Denial of the Petitions To Reconsider the Final Rule Promulgating the Primary National Ambient Air Quality Standard for Sulfur Dioxide; Final Rule
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AGENCY: Environmental Protection Agency (EPA).

ACTION: Denial of petitions to reconsider.

SUMMARY: The Environmental Protection Agency (EPA, or Agency) is denying the petitions to reconsider the final revised primary national ambient air quality standard (NAAQS) for oxides of sulfur as measured by sulfur dioxide (SO₂) issued under section 109 of the Clean Air Act (CAA). The final revised SO₂ Primary NAAQS was published on June 22, 2010, and became effective on August 23, 2010. EPA has carefully reviewed all of the petitions and revisited both the rulemaking record and the Administrator’s decision process underlying the final revised SO₂ Primary NAAQS in light of these petitions. EPA’s analysis of the petitions reveals that the petitions have provided inadequate and generally irrelevant arguments and evidence that the underlying information supporting the final revised SO₂ Primary NAAQS is flawed, misinterpreted or inappropriately applied by EPA. The petitioners’ arguments fail to meet the criteria for reconsideration under the Clean Air Act.

DATES: This denial is effective January 14, 2011.

ADDRESSES: EPA’s docket for this action is Docket ID No. EPA–HQ–OAR–2007–0352. All documents in the docket are listed on the http://www.regulations.gov Web site. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information where 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 http://www.regulations.gov or in hard copy at EPA’s Docket Center, Public Reading Room, EPA West Building, Room 3334, 1301 Constitution Avenue, NW., Washington, DC 20004. This Docket Center is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

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I. Introduction

A. Summary

This is EPA’s response denying the petitions to reconsider the final revised SO₂ Primary NAAQS promulgated under Section 109 of the Clean Air Act (CAA, or Act) (75 FR 35520, June 22, 2010). EPA has considered all of the petitions, including the arguments presented therein and information provided by the petitioners as supporting evidence of their claims, and including materials submitted to the District of Columbia Circuit Court of Appeals that petitioners provided regarding the same or similar claims raised there in support of motions to stay the revised SO₂ Primary NAAQS. EPA has evaluated the merit of the petitioners’ arguments in the context of the entire body of scientific and other evidence before the Agency. This response provides EPA’s justifications for denying these petitions. Sections III–VI of this Decision set forth EPA’s specific responses to the petitioners’ arguments.

After a comprehensive, careful review and analysis of the petitions, EPA has determined that the petitioners’ arguments and evidence are inadequate, irrelevant to the promulgation of the final revised SO₂ Primary NAAQS, and do not show that the underlying information supporting the revised SO₂ Primary NAAQS is flawed, misinterpreted by EPA, or inappropriately applied by EPA. In fact, petitioners do not challenge the revised health-based SO₂ Primary NAAQS at all. The focus of their petitions is, instead, EPA’s non-binding preamble discussion providing guidance regarding expected approaches for future implementation of the revised SO₂ Primary NAAQS, which they claim should not have been presented without first having undergone notice and comment procedures. They claim that this discussion relates to aspects of the revised SO₂ Primary NAAQS that are of “central relevance” to the NAAQS decision itself, and as such have an impact on the promulgated NAAQS. The fact that EPA did not present this discussion in the notice of proposed rulemaking (NPRM), petitioners argue, violates the procedural requirements of the Clean Air Act and requires EPA to reconsider the promulgated rule.

Moreover, petitioners argue that the discussion in the final rule preamble conflicts with numerous substantive provisions of the Act, as well as the
regulatory text of the final NAAQS. Therefore, petitioners claim, EPA must stay the effectiveness of the revised SO\textsubscript{2} Primary NAAQS, pending the Agency’s reconsideration of the preamble discussion and of the promulgated NAAQS.

