 designation was based upon the monitored design value at this location for this three-year period. (Lake County's other SO_2 monitor, located in Eastlake, Ohio (39-085-0003), had a 2009-2011 design value of 33 ppb, which is not a violation.) On August 5, 2013, EPA designated a first set of 29 areas of the

country as nonattainment for the 2010 SO_2 NAAQS, including the Lake County nonattainment area. *See* 78 FR 47191, codified at 40 CFR part 81, subpart C. These area designations were effective on October 4, 2013. Section 191(a) of the CAA directs states to submit SIPs for areas designated as nonattainment for the SO_2 NAAQS to EPA within 18 months of the effective date of the designation; in this case, by no later than April 4, 2015. These SIPs are required by CAA section 192(a) to demonstrate that their respective areas will attain the NAAQS as expeditiously as practicable, but no later than 5 years from the effective date of designation. The SO_2 attainment deadline for Lake County is October 4, 2018.

In response to the requirement for SO_2 nonattainment plan submittals, Ohio submitted a nonattainment plan for the Lake County nonattainment area on April 3, 2015[1], and supplemented it on October 13, 2015, and on March 13, 2017. The remainder of this document describes the requirements that such plans must meet in order to obtain EPA approval, provides a review of the state's plan with respect to these requirements, and describes EPA's proposed action on the plan.

[1] For a number of areas, EPA published notice on March 18, 2016, that the pertinent states had failed to submit the required SO_2 nonattainment plan by this submittal deadline. *See* 81 FR 14736. However, because Ohio had submitted its SO_2 nonattainment plan before that date, EPA did not make such a finding with respect to Ohio's submittal for Lake County.

II. Requirements for SO_2 Nonattainment Area Plans

Nonattainment SIPs must meet the applicable requirements of the CAA, and specifically CAA sections 110, 172, 191 and 192. EPA's regulations governing nonattainment SIPs are set forth at 40 CFR part 51, with specific procedural requirements and control strategy requirements residing at subparts F and G, respectively. Soon after Congress enacted the 1990 Amendments to the CAA, EPA issued comprehensive guidance on SIPs, in a document entitled the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," published at 57 FR 13498 (April 16, 1992) (General Preamble). Among other things, the General Preamble addressed SO_2 SIPs and fundamental principles for SIP control strategies. *Id.*, at 13545-13549, 13567-13568.

On April 23, 2014, EPA issued recommended guidance for meeting the statutory requirements in SO_2 SIPs, in a document entitled, "Guidance for 1-Hour SO_2 Nonattainment Area SIP Submissions," available at https://www.epa.gov/sites/production/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf. In this guidance, referred to in this document as the April 2014 SO_2 guidance, EPA described the statutory requirements for a complete nonattainment area SIP, which includes an accurate

emissions inventory of current emissions for all sources of SO_2 within the nonattainment area; an attainment demonstration; a demonstration of reasonable further progress (RFP); implementation of reasonably available control measures (RACM); enforceable emission limitations and control measures; new source review (NSR); and adequate contingency measures for the affected area. A synopsis of these requirements can be found in the proposed rulemaking for the Lemont and Pekin, Illinois, SO_2 nonattainment plans, which was published on October 5, 2017 at 82 FR 46434[2].

In order for EPA to fully approve a SIP as meeting the requirements of CAA sections 110, 172 and 191-192 and EPA's regulations at 40 CFR part 51, the SIP for the affected area needs to demonstrate to EPA's satisfaction that each of the applicable requirements have been met. Under CAA sections 110(l) and 193, EPA may not approve a SIP that would interfere with any applicable requirement concerning NAAQS attainment and RFP, or any other applicable requirement, and no requirement in effect (or required to be adopted by an order, settlement, agreement, or plan in effect before November 15, 1990) in any area which is a nonattainment area for any air pollutant, may be

[2] See https://www.regulations.gov/document?D=EPA-R05-OAR-2016-0138-0001. The Lemont and Pekin area action was finalized on February 1, 2018 (83 FR 4591).

modified in any manner unless it insures equivalent or greater emission reductions of such air pollutant.

III. Attainment Demonstration and Longer-Term Averaging

CAA section 172(c)(1) directs states with areas designated as nonattainment to demonstrate that the submitted plan provides for attainment of the NAAQS. The regulations at 40 CFR part 51, subpart G, further delineate the control strategy requirements that SIPs must meet. EPA has long required that all SIPs and control strategies reflect four fundamental principles of quantification, enforceability, replicability, and accountability. General Preamble, at 13567-13568. SO_2 attainment plans must consist of two components: (1) emission limits and other control measures that assure implementation of permanent, enforceable and necessary emission controls, and (2) a modeling analysis which meets the requirements of 40 CFR part 51, appendix W, which demonstrates that these emission limits and control measures provide for timely attainment of the primary SO_2 NAAQS as expeditiously as practicable, but by no later than the attainment date for the affected area.

In all cases, the emission limits and control measures must be accompanied by appropriate methods and conditions to determine compliance with the respective emission limits and control measures and must be quantifiable (i.e., a specific

amount of emission reduction can be ascribed to the measures), fully enforceable (specifying clear, unambiguous and measurable requirements for which compliance can be practicably determined), replicable (the procedures for determining compliance are sufficiently specific and non-subjective so that two independent entities applying the procedures would obtain the same result), and accountable (source specific limits must be permanent and must reflect the assumptions used in the SIP demonstrations).

EPA's April 2014 SO_2 guidance recommends that emission limits be expressed as short-term average limits (e.g., addressing emissions averaged over one or three hours), but also describes an option to utilize emission limits with longer averaging times of up to 30 days so long as the state meets various suggested criteria. *See* 2014 SO_2 guidance, pp. 22 to 39. Should states and sources utilize longer averaging times, the guidance recommends that the longer-term average limit be set at an adjusted level that reflects a stringency comparable to the 1-hour average limit that the plan otherwise would have set at the critical emission value shown to provide for attainment.