As discussed in detail throughout this decision, petitioners’ claims and the information they submit do not change or undermine our scientific conclusions regarding the appropriateness of the revisions to the SO\textsubscript{2} Primary NAAQS, as determined under section 109 of the CAA. Nor do they change or undermine our conclusions regarding the promulgated requirements for an SO\textsubscript{2} monitoring network or the conforming regulatory changes we made to the Air Quality Index (AQI). More specifically, the arguments in the petitions do not lead EPA to change its final decisions regarding the need to revise the prior SO\textsubscript{2} Primary NAAQS, and what those revisions should be. EPA’s decisions were based on a thorough review in the Integrated Science Assessment for Oxides of Sulfur—Health Criteria (ISA) of scientific information on known and potential human health effects associated with exposure to SO\textsubscript{2} in the air. Those final decisions also took into account: (1) EPA’s Risk and Exposure Assessment to Support the Review of the SO\textsubscript{2} Primary National Ambient Air Quality Standard (REA), which provided quantitative exposure and risk analyses based on the ISA; (2) advice and recommendations of the statutory review body, the Clean Air Act Science Advisory Committee (CASAC), as reflected in its letters to the Administrator and its public discussions of the ISA and REA; (3) public comments received during the development of the ISA and REA; and (4) public comments received on EPA’s NPRM for the revised SO\textsubscript{2} Primary NAAQS.

A core defect in petitioners’ arguments is that they are not based on consideration of the body of scientific information that informed EPA’s final decisions in promulgating the revised SO\textsubscript{2} Primary NAAQS. In fact, petitioners’ arguments have nothing at all to do with EPA’s scientific conclusions, and provide no new information or basis for EPA to revisit either those conclusions or the specific SO\textsubscript{2} Primary NAAQS that EPA promulgated. Petitioners’ objections regarding the final rule preamble’s non-binding discussion of anticipated future implementation approaches are neither relevant nor persuasive in challenging EPA’s promulgated revised SO\textsubscript{2} Primary NAAQS. They certainly are not material or a reliable basis on which to question the validity and credibility of the body of science underlying EPA’s SO\textsubscript{2} NAAQS decision, or the decision process as articulated in the NPRM and final rulemaking notice. Petitioners’ assertions regarding the additional preamble discussion providing guidance on expected future and separate implementation actions are thus not an appropriate basis on which to challenge the voluminous and well documented body of science that is the technical foundation of EPA’s revised SO\textsubscript{2} Primary NAAQS.

A second, and equally important, defect in petitioners’ arguments is their assumption that EPA’s non-binding preamble discussion of anticipated approaches for separate future implementation actions constituted, itself, final agency action governing those future actions. Although petitioners do not demonstrate how EPA’s discussion has such final, binding and enforceable effect, their implicit assumption is that EPA has already taken final rulemaking action on the discussed implementation approaches. Only if EPA had taken such final action on these discussed approaches could there possibly be an issue regarding whether EPA’s discussion was a “logical outgrowth” of the proposed rule, and whether it was of “central relevance” to the promulgated revised SO\textsubscript{2} Primary NAAQS sufficient to support a petition for reconsideration. Similarly, for the discussion to constitute a “procedural error,” it would first have to represent a “determination” under section 307(d) that is a final rulemaking action. But the preamble discussion at issue was not such a final agency action. EPA plainly stated that the discussion represented non-binding guidance regarding future actions, that the Agency’s anticipated approach could continue to evolve as further guidance is developed, and that the Agency expected there to be circumstances in which the anticipated approaches may not apply. In other words, regarding the implementation discussion, EPA has not yet taken a final action that could be “reconsidered.”

Even assuming, in the sake of argument, that EPA’s implementation discussion as presented in the final preamble to the SO\textsubscript{2} Primary NAAQS could have constituted final action, it is separate and independent from the establishment of the health-based SO\textsubscript{2} Primary NAAQS itself. Therefore, the Agency does not regard the discussion as having been of “central relevance” to the regulatory decision on the NAAQS itself. In setting NAAQS that are “required” to protect public health with an adequate margin of safety, as provided in section 109(b) of the Act, EPA’s task is to establish standards that are neither more nor less stringent than necessary for these purposes. In so doing, EPA may not consider costs of implementing the standards. \textit{Whitman v. American Trucking Associations}, 531 U.S. 457, 471, 475–76 (2001). Petitioners frequently assert that the implementation discussion is an “aspect” of the final NAAQS itself, but this is incorrect given that issues regarding future implementation are not part of the NAAQS itself and are legally irrelevant to the setting of the NAAQS. At most, the preamble’s discussion of modeling partly influenced only the reduced scope of the promulgated required monitoring network, compared to that proposed, and no petitioner has objected to that reduction.

Consequently, we reject petitioners’ assertions that the non-binding preamble discussion of the anticipated future implementation approaches, even if “final action,” is “of central relevance” to the promulgation of the SO\textsubscript{2} Primary NAAQS, and therefore conclude that reconsideration of the rule in light of that discussion is not warranted.

Assuming again for the purpose of argument that the preamble’s non-binding implementation discussion could be both “final action” and “of central relevance” to the outcome of the NAAQS decision, we further disagree with petitioners’ claims that the discussion was not a “logical outgrowth” of the proposal and that the CAA required us to present the discussion in the NPRM before we could address the expected implementation approaches in the final rule’s preamble or in other guidance documents. Although the NPRM did not specifically address the modeling based approach to implementation discussed in the preamble to the final rule, it has long been EPA’s practice in implementing the prior SO\textsubscript{2} Primary NAAQS to rely upon both modeling and monitoring to determine whether areas have attained the NAAQS. To the extent the preamble discussion in the NPRM concerning a monitoring based approach was interpreted by interested parties to announce a proposed change to that longstanding practice, the context for this proposed change was the past practice of the Agency and the rulemaking process inherently leaves open the possibility that an agency will choose not to adopt any proposed change to its historic practice.

Therefore, interested parties should have foreseen that EPA might not, in fact, “promulgate” any such change but instead discuss our expectation to continue our historic practice, and they...
had ample opportunity to comment on that possibility. In fact, interested parties did comment on the related issue of the burden of relying on monitoring, and suggested that EPA instead use modeling to relieve that administrative burden. Partly in response to those comments, EPA explained its anticipated approaches of continuing to rely upon both modeling and monitoring in implementing the Primary SO\textsubscript{2} NAAQS, and made clear that except for the promulgated provisions relating to the scope of the monitoring network and associated requirements, the Agency was still developing its policy for future implementation actions such as area designations and determinations of NAAQS attainment, and would decide whether to base such actions on modeling or monitoring in the future on a case-by-case basis. Thus, although EPA disagrees with the petitioners’ view that the non-binding preamble discussion on future implementation represents final agency action of central relevance to the NAAQS decision, even if the preamble to the final rule has this effect, EPA committed no procedural error in presenting this discussion in the final rule’s preamble, and reconsideration is not warranted.

Furthermore, EPA disagrees with petitioners’ assertions that the Agency is required under the CAA to promulgate, as regulatory provisions, requirements addressing future implementation of the NAAQS of the type that petitioners demand. Nothing in the CAA requires this, and the rulemaking for prior SO\textsubscript{2} Primary NAAQS did not contain such regulatory requirements. Consequently, we disagree with petitioners’ claims that it is now improper to continue to address implementation issues in non-binding guidance such as that which EPA has frequently issued regarding SO\textsubscript{2} NAAQS implementation and which EPA presented in the final rule preamble. Although the preamble’s inclusion of such guidance and statements regarding the intent to issue further guidance do not warrant reconsideration of the final rule, we fully expect to continue to evaluate implementation issues as we proceed to develop such non-binding guidance and take implementing actions.

In addition to petitioners’ administrative process arguments, EPA disagrees with petitioners’ claims that the final rule preamble’s non-binding implementation discussion is inconsistent with applicable substantive CAA statutory provisions or with the regulatory text of the SO\textsubscript{2} Primary NAAQS. Petitioners present a series of arguments claiming that our explanation of our anticipated approaches for area designations and action on state implementation plan (SIP) submissions unlawfully conflicts with the principles of “cooperative federalism” embraced by the CAA and with provisions and past practice under, for example, CAA sections 107(d), 110(a), 171(2), and the promulgated regulatory text of 40 CFR 50.17(b) and (c) and Appendix T section 1.1. As we explain in section IV below, none of petitioners’ arguments has merit or warrants reconsideration of the final rule. Moreover, petitioners must necessarily wait for final agency action to challenge whatever implementation approaches EPA eventually adopts when making designations and taking SIP actions. Moreover, we continue to believe the implementation approaches discussed in the final rule preamble, if taken in future final actions, would be consistent with governing statutory and regulatory provisions. Of course, if public comments we receive on those future actions persuade us otherwise, we would consider taking other approaches and nothing EPA has done or stated to this point forecloses ultimate adoption of entirely different approaches. The very fact that future actions will provide us this opportunity to refine and otherwise change our anticipated approaches in advance of taking final action to make them binding shows that reconsideration of them under CAA section 307(d)(7)(B), at this preliminary stage, is not warranted. Nor are these objections “of central relevance” to the outcome of the final SO\textsubscript{2} Primary NAAQS. Thus, they do not meet the criteria for reconsideration under CAA section 307(d)(7)(B).