The April 2014 SO_2 guidance provides an extensive discussion of EPA's rationale for concluding that appropriately set, comparably stringent limitations based on averaging times as

long as 30 days can be found to provide for attainment of the 2010 SO_2 NAAQS. In evaluating this option, EPA considered the nature of the standard, conducted detailed analyses of the impact of use of 30-day average limits on the prospects for attaining the standard, and carefully reviewed how best to achieve an appropriate balance among the various factors that warrant consideration in judging whether a state's plan provides for attainment. *Id.* at pp. 22 to 39. *See* also *id.* at appendices B, C, and D.

EPA considered that the 1-hour primary SO_2 NAAQS, as specified in 40 CFR 50.17(b), is met at an ambient air quality monitoring site when the 3-year average of the annual 99^{th} percentile of daily maximum 1-hour average concentrations is less than or equal to 75 ppb. In a year with 365 days of valid monitoring data, the 99^{th} percentile would be the fourth highest daily maximum 1-hour value. The 2010 SO_2 NAAQS, including this form of determining compliance with the standard, was upheld by the U.S. Court of Appeals for the District of Columbia Circuit in Nat'l Envt'l Dev. Ass'n's Clean Air Project v. EPA, 686 F.3d 803 (D.C. Cir. 2012). Because the standard has this form, a single exceedance does not create a violation of the standard. Therefore, an emission limit which allows some operational flexibility or emission variability may still be protective of

the standard.

At issue is whether a source operating in compliance with a properly set longer-term average could cause exceedances, and if so, what are the resulting frequency and magnitude of such exceedances. Specifically, EPA must determine with reasonable confidence whether a properly set longer-term average limit will provide that the 3-year average of the annual fourth highest daily maximum 1-hour value will be at or below 75 ppb. A synopsis of EPA's review of how to judge whether such plans provide for attainment in light of the NAAQS' form, based on modeling of projected allowable emissions for determining attainment at monitoring sites, is given below.

For plans for SO_2 based on 1-hour emission limits, the standard approach is to conduct modeling using fixed emission rates. The maximum emission rate that would be modeled to result in attainment (i.e., in an "average year"[3] shows three, not four days with maximum hourly levels exceeding 75 ppb) is labeled the "critical emission value." The modeling process for identifying this critical emissions value inherently considers

[3] An "average year" is used to mean a year with average air quality. While 40 CFR 50 appendix T provides for averaging three years of 99th percentile daily maximum hourly values (e.g., the fourth highest maximum daily hourly concentration in a year with 365 days with valid data), this discussion and an example below uses a single "average year" in order to simplify the illustration of relevant principles.

the numerous variables that affect ambient concentrations of SO_2, such as meteorological data, background concentrations, and topography. In the standard approach, the state would then provide for attainment by setting a continuously applicable 1-hour emission limit at this critical emission value.

EPA recognizes that some sources have highly variable emissions, for example due to variations in fuel sulfur content and operating rate, that can make it extremely difficult, even with a well-designed control strategy, to ensure in practice that emissions for any given hour do not exceed the critical emission value. EPA also acknowledges the concern that longer-term emission limits can allow short periods with emissions above the "critical emissions value," which, if coincident with meteorological conditions conducive to high SO_2 concentrations, could in turn create the possibility of a NAAQS exceedance occurring on a day when an exceedance would not have occurred if emissions were continuously controlled at the level corresponding to the critical emission value. However, for several reasons, EPA believes that the approach recommended in its guidance document suitably addresses this concern.

First, from a practical perspective, EPA expects the actual emission profile of a source subject to an appropriately set longer-term average limit to be similar to the emission profile

of a source subject to an analogous 1-hour average limit. EPA expects this similarity because it has recommended that the longer-term average limit be set at a level that is comparably stringent to the otherwise applicable 1-hour limit (reflecting a downward adjustment from the critical emissions value) and that takes the source's emissions profile into account. As a result, EPA expects either form of emission limit to yield comparable air quality.

Second, from a more theoretical perspective, EPA has compared the likely air quality with a source having maximum allowable emissions under an appropriately set longer-term limit, as compared to the likely air quality with the source having maximum allowable emissions under the comparable 1-hour limit. In this comparison, in the 1-hour average limit scenario, the source is presumed at all times to emit at the critical emission level, and in the longer-term average limit scenario, the source is presumed occasionally to emit more than the critical emission value but on average, and presumably at most times, to emit well below the critical emission value. In an "average year," compliance with the 1-hour limit is expected to result in three exceedance days (i.e., three days with hourly values above 75 ppb) and a fourth day with a maximum hourly value at 75 ppb. By comparison, with the source complying with

a longer-term limit, it is possible that additional exceedances would occur that would not occur in the 1-hour limit scenario (if emissions exceed the critical emission value at times when meteorology is conducive to poor air quality). However, this comparison must also factor in the likelihood that exceedances that would be expected in the 1-hour limit scenario would not occur in the longer-term limit scenario. This result arises because the longer-term limit requires lower emissions most of the time (because the limit is set well below the critical emission value), so a source complying with an appropriately set longer-term limit is likely to have lower emissions at critical times than would be the case if the source were emitting as allowed with a 1-hour limit.