For similar reasons, discussed further in Section VI, EPA concludes that there is no basis for an administrative stay of the final SO\textsubscript{2} Primary NAAQS. Under CAA section 307(d)(7)(B), EPA has authority to issue a stay for up to three months if it grants a petition to reconsider a final rule. As we are denying the petitions to reconsider, an administrative stay here is not warranted. In addition, a stay is not otherwise warranted. First, the petitioners have not made a strong showing on the merits that reconsideration is warranted, for all of the reasons upon which EPA is denying the petitions to reconsider. Second, the petitioners’ general and speculative arguments concerning irreparable harm fail to account for the non-binding nature of the final rule preamble’s implementation discussion, the opportunities for interested parties to assert their views in the future implementation actions about which petitioners are concerned, and also do not account for EPA’s stated intention to provide further implementation guidance. Third, petitioners are incorrect in maintaining that it would be in the public interest to grant an administrative stay of the rule. Their arguments ignore the harm to the public that would occur from delayed implementation and attainment of the revised SO\textsubscript{2} Primary NAAQS, rendering such a stay contrary to the public interest.

B. Background

1. Revisions to the SO\textsubscript{2} Primary NAAQS

Based on its review of the air quality criteria for oxides of sulfur and the primary NAAQS for oxides of sulfur as measured by SO\textsubscript{2}, EPA published a revised Primary SO\textsubscript{2} NAAQS on June 22, 2010, so that the standards are requisite to protect public health with an adequate margin of safety, as appropriate under CAA section 109. See 75 FR 35520–35603. Specifically, EPA replaced the prior 24-hour and annual standards with a new one-hour SO\textsubscript{2} standard at a level of 75 parts per billion (ppb), based on the three-year average of
the annual 99th percentile of 1-hour daily maximum concentrations. EPA also established requirements for an SO₂ monitoring network under section 110. See 75 FR at 35602. EPA did not, in this regulation, promulgate requirements governing designations of areas as either nonattainment, attainment or unclassifiable with respect to the revised NAAQS under CAA section 107, or governing development and approval of SIPs under CAA sections 110 and 192. Instead, for these future implementation actions, EPA provided in the preamble non-binding guidance regarding how the Agency initially expects to designate areas under the new NAAQS and how the NAAQS would be implemented by States, Tribes, local governments and EPA. See 75 FR at 35550–54, 35569–82. EPA indicated that the Agency expected to provide additional guidance for those future actions. Id.

EPA revised the SO₂ primary NAAQS pursuant to two sections of the CAA that govern NAAQS establishment and revision. Section 108 directs EPA to identify and list air pollutants that meet certain criteria, including that the air pollutant “in [the Administrator’s] judgment, cause[s] or contribute[s] to air pollution which may reasonably be anticipated to endanger public health and welfare” and “the presence of which in the ambient air results from numerous or diverse mobile or stationary sources.” CAA sections 108(a)(1). For those air pollutants listed, section 108 requires EPA to issue air quality criteria that accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of a pollutant in ambient air. * * * CAA section 108(a)(2).

Section 109(a) directs EPA to promulgate “primary” and “secondary” NAAQS for pollutants for which air quality criteria have been issued. Section 109(b)(1) defines a primary standard as one “the attainment and maintenance of which in the judgment of the Administrator, based on [the air quality] criteria and allowing an adequate margin of safety, are requisite to protect the public health.” CAA section 109(b)(1). The legislative history of section 109 indicates that a primary NAAQS is to be set at “the maximum permissible ambient air level * * * which will protect the health of any [sensitive] group of the population,” and that for this purpose “reference should be made to a representative sample of persons comprising the sensitive group rather than to a single person in such a group.” S. Rep. No. 91–1196, 91st Cong., 2d Sess. 10 (1970). See also American Lung Ass’n v. EPA, 134 F.3d 388, 389 (D.C. Cir. 1998) (“NAAQS must protect not only average healthy individuals, but also ‘sensitive citizens’—children, for example, or people with asthma, emphysema, or other conditions rendering them particularly vulnerable to air pollution. If a pollutant adversely affects the health of these sensitive individuals, EPA must strengthen the entire national standard.”); Coalition of Battery Recyclers Ass’n v. EPA, 604 F.3d 613, 617–18 (D.C. Cir. 2010) (same).

The requirement that primary NAAQS include an adequate margin of safety is intended to address uncertainties associated with inconclusive scientific and technical information available at the time of standard setting. It is also intended to provide a reasonable degree of protection against hazards that research has not yet identified. Lead Industries Ass’n v. EPA, 647 F.2d 1130, 1154 (D.C. Cir. 1980), cert. denied, 449 U.S. 1042 (1980); American Petroleum Inst. v. Costle, 665 F.2d 1176, 1186 (D.C. Cir. 1981), cert. denied, 455 U.S. 1034 (1982). Thus, in selecting primary NAAQS, EPA may seek not only to prevent pollution levels that have been demonstrated to be harmful but also to prevent lower pollution levels that may pose an unacceptable risk of harm, even if the risk is not precisely identified as to the nature or degree.

In addressing the requirement for a margin of safety, EPA considers such factors as the nature and severity of the health effects involved, the size of the at-risk population[s], and the kind and degree of the uncertainties that must be addressed. In setting standards that are “requisite” to protect public health and welfare, as provided in section 109(b), EPA’s task is to establish standards that are neither more nor less stringent than necessary for these purposes. In so doing, EPA may not consider the costs of implementing the standards. Whitman v. American Trucking Ass’n, 531 U.S. 457, 475–76 (2001). Consequently, in establishing the revised SO₂ Primary NAAQS, EPA did not consider future implementation burdens or costs that might be borne by industrial sources, States, Tribes, local governments, or by EPA itself, such considerations not being relevant to the science based determinations required to be made under CAA section 109. However, as mentioned above, EPA did discuss and provide guidance on issues related to future implementation, without such considerations impermissibly affecting EPA’s decision on the NAAQS itself.

States are primarily responsible for ensuring attainment and maintenance of NAAQS once EPA establishes them. Under CAA section 110 and related provisions, States submit, for EPA approval, SIPs that provide for implementation, maintenance, enforcement, and attainment of such standards through control programs directed to sources of the pollutants involved. The States, in conjunction with EPA, also administer the prevention of significant deterioration (PSD) program under CAA sections 160–169 that covers these sources. In addition, federal programs provide for nationwide control of emissions through: The motor vehicle and motor vehicle fuel program under title II of the CAA: the new source performance standards (NSPS) under CAA sections 111 and 129; and the acid rain program under CAA title IV. EPA has also promulgated the Clean Air Interstate Rule (CAIR) to require additional SO₂ emission reductions needed in the eastern United States. This rule was remanded by the U.S. Court of Appeals for the D.C. Circuit, and EPA recently proposed revisions to it. See North Carolina v. EPA, 531 F.3d 896 (D.C. Cir. 2008) and 75 FR 45210 (August 2, 2010). EPA is also developing “maximum achievable control technology” (MACT) standards under CAA sections 112 and 129 that the Agency expects will result in significant SO₂ reductions from the subject source categories.

EPA formally initiated the most recent review of the air quality criteria for oxides of sulfur and of the SO₂ Primary NAAQS on May 15, 2006 (71 FR 29023). The first draft of the ISA for SO₂ was reviewed by CASAC at a public meeting held on December 5–6, 2007. EPA then developed the second draft of the ISA and the first draft of the Risk and Exposure Assessment to Support the Review of the SO₂ Primary [NAAQS] (REA), which CASAC reviewed at a public meeting held on July 30–31, 2008. EPA released the final ISA in September 2008 (EPA, 2008a), and the second draft of the REA was reviewed by CASAC at a public meeting held April 16–17, 2009. The final REA containing the final staff policy assessment that considered the evidence presented the final ISA and the air quality, exposure, and risk characterization results as they related to the adequacy of the then-current SO₂ NAAQS and potential alternative primary SO₂ standards, was completed in August 2009 (EPA 2009a).