As a hypothetical example to illustrate these points, suppose there is a source that always emits 1000 pounds of SO_2 per hour (lb/hr), and thereby maintains air quality at the level of the NAAQS (i.e., a calculated design value of 75 ppb). Air quality depends on both emissions and meteorological conditions. In an "average year," with typically varying meteorological conditions, the steady 1000 lb/hr emissions will lead to slightly different daily average 1-hour concentrations. Suppose that the five highest maximum daily average 1-hour concentrations in that average year are 100 ppb, 90 ppb, 80 ppb,

75 ppb, and 70 ppb. With the fourth value at 75 ppb, the NAAQS is met. (In this simplified example, we assume a zero background concentration, which allows one to assume a linear relationship between emissions and air quality. A nonzero background concentration would make the mathematics more difficult but would give similar results.) Now, suppose that the source is subject to a 30-day average emission limit of 700 lb/hr. It is theoretically possible for a source meeting this limit to have emissions that occasionally exceed 1000 lb/hr, but with a typical emissions profile emissions would much more commonly be between 600 and 800 lb/hr. Suppose for example that the emissions on those same five days were 800 lb/hr, 1100 lb/hr, 500 lb/hr, 900 lb/hr, and 1200 lb/hr, respectively. (This is a conservative example because the average of these emissions, 900 lb/hr, is well over the 30-day average emission limit.) Based on the previous ratio of concentrations to emissions on each day (representing the influence of meteorology), the new emission rates would be expected to result in daily maximum 1-hour concentrations of 80 ppb, 99 ppb, 40 ppb, 67.5 ppb, and 84 ppb. In this example, the fifth day would have an exceedance that would not otherwise have occurred, but the third day would not have an exceedance that otherwise would have occurred, and the fourth day would

have been below, rather than at, 75 ppb. The fourth highest daily maximum concentration under this 30-day average example would be 67.5 ppb. This example serves to show that the net effect of allowing some limited emission variability is that a longer-term limit can still provide for attainment.

This simplified example illustrates the findings of a more complicated statistical analysis that EPA conducted using a range of scenarios using actual plant data. As described in appendix B of EPA's April 2014 SO_2 guidance, EPA found that the requirement for lower average emissions is highly likely to yield better air quality than is required with a comparably stringent 1-hour limit. Based on analyses described in appendix B of its April 2014 SO_2 guidance, EPA expects that an emission profile with maximum allowable emissions under an appropriately set comparably stringent 30-day average limit is likely to have the net effect of having a *lower* number of exceedances and better air quality than an emission profile with maximum allowable emissions under a 1-hour emission limit at the critical emission value. This result provides a compelling policy rationale for allowing the use of a longer averaging period in appropriate circumstances where the facts indicate that a result of this type might occur.

The question then becomes whether this approach--which is likely to produce a lower number of overall exceedances even though it may produce some unexpected exceedances above the critical emission value--meets the requirements in sections 110(a)(1), 172(c)(1), 172(c)(6), and 192(a) for emission limitations in state implementation plans to "provide for attainment" of the NAAQS. For SO_2, as for other pollutants, it is generally impossible to design a nonattainment plan in the present that will guarantee that attainment will occur in the future. A variety of factors can cause a well-designed plan to fail and unexpectedly not result in attainment, for example if meteorological conditions occur that are more conducive to poor air quality than was anticipated in the plan. Therefore, in determining whether a plan meets the requirement to provide for attainment, EPA's task is commonly to judge not whether the plan provides absolute certainty that attainment will in fact occur, but rather whether the plan provides an adequate level of confidence of prospective NAAQS attainment. From this perspective, in evaluating use of a 30-day average limit, EPA must weigh the likely net effect on air quality. Such an evaluation must consider the risk that occasions with meteorological conditions conducive to high concentrations will have elevated emissions leading to exceedances that would not

otherwise have occurred, and must also weigh the likelihood that the requirement for lower emissions on average will result in days not having exceedances that would have been expected with emissions at the critical emissions value.

Additional policy considerations, such as in this case the desirability of accommodating real world emissions variability without significant risk of violations, are also appropriate factors for EPA to weigh in judging whether a plan provides a reasonable degree of confidence that the plan will lead to attainment. Based on these considerations, especially given the high likelihood that a continuously enforceable limit averaged over as long as 30 days, determined in accordance with EPA's guidance, will result in attainment, EPA believes as a general matter that such limits, if appropriately determined, can reasonably be considered to provide for attainment of the 2010 SO_2 NAAQS.

The April 2014 SO_2 guidance offers specific recommendations for determining an appropriate longer-term average limit. The recommended method starts with determination of the 1-hour emission limit that would provide for attainment (i.e., the critical emission value), and applies an adjustment factor to determine the (lower) level of the longer-term average emission limit that would be estimated to have a stringency comparable to

the otherwise necessary 1-hour emission limit. This method uses a database of continuous emission data reflecting the type of control that the source will be using to comply with the SIP emission limits, which (if compliance requires new controls) may require use of an emission database from another source. The recommended method involves using these data to compute a complete set of emission averages, computed according to the averaging time and averaging procedures of the prospective emission limitation. In this recommended method, the ratio of the 99th percentile among these long-term averages to the 99th percentile of the 1-hour values represents an adjustment factor that may be multiplied by the candidate 1-hour emission limit to determine a longer-term average emission limit that may be considered comparably stringent.[4]

The guidance also addresses a variety of related topics, such as the potential utility of setting supplemental emission limits, such as mass-based limits, to reduce the likelihood and/or magnitude of elevated emission levels that might occur under the longer-term emission rate limit.

EPA anticipates that most modeling used to develop long-term average emission limits and to prepare full attainment

[4] For example, if the critical emission value is 1000 lb/hr of SO_2, and a suitable adjustment factor is determined to be 70 percent, the recommended longer-term average limit would be 700 lb/hr.

demonstrations will be performed using one of EPA's preferred air quality models. Preferred air quality models for use in regulatory applications are described in appendix A of EPA's *Guideline on Air Quality Models* (40 CFR part 51, appendix W).[5] In 2005, EPA promulgated AERMOD as the Agency's preferred near-field dispersion modeling for a wide range of regulatory applications addressing stationary sources (for example in estimating SO_2 concentrations) in all types of terrain based on extensive developmental and performance evaluation. Supplemental guidance on modeling for purposes of demonstrating attainment of the SO_2 standard is provided in appendix A to the April 23, 2014 SO_2 nonattainment area SIP guidance document referenced above. Appendix A provides extensive guidance on the modeling domain, the source inputs, assorted types of meteorological data, and background concentrations. Consistency with the recommendations in this guidance is generally necessary for the attainment demonstration to offer adequately reliable assurance that the plan provides for attainment.