On December 8, 2009, EPA published its proposed revisions to the primary SO₂ NAAQS. See 74 FR 64810, EPA.
presented a number of conclusions, findings, and determinations proposed by the Administrator, and invited general, specific, and/or technical comments on all issues involved with this proposal, including all such proposed judgments, conclusions, findings and determinations. EPA carefully considered these comments as it made its final decisions regarding the revised SO₂ Primary NAAQS, as EPA described in its notice of final rulemaking. See 75 FR at 35523. The Administrator signed the final rule on June 2, 2010, and it was published in the Federal Register on June 22, 2010. EPA’s thorough and detailed scientific rationale for the revised SO₂ Primary NAAQS is set forth at 75 FR 35524–35550. For the reasons discussed therein, and taking into account information and assessments presented in the ISA and the REA, as well as the advice and recommendations of CASAC, the Administrator concluded that the then-current 24-hour and annual primary SO₂ NAAQS were not requisite to protect public health with an adequate margin of safety. The Administrator also reviewed each of the elements of the NAAQS—indicator, averaging time, form, and level—and promulgated a revised standard of 75 ppb based on the three-year average of the annual 99th percentile of the daily maximum one-hour average concentrations of SO₂. The Administrator concluded that this standard will appropriately protect public health with an adequate margin of safety, and specifically will afford appropriate increased protection for asthmatics and other at-risk populations of safety, and specifically will afford increased protection for public health with an adequate margin of safety. See Whitman v. American Trucking Ass’ns, 531 U.S. at 475–76. The Administrator concluded that this standard will appropriately protect public health with an adequate margin of safety, and specifically will afford appropriate increased protection for asthmatics and other at-risk populations.

2. Preamble Discussion of Anticipated Approaches for Implementation

Although discussions regarding implementation are not part of the NAAQS itself, it is EPA’s customary practice to provide separate implementation guidance—and in some cases regulatory requirements—regarding a new or revised NAAQS, along with guidance on designations and other issues. The December 8, 2009, NPRM for the SO₂ Primary NAAQS included a summary discussion regarding future implementation actions such as designations of areas under the standard, SIP development, and new source review (NSR) and PSD permitting. See 74 FR 64810, 64858–64. This discussion essentially outlined the separate statutory provisions and requirements that would be triggered following final promulgation of a revised NAAQS under section 109(d). As part of this general discussion, EPA presented limited preliminary explanations of how the Agency expected some of these future actions might be addressed. For example, regarding area designations under section 107(d) of the Act, EPA stated it did not expect new monitors required under a new monitoring network would be in place in time to generate data to inform designations under the statutory timetable, and the Agency explained that some areas could be designated as unclassifiable because EPA would be unable to determine whether they are violating the 1-hour standard or contributing to a violation in a nearby area. See 74 FR at 64859. EPA also summarized the CAA section 110 requirement that States submit SIPs showing attainment and maintenance of a revised NAAQS through control programs directed at sources of SO₂ emissions, including, for example, NSR and PSD programs. See 74 FR at 64859–63. Regarding PSD, EPA specifically discussed preliminary issues regarding the use of modeling to demonstrate that emissions increases from new or modified sources will not cause or contribute to a violation of the new NAAQS. See 74 FR at 64862. However, the NPRM did not contain any proposed regulatory provisions regarding area designations under section 107, or regarding SIP implementation under section 110 and related provisions, except as discussed below.

The NPRM also proposed regulatory amendments regarding the monitoring network design, in order to better identify where short-term, peak ground-level concentrations of SO₂ may occur. See 74 FR at 64849–55. EPA proposed a two-pronged monitoring network comprised of all source-oriented monitors, with requirements that the network contain at least a specified number of monitors in the following locations: (1) Monitors in urban areas where there is a higher coincidence of population and emissions, utilizing a Population Weighted Emissions Index (PWEI), and (2) monitors in States based on each State’s contributions to the national SO₂ emissions inventory. This two-pronged network would have resulted in a minimum of approximately 348 source-oriented monitors nationwide. EPA noted that due to multiple variables that affect ground-level SO₂ concentrations caused by one or more stationary sources, it is difficult to specify a priori a source-specific threshold, algorithm, or metric by which to accurately identify the monitoring location where peak concentrations occur. See 74 FR at 64850–51. Consequently, EPA explained that States may need to conduct other quantitative analyses, such as modeling, to identify where ground-level SO₂ maximum concentrations may occur and where to site monitors (see 74 FR at 64851–52, 64853–54), and requested comment on whether to utilize existing screening and refined modeling tools to identify facilities with the potential to cause an exceedance of the proposed revised SO₂ NAAQS (see 74 FR at 64854–55).