As stated previously, attainment demonstrations for the 2010 1-hour primary SO_2 NAAQS must demonstrate future attainment and maintenance of the NAAQS in the entire area designated as

[5] EPA published revisions to the *Guideline on Air Quality Models* on January 17, 2017.

nonattainment (*i.e.*, not just at the violating monitor) by using air quality dispersion modeling (*see* appendix W to 40 CFR part 51) to show that the mix of sources and enforceable control measures and emission rates in an identified area will not lead to a violation of the SO_2 NAAQS. For a short-term (*i.e.*, 1-hour) standard, EPA believes that dispersion modeling, using allowable emissions and addressing stationary sources in the affected area (and in some cases those sources located outside the nonattainment area which may affect attainment in the area) is technically appropriate, efficient and effective in demonstrating attainment in nonattainment areas because it takes into consideration combinations of meteorological and emission source operating conditions that may contribute to peak ground-level concentrations of SO_2.

The meteorological data used in the analysis should generally be processed with the most recent version of AERMET. Estimated concentrations should include ambient background concentrations, should follow the form of the standard, and should be calculated as described in section 2.6.1.2 of the August 23, 2010 clarification memo on "Applicability of appendix W Modeling Guidance for the 1-hr SO_2 National Ambient Air Quality Standard" (EPA, 2010).

IV. Review of Modeled Attainment Plan

As part of its SIP development process, Ohio used EPA's regulatory dispersion model, AERMOD, to help determine the SO_2 emission limit revisions that would be needed to bring Lake County into attainment of the 2010 SO_2 NAAQS. Ohio evaluated the three highest-emitting facilities in Lake County, which together made up 98 percent of Lake County's 2011 SO_2 emissions. Ohio's analyses determined that a reduction in allowable emissions at two facilities would provide for attainment in Lake County. The following paragraphs evaluate various features of the modeling analysis that Ohio performed for its attainment demonstration.

A. Model Selection and General Model Inputs

For the Lake County SIP attainment demonstration, Ohio used the AERMOD model, version 14134. AERMOD is EPA's preferred model for this application, and version 14134 was the current, appropriate model version when the modeling was performed. Occasionally, EPA releases updates to the model between the time that a state completes its modeling analysis and the time that EPA acts on the state's submittal.

If the state's modeling was properly performed using an appropriate model version and submitted as expeditiously as practicable, EPA considers that model version acceptable, as long as the newer model version available at the time of EPA's

review does not contain revisions or error corrections that are expected to significantly damage the credibility of the older modeled results. The more recently released versions of AERMOD, 15181 (2015), 16216r (2017), and 18081 (2018), provided revisions to the model which EPA does not expect to have a significant effect on the modeled results for the analysis that Ohio performed for Lake County.[6] Therefore, EPA accepts AERMOD version 14134 for Ohio's submitted analysis.

Ohio ran the AERMOD model in regulatory default mode, with rural dispersion coefficients. Ohio performed a land use analysis which considered land use within a 3 kilometer (km) radius of each facility, using National Land Cover Database data from 1992 and 2011. Ohio considered the urban and rural land use percentages both with and without the portion of Lake Erie within the 3 km radius. In both cases, the land use analyses indicated that running the AERMOD model in rural mode was appropriate.

[6] In early 2017, EPA identified an issue in version 15181 of AERMOD, which affected the adjusted surface friction velocity (ADJ_U*) parameter used in AERMET (AERMOD's meteorological data preprocessor). The problem was corrected in AERMOD version 16216r, which was released on January 17, 2017. The issue affecting ADJ_U* was not present in AERMOD version 14134, and Ohio did not use the ADJ_U* option in the Lake County modeling, as it was a non-default option at the time. Therefore, the results of the Lake County modeling are unaffected by this issue.

The state used a set of nested grids of receptors centered on the modeled Lake County facilities. The analysis included a total of 14,680 receptors. Receptors were placed every 50 meters (m) within 1 km of the three facilities, then every 100 m to 2.5 km, and every 250 m out to a 5 km distance from the facilities. Between 5 and 10 km, a 500-m receptor spacing was used, and beyond 10 km from the facilities, receptors were placed every 1000 m. Ohio placed receptors along the fenceline of these three facilities, and did not place receptors within plant property where public access is precluded. EPA requires assessing whether violations within plant property may be occurring as the result of emissions from other plants in the area. As discussed below in Section IV.F, EPA believes that Ohio's submitted modeling results, based on modeling without receptors on plant property, are adequate to demonstrate that no such violations are occurring.

Ohio used the AERMAP terrain preprocessor, version 11103, with USGS Digital Elevation Data to include terrain heights at the receptor locations. EPA finds the model selection and these modeling options appropriate.

B. Meteorological Data

Ohio used five years (2008-2012) of National Weather Service meteorological data from Cleveland Hopkins International

Airport (Station 14820) with upper air data from Buffalo Niagara International Airport (Station 14733). This data was processed with AERMINUTE version 14237 and AERMET version 14134. Cleveland Hopkins International Airport is located at the southwestern edge of the city of Cleveland, in Cuyahoga County, approximately 45-60 km southwest of the Lake County power plants. Lake County borders Cuyahoga County to the northeast. The Cleveland surface data adequately represents the typical prevailing winds in Lake County, the influences of generally similar topography, and the meteorological influence from nearby Lake Erie.

The upper air station in Buffalo, New York, is also considered to be representative of Lake County, Ohio. The Buffalo upper air station is about 250 km from Painesville, but it is located at the eastern end of Lake Erie and south of Lake Ontario, so it is likely to experience upper air meteorological conditions similar to those affecting the Lake County SO_2 sources near Lake Erie. EPA concurs with the choice of these meteorological data sets.

Ohio used AERSURFACE version 13016 to determine the AERMOD surface characteristics of albedo, Bowen ratio, and roughness length, which were then input into AERMOD. Ohio used National Land Cover Database data from 1992, twelve sectors, and four

seasons, including moisture conditions at the surface meteorological station which were determined from 30-year precipitation data. EPA finds that this procedure for preparing the input values for AERMOD surface characteristics is acceptable.

C. Modeled Emissions Data

Ohio considered three significant facilities in Lake County for inclusion in the Lake County analysis and attainment demonstration: the FirstEnergy Generation, LLC, Eastlake Plant (Eastlake plant), the Painesville Municipal Electric Plant (Painesville plant), and Carmeuse Lime Grand River Operations (Carmeuse Lime). These three facilities were responsible for 98 percent of Lake County's total SO_2 emissions (based on 2011 actual emissions data). The Eastlake plant emitted 48,303 tons of SO_2 per year (tpy), the Painesville plant emitted 2,745 tpy, and Carmeuse Lime emitted 891 tpy. The other SO_2 sources in Lake County each emitted less than 25 tpy in 2011, and were not considered likely to have significant concentration gradients in the area of analysis. The large sources in nearby counties outside Lake County, all of which emitted less than the Painesville plant did in 2011, were located more than 35 km from the Lake County monitor which had indicated violation. Therefore, these sources were considered unlikely to create

significant concentration gradients in the nonattainment area. In accordance with EPA recommendations and regulations at 40 CFR part 51, appendix W, section 8.3, Ohio used a background concentration to account for the contributions of sources not included in the modeling analysis. See section IV.E for more discussion of Ohio's determination of background concentrations. EPA concurs with Ohio's selection of the sources to include in its attainment demonstration.

The Eastlake plant had five large boilers, but at the time of Ohio's analysis, two of those boilers had been retired and were no longer emitting SO_2. Therefore, Ohio's modeling analysis included only the three large boilers which were still operating. Ohio determined that the SO_2 emission rates for each of the three boilers must be reduced from 7,473 lb/hr to 1,158.89 lb/hr in order to attain the NAAQS. Although FirstEnergy Generation, LLC later informed Ohio that all of the Eastlake plant's large boilers would be shut down as of April 16, 2015, Ohio did not revise its modeled attainment demonstration to reflect the shutdown of boilers B001, B002, and B003. Therefore, the final modeled attainment demonstration Ohio submitted for Lake County includes modeled emissions of 1,158.89 lb/hr from the Eastlake plant's boilers B001, B002, and B003. After receiving the formal notification that the

remaining three large boilers at the Eastlake plant had been retired and would no longer emit SO_2, Ohio did, however, revise Eastlake's permit to remove references to the retired boilers, and Ohio also removed the emission limit SIP rule entry for the Eastlake plant at OAC 3745-18-49(G), as the five boiler units previously subject to the rule had all been shut down.

The second facility in Lake County which Ohio included in its attainment strategy was the Painesville plant. This facility has three boilers (numbered 3, 4 and 5). Boilers 3 and 4 exhaust from a single stack, 52 m tall. Boiler 5 exhausts from a separate stack, 47 m tall. Ohio's modeling analyses indicated that reductions in the Painesville plant's SO_2 emissions would also be necessary to attain the NAAQS. Ohio determined that attainment would be provided with an hourly emission limit of 362.997 lb/hr at Boiler 5, an hourly limit of 430.499 lb/hr for Boilers 3 and 4, and an additional restriction that only one of the three boilers could run on coal at any time. The Lake County final cumulative attainment modeling analyses were performed using the hourly emission values above.

The third facility, Carmeuse Lime, was included in the final cumulative attainment modeling analysis with emissions of 230 lb/hr at Lime kiln #4 and 260 lb/hr at Lime kiln #5. These emission rates represent Carmeuse Lime's permitted emission

rates. Since it was not necessary, Ohio did not revise Carmeuse Lime's emission limits as part of its Lake County nonattainment SIP.

D. Emission Limits

An important prerequisite for approval of a nonattainment plan is that the emission limits that provide for attainment be quantifiable, fully enforceable, replicable, and accountable. *See* General Preamble at 13567-68. Because some of the limits that Ohio's plan relies on are expressed as 30-day average limits, part of the review of Ohio's nonattainment plan must address the use of these limits, both with respect to the general suitability of using such limits for this purpose and with respect to whether the particular limits included in the plan have been suitably demonstrated to provide for attainment. The first subsection that follows addresses the overall enforceability of all of the emission limits in Ohio's plan, and the second subsection that follows addresses the 30-day limits.

1. Enforceability

Ohio's nonattainment plan for Lake County relies on revised emission limits for the Painesville plant, existing SO_2 emission limits for Carmeuse Lime, and modeled emission reductions at the Eastlake plant which have been supplanted by the permanent emission reductions which resulted from the Eastlake plant's

boiler retirements. The emission limits for Lake County are codified at OAC 3745-18-49. Ohio's compliance time schedules and emission measurement methods are located in OAC 3745-18-03 and OAC 3745-18-04, respectively. These rules were included in Ohio's SIP submittals. Ohio's revised SIP rules were properly adopted by the state and will provide for permanent Federal enforceability after EPA approves them into the Ohio SO_2 SIP.

As of April 2015, none of the Eastlake plant's five large boilers operate or emit SO_2. Ohio has removed these units from the Eastlake plant's permit. Ohio also removed the Eastlake plant's previous entry at OAC 3745-18-49 (G) from the SO_2 rule for Lake County, OAC 3745-18-49. This facility is no longer authorized to operate its former large boilers, and cannot reinstate them without obtaining a new permit under Ohio's New Source Review program. Therefore, EPA finds that the reductions in SO_2 emissions from the boiler closures can be considered permanent, enforceable reductions.

For the Painesville plant, Ohio placed new 30-day and 24-hour emission limits in OAC 3745-18-49(F), effective on October 23, 2015, and submitted its SIP rule package to EPA. In accordance with EPA policy, the 30-day average limit is set at a lower level than the hourly emission rate used in the modeled

attainment demonstration; the relationship between these two values is discussed in more detail in the following section.