Besides monitoring and reporting requirements, the only implementation related regulatory provisions EPA proposed had to do with making the transition to the new standard and including “anti-backsliding” principles consistent with section 172(e) of the Act. See 74 FR at 64863–64. EPA announced it was proposing that the prior NAAQS would remain in place for one year following the effective date of a designation under the new NAAQS in an area, before being revoked in most attainment areas. Further, EPA proposed that all existing SIP and FIP requirements currently in effect under CAA sections 110, 191 and 192 would remain in effect. For all areas designated nonattainment under the prior NAAQS or subject to “SIP Calls,” EPA proposed that the prior NAAQS would remain in effect until the area had received full approval of a SIP meeting the attainment requirements of the new NAAQS. EPA proposed regulatory amendments to 40 CFR 50.4 to this effect. The final NAAQS rulemaking promulgated these proposed requirements, with minor clarifying amendments to address public comments received on the proposed
requirements. See 75 FR at 35580–82; 40 CFR 50.4(e).

The final rulemaking notice, in addition to explaining the codified requirements regarding monitoring and anti-backsliding, also presented a more thorough non-binding discussion than did the NPRM of how EPA anticipated subsequent designations and SIP planning actions would be implemented. See 75 FR at 35550–80. Partly in response to public comments arguing that the proposed monitoring network was simultaneously insufficient to identify all points of maximum ambient SO₂ concentrations and overly burdensome in the number of monitors it proposed to require, EPA explained that it now expected to follow its traditional approach in SO₂ NAAQS implementation of utilizing both modeling and monitoring to inform future designation and SIP approval actions. EPA explained that its anticipated approach would better address: (1) The unique source-specific impacts of SO₂ emissions, (2) the special challenges SO₂ emissions present in terms of monitoring short-term SO₂ levels for comparison with the NAAQS, (3) the generally superior utility that modeling offers for assessing SO₂ concentrations, and (4) the most appropriate method for ensuring that areas attain and maintain the NAAQS, taking into account the potential substantial SO₂ emissions reductions from forthcoming national and regional rules currently under development. See 75 FR at 35550. EPA explained that except for the final regulatory provisions such as those regarding the promulgated monitoring network, the implementation discussion explained the Agency’s expected and intended approach to future action as guidance, not as final agency action, and acknowledged that EPA’s approaches may continue to evolve as actual implementation proceeds. Id. For example, in the part of the discussion outlining EPA’s general expectation for what roles modeling and monitoring would play in initial area designations under CAA section 107, EPA noted that decisions about whether to base an attainment designation on monitoring alone would be made on a case-by-case basis. See 75 FR at 35552, n. 22. EPA further explained that it planned to issue more implementation guidance, particularly regarding the use of refined dispersion modeling. See 75 FR at 35550. EPA has in fact already provided some further guidance regarding implementation of the revised SO₂ NAAQS. See Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, to Regional Air Division Directors, “Guidance Concerning Implementation of the 1-hour SO₂ NAAQS for the Prevention of Significant Deterioration Program,” and attachments (Aug. 23, 2010) (included in the docket for this notice of denial).

EPA described its historical preference for having used modeling more than monitoring to support SO₂ NAAQS compliance determinations, and referred to numerous prior actions dating from the late 1970s through 2002 in implementing the SO₂ NAAQS that had taken this approach. See 75 FR at 35551. EPA explained the unique aspects of SO₂ that had caused the Agency to have less confidence in relying on monitoring compared to situations involving other NAAQS pollutants and how this affected its expected approach to initial designations, given that the new monitoring network would not be in place in time under the statutory timetable for issuing designations. EPA also indicated that it did not expect States to be able in that timeframe to conduct refined dispersion modeling for all of the sources that may potentially cause or contribute to a violation of the revised NAAQS. See 75 FR at 35551–52. EPA thus explained that it was likely that most areas would therefore be initially designated as “unclassifiable” under the new NAAQS, and that an appropriate approach needed to be identified to ensure that all areas ultimately attain and maintain the revised NAAQS. See 75 FR at 35552–53. The anticipated approach, EPA discussed, was to rely upon the CAA section 110(a)(1) requirement for SIP submissions from all areas—attainment, unclassifiable, and nonattainment—following NAAQS revision. Although EPA had often historically expected very little from States in this submission in the way of substantive demonstrations or control requirements, relying on new source review programs to keep areas in attainment, EPA explained that in the case of SO₂ the section 110(a)(1) SIP provided an opportunity to allow States to include in attainment demonstration modeling expected SO₂ reductions from future federal and regional control programs currently in development that would not be in effect in time to inform initial designations. Id. To ensure that these attainment demonstrations would result in timely nationwide attainment of the new NAAQS just as expeditiously as would areas to designate as nonattainment areas with sources that may potentially cause or contribute to NAAQS violations in advance of these new national and regional programs becoming effective, EPA explained that it anticipated States would submit section 110(a)(1) SIPs to show attainment on the same schedule as would apply for nonattainment areas, i.e., no later than approximately August 2017. EPA indicated its expectation that this date would represent attainment as expeditiously as practicable for all areas. Id. EPA provided detailed non-binding guidance discussions of its expected approach toward future designations at 75 FR 35569–71, and of its expected implementation strategy at 75 FR 35571–80. However, EPA noted that any determination of actual attainment dates would await notice and comment rulemaking with respect to a particular area and SIP. Id. at 35573.