In its initial review, EPA identified an issue with the Painesville plant's limits and their associated compliance requirements as given in Ohio's October 2015 submittal. The method stated in Ohio's rule OAC 3745-18-04 (D)(10) for calculating compliance with the Painesville plant's 30-day emission limits in OAC 3745-18-49 (F) could have been interpreted to allow a boiler's non-operating hours to be included in its 30-day average heat input calculation. Since OAC 3745-18-49 (F) also requires that the Painesville plant's boilers must not operate simultaneously, the three boilers may each have a number of non-operating hours in any given 30-day period. Allowing multiple hours of zero heat input to be averaged into the 30-day compliance calculations could have had the effect of allowing the boilers to operate frequently at heat input rates well in excess of the limit which was developed as an equivalent to the short-term limit required for attainment. On February 6, 2017, Ohio revised OAC 3745-18-04 (D)(10) to clarify the heat input averaging procedure, that compliance shall be determined by averaging heat input values only while the boiler operates.

EPA finds that this revised approach provides acceptable confidence that, consistent with EPA's policy on longer-term average limits, occasions with emissions above the otherwise applicable 1-hour limit will be infrequent and of moderate magnitude. As discussed further below, with these revisions, EPA finds that the revised rule assures that the Painesville plant's 30-day emission limits now appropriately correspond to the 1-hour emission limits Ohio demonstrated to be protective of the NAAQS. Therefore, EPA proposes to conclude that the revised rules for the Painesville plant are acceptable.

2. Longer-term Average Limits

Ohio's revised SIP includes emission limits for the Painesville plant which require compliance based on a thirty-operating-day average of one-hour emission rates. This longer-term averaged limit provides operating flexibility for the facility while continuing to maintain the NAAQS. The 30-day SO_2 limits are 340 lb/hr each for Boilers 3 and 4 and 287 lb/hr for Boiler 5. These limits are numerically more stringent than the modeled 1-hour emission rates which were demonstrated to provide for attainment. The increased stringency is intended to account for potential fluctuations in hourly emissions which may occur while the facility remains in compliance with its limits over the longer averaging time. Ohio also included a

supplemental short-term (24-hour) limit on the facility's overall boiler operating rates of 249 million British Thermal Units per hour (MMBtu/hr) in any calendar day. EPA finds that this supplemental limit acts to reduce the occurrence of high, short-lived SO_2 emission events and thereby provides additional assurance that this set of limits will provide for attainment in this area.

Ohio calculated the Painesville plant's 30-day emission limits in accordance with EPA's recommended method. See section III. Ohio used dispersion modeling to determine a 1-hour critical emission value for each boiler which would provide for attainment of the NAAQS. These critical 1-hour values necessary for modeled attainment were 430.499 for Boilers 3 and 4 and 362.997 lb/hr at Boiler 5. Ohio then applied an adjustment factor to determine the (lower) level of the longer-term average emission limit that would be estimated to have a stringency comparable to the critical 1-hour emission value. Ohio was not able to calculate a source-specific adjustment factor for the Painesville plant, due to the facility's expected operations. The Painesville plant has accepted enforceable operating limits which will meet the Federal Boiler Maximum Achievable Control

Technology (MACT)[7] Limited Use definition. Under this enforceable restriction to a 10 percent annual operating capacity factor, which Ohio has codified at OAC 3745-18-49 (F)(7), the facility will only operate intermittently, during periods of high demand or interrupted service. Hourly SO_2 emissions data representing these intermittent operations were not available for use in calculating a source-specific emission ratio. Instead, Ohio used the national average ratio of 0.79 for sources with no control equipment, which is given in Table 1 of appendix D of EPA's guidance. The Painesville plant does not anticipate installing additional control technology, as such technology often cannot be consistently effective for sources which operate intermittently rather than continually. EPA concurs that the appendix D ratio is an acceptable adjustment factor for use in calculating a long-term average emission limit that is comparably stringent to the 1-hour limit at the critical emission value that would otherwise be set for the Painesville plant. Ohio calculated that appropriately stringent 30-day SO_2 limits would be 340 lb/hr each for Boilers 3 and 4 and 287 lb/hr for Boiler 5.

[7] Information about the boiler MACT is available at https://www.epa.gov/stationary-sources-air-pollution/boiler-maximum-achievable-control-technology-mact-40-cfr-part-63.

After reviewing the state's 2015 and 2017 submittals, EPA concurs that the 30-day-average limits for the Painesville plant in OAC 3745-18-49 (F), as amended effective February 16, 2017, and as supplemented by the 24-hour operation level restriction, provide an acceptable alternative to establishing a 1-hour average emission limit for this source. The state has used suitable data in an appropriate manner and has applied an appropriate adjustment, yielding an emission limit that has comparable stringency to the 1-hour average limit that the state determined would otherwise have been necessary to provide for attainment. While the 30-day-average limit can allow occasions in which emissions may be higher than the level that would be allowed with the 1-hour limit, the state's limit compensates by requiring average emissions to be lower than the level that would otherwise have been required by a 1-hour average limit.

For reasons described above and explained in more detail in EPA's April 2014 guidance for SO_2 nonattainment plans, EPA finds that appropriately set longer-term average limits provide a reasonable basis by which nonattainment plans may provide for attainment. Based on its review of this general information as well as the particular information in Ohio's plan, EPA proposes to conclude that the 30-day-average limit for the Painesville

plant, in combination with other limitations in the state's plan, will provide for attainment of the NAAQS.

E. Background Concentrations

The modeled attainment demonstration for a nonattainment area specifically includes the maximum allowable emissions and the individual dispersion characteristics of the most significant emission sources in the area. To ensure that the demonstration also represents the cumulative impacts of additional sources which are individually too small or too distant to be expected to show a significant concentration gradient within the modeling domain, a background concentration is added to the modeled results. Data from a nearby air quality monitor can be used to determine a background value which approximates the diffuse impacts of these sources within the modeling domain.

For the Lake County attainment demonstration, Ohio used a background concentration of 10.3 ppb. This value was based on 2008-2012 monitored data at the Eastlake monitor (39-085-0003), which is located 1 km east of the Eastlake plant, 15 km west southwest of the Painesville and Carmeuse Lime plants, and 8 km northeast of the Cuyahoga County/Lake County border. This monitor is expected to be reasonably representative of SO_2 emissions coming into Lake County from all directions, including

from Cuyahoga and Lorain Counties to the west, the city of Cleveland, and SO_2 emissions from small sources in Lake County which were not explicitly modeled. This monitor is expected to reflect the emissions of the nearby Eastlake plant as well.

Since the Eastlake plant's emissions were specifically input into the model for Lake County's attainment demonstration, Ohio selected a 20-degree sector for which the monitor's readings are expected to be primarily due to the Eastlake plant's emissions. Monitored values measured when winds were blowing from this 20-degree wind sector were not included in Ohio's determination of a background concentration for the Lake County analysis. Using the remaining monitored data, Ohio calculated that a background value of 10.3 ppb would account for the significant power plant emission reductions which were expected to occur in Cuyahoga and Lorain Counties over the next few years. Although EPA generally recommends against projecting future background concentrations, the monitoring data that have subsequently become available indicate that Ohio's estimates of applicable background concentrations have proven to be appropriate. EPA notes that the most recent years' 99^{th} percentile values measured at the Eastlake monitor are 10 ppb for 2016 and 5 ppb for 2017, which are lower than Ohio's

background estimate. Therefore, EPA finds that the background concentration value used by Ohio is reasonable.

F. Summary of Results

Ohio's attainment modeling analyses resulted in a predicted 1-hour design value of 196.2 micrograms per cubic meter (µg/m^3), or 74.9 ppb, which is below the SO_2 NAAQS of 75 ppb/196.4 µg/m^3. This modeled value, which includes the background concentration, occurred less than one kilometer from the Eastlake plant. The modeled analysis shows attainment even including the no-longer-allowable emissions from the Eastlake plant's three retired boilers, which offers additional assurance that the final SIP emission limitations in Ohio's revised rule OAC 3745-18-49 are adequate to protect the SO_2 NAAQS in Lake County.

EPA policy also requires that one facility must not cause or contribute to exceedances of the NAAQS on another facility's property. Ohio's final submittal does not specifically address the impacts of each modeled facility within the plant property boundaries of the other modeled facilities, but the final modeled results indicate that no facility is causing or contributing to violations within another facility's property. The maximum impacts from each facility alone occurred within a kilometer of its own fenceline. The two closest facilities, Carmeuse Lime and the Painesville plant, are almost 4 km from

each other. With maximum impacts below the NAAQS and decreasing with distance, EPA finds Ohio's submitted modeling results to provide adequate evidence that no facility or combination of facilities is causing or contributing to violations on another facility's property.

EPA concurs with the results of Ohio's analysis and proposes to conclude that Ohio has demonstrated that its revised emission limits are adequate to provide for attainment and maintenance of the 2010 SO_2 NAAQS.

V. Review of Other Plan Requirements

A. Emissions Inventory

The emissions inventory and source emission rate data for an area serve as the foundation for air quality modeling and other analyses that enable states to: 1) estimate the degree to which different sources within a nonattainment area contribute to violations within the affected area; and 2) assess the expected improvement in air quality within the nonattainment area due to the adoption and implementation of control measures. As noted above, the state must develop and submit to EPA a comprehensive, accurate and current inventory of actual emissions from all sources of SO_2 emissions in each nonattainment area, as well as any sources located outside the nonattainment

area which may affect attainment in the area. *See* CAA section 172(c)(3).

Ohio prepared an emissions inventory using 2011 as the base year and 2018, the SO_2 NAAQS attainment year, as the future year. The inventories were prepared for six categories: electrical generating units (EGU), non-electrical generating units (non-EGU), non-road mobile sources, on-road mobile sources, area sources, and marine, air and rail sources. The 2011 base year inventory totaled 52,155.57 tpy for all six categories. Reflecting growth and known, planned, point source emission reductions, the 2018 future year inventory projection totaled 3,322.31 tpy. To maintain conservatism, Ohio did not apply a population growth factor to the EGU and non-EGU categories, although the population in Lake County is expected to decline from 2010 to 2020.

Emissions from the non-EGU facilities which were not required to reduce emissions under the Lake County SO_2 nonattainment plan were projected to remain constant between 2011 and 2018. The EGU category of this emissions inventory only contains the Eastlake plant. (The Painesville plant, while an electric generating facility, does not meet the definition of an EGU, and its emissions and projected reductions are included in the non-EGU category.) The 2011 EGU inventory included six

emission sources at the Eastlake plant (five large boilers and one lower-emission turbine), totaling 48,303.10 tpy. Ohio's projected 2018 EGU inventory accounted for the closure of two of the Eastlake plant's five large boilers and the emission reductions which Ohio's modeling analysis initially indicated would be necessary at the Eastlake plant to provide for attainment of the NAAQS, resulting in projected total emissions of 1,659.53 tpy. Ohio's submitted 2018 projected inventory did not account for the retirement of the Eastlake plant's remaining three large boilers, which occurred in April 2015. This boiler retirement would have been expected to reduce Ohio's EGU projection by an additional 1657 tpy, and in that case Ohio's total six-category 2018 projected year inventory would be 1,665 tpy.

Ohio's projected inventory indicates that SO_2 emissions will be significantly and permanently reduced in Lake County as of the SO_2 NAAQS attainment year. EPA concurs and proposes to conclude that Ohio has satisfied the emissions inventory requirement.

B. Reasonably Available Control Measures and Technology

Section 172(c)(1) of the CAA requires states to adopt and submit all RACM, including reasonably available control technology (RACT), as needed to attain the standards as

expeditiously as practicable. Section 172(c)(6) requires the SIP to contain enforceable emission limitations and control measures necessary to provide for timely attainment of the standard. Ohio's plan for attaining the 1-hour SO_2 NAAQS in Lake County is based on emission reductions at the Eastlake and Painesville plants, and Ohio has demonstrated that emission limitations for these plants will result in attainment of the NAAQS.

While Ohio's demonstration included emission reductions from the Eastlake plant, Ohio did not include SO_2 limits for the Eastlake plant in the final SIP rule package, because during Ohio's attainment planning and rulemaking process, the Eastlake plant announced the retirement of its three remaining large boilers, which would reduce the plant's SO_2 emissions to below the intended limits. The reductions are permanent, as the large boilers are no longer included in the Eastlake plant's Title V permit. To reinstate them would require new source review analysis and potentially additional emission controls to maintain SO_2 attainment in Lake County. Therefore, EPA concurs that the Eastlake plant's boiler SO_2 emissions are currently zero and RACT requirements are satisfied at this source.[8]

[8] Although Ohio's modeling demonstrates that the area would attain even if these units at the Eastlake plant had nonzero emissions, the plan should be

Ohio's plan includes new emission limits at the Painesville plant and requires timely compliance. Ohio has determined that these measures suffice to provide for timely attainment. EPA concurs and proposes to conclude that the state has satisfied the requirements in sections 172(c)(1) and 172(c)(6) to adopt and submit all RACM and enforceable limitations and control measures as are needed to attain the standards as expeditiously as practicable.

C. New Source Review

Section 172 of the CAA requires the state to have an adequate new source review program. EPA approved Ohio's nonattainment new source review rules on January 22, 2003 (68 FR 2909). Ohio's new source rules, codified at OAC 3745-31, provide for appropriate new source review for SO_2 sources undergoing construction or major modification in Lake County without need for modification of the approved rules. EPA concurs and proposes to conclude that this requirement has been met for this area.

D. Reasonable Further Progress

Section 172 of the CAA requires Ohio's Lake County nonattainment SIP to provide for reasonable further progress

---

considered to require these units to be shut down, and the satisfaction of the RACM/RACT requirement is being judged accordingly.

toward attainment. For SO_2 SIPs, which address a small number of affected sources, requiring expeditious compliance with attainment emission limits can address the RFP requirement. EPA finds that the state's revised limits for the Painesville plant and the 2015 retirement of the Eastlake plant's boilers represent implementation of control measures as expeditiously as practicable. Accordingly, EPA proposes to conclude that Ohio's plan provides for RFP.

E. Contingency Measures

Section 172 of the CAA requires that nonattainment plans include additional measures which will take effect if an area fails to meet RFP or fails to attain the standard by the attainment date. As noted above, EPA guidance describes special features of SO_2 planning that influence the suitability of alternative means of addressing the requirement in section 172(c)(9) for contingency measures for SO_2. An appropriate means of satisfying this requirement is for the state to have a comprehensive enforcement program that identifies sources of violations of the SO_2 NAAQS and for the state to undertake aggressive follow-up for compliance and enforcement. Ohio's plan provides for satisfying the contingency measure requirement in this manner. EPA concurs and proposes to approve Ohio's plan for meeting the contingency measure requirement in this manner.

VI. Ohio's SIP Rules

On March 13, 2017, Ohio submitted revisions to its rule OAC 3745-18, which contains the state's sulfur dioxide emission regulations. This submittal consisted of SO_2 regulations which apply statewide and SO_2 regulations specific to certain Ohio counties and facilities, which include regulations pertinent to Ohio's SO_2 nonattainment areas. Certain portions of OAC 3745-18 are specifically pertinent to Ohio's Lake County nonattainment SIP. These are OAC 3745-18-03 (B)(9), OAC 3745-18-03 (C)(11), OAC 3745-18-04(D)(10), and OAC 3745-18-49. EPA finds acceptable and proposes to approve these four revised rules as part of Ohio's SO_2 nonattainment plan for Lake County. The remainder of the OAC 3745-18 rule revisions submitted on March 13, 2017, will be addressed in a subsequent rulemaking action.

VII. EPA's Proposed Action

EPA is proposing to approve Ohio's SIP submission for attaining the 2010 1-hour SO_2 NAAQS and for meeting other nonattainment area planning requirements for the Lake County SO_2 nonattainment area. This SO_2 nonattainment plan, which the state submitted to EPA on April 3, 2015, and supplemented on October 13, 2015, and on March 13, 2017, includes Ohio's attainment demonstration for the Lake County nonattainment area and addresses the CAA requirements for reasonable further

progress, RACM/RACT, base-year and projection-year emission inventories, enforceable emission limitations and control measures, and contingency measures. EPA is proposing to approve Ohio's rules OAC 3745-18-03 (B)(9), OAC 3745-18-03 (C)(11), OAC 3745-18-04(D)(10), and OAC 3745-18-49, which became effective on February 16, 2017, and were submitted to EPA by Ohio on March 13, 2017.

EPA proposes to conclude that Ohio has appropriately demonstrated that the plan provisions provide for attainment of the 2010 1-hour primary SO_2 NAAQS in Lake County by the applicable attainment date and that the plan meets the other applicable requirements of sections 110, 172 and 192 of the CAA. EPA is therefore proposing to approve Ohio's nonattainment plan for Lake County.

VIII. Incorporation by Reference

In this rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference OAC 3745-18-03 (B)(9), OAC 3745-18-03 (C)(11), OAC 3745-18-04(D)(10), and OAC 3745-18-49, effective on February 16, 2017. EPA has made, and will continue to make, these documents generally available through www.regulations.gov, and at the EPA Region 5 Office (please contact the person

identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

IX. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA 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 Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- 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, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: August 2, 2018.

Cathy Stepp,
Regional Administrator, Region 5.

[FR Doc. 2018-17930 Filed: 8/20/2018 8:45 am; Publication Date: 8/21/2018]