Although the discussion regarding designations and SIP implementation constituted non-binding guidance, the approach discussed had a role in EPA’s final decisions on the size of the required monitoring network, and the anti-backsliding requirements. The discussion had no impact on the Agency’s final decision on the NAAQS itself. In particular, partly as a result of EPA’s review of its historic practice in assessing SO₂ NAAQS compliance, EPA in the final rule modified its proposed requirements concerning the minimum size of the monitoring network. See 75 FR at 35554, 35556–62. The result was that EPA reduced the final minimum monitoring network requirement to approximately 163 monitors from the proposed number of 184, 35580. See 75 FR at 35557. And, as mentioned above, within the implementation discussion EPA discussed its promulgated requirements addressing the “anti-backsliding” provisions of CAA section 172(e). See 75 FR at 35580–82. Finally, both in order to conform the regulatory text for the new NAAQS to that addressing other NAAQS, and in recognition of the fact that both monitoring and modeling may be used by States to implement the new NAAQS, EPA added clarifying regulatory text to address the circumstances in which compliance is measured by use of monitoring. See 75 FR at 35582; 40 CFR 50.17(b) and section 1(a) of Appendix T to part 50.

3. Petitions for Reconsideration and for Judicial Review and Stay Requests

Following promulgation of the revised SO₂ Primary NAAQS, on August 23, 2010, numerous parties filed petitions for judicial review in the U.S. Court of Appeals for the D.C. Circuit. See National Environmental Development Association’s Clean Air Project v. EPA,
II. Standard for Reconsideration

Section 307(d)(7)(B) of theCAA strictly limits petitions for reconsideration both in time and scope. It states that: “Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b)). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed pending such reconsideration, however, by the Administrator or the court for a period not to exceed three months.”

Thus, by the terms of CAA section 307(d)(7)(B), it is clear that the right to seek reconsideration of a rule is afforded with respect to decisions that are final rulemaking actions for which judicial review may be obtained under CAA section 307(b)(1) and which have some final effect that could potentially be stayed by either a court or by the Administrator. EPA may not be required to reconsider non-final actions, such as non-binding guidance discussions, for which judicial review is not otherwise available and which do not themselves take effect at any time. Moreover, the requirement to convene a proceeding to reconsider a rule is based on the petitioner demonstrating to EPA both: (1) That it was impracticable to raise the objection during the comment period, or that the grounds for such objection arose after the comment period but within the time specified for judicial review (i.e., within 60 days after publication of the final rulemaking notice in the Federal Register), see CAA section 307(b)(1); and (2) that the objection is of central relevance to the outcome of the rule. As to the first procedural criterion for reconsideration, a petitioner must show why the issue could not have been presented during the comment period, either because it was impracticable to raise the issue during that time or because the grounds for the issue arose after the period for public comment (but within 60 days of publication of the final action). Thus, CAA section 307(d)(7)(B) does not provide a forum to request EPA to reconsider issues that actually were raised, or could have been raised, prior to promulgation of the final rule.

In EPA’s view, an objection is of central relevance to the outcome of the rule only if it provides substantial support for the argument that the promulgated regulation should be revised. See, e.g., EPA’s Denial of the Petitions to Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202 of the Clean Air Act, 75 FR 49556, 49561 (Aug. 13, 2010). This interpretation is appropriate in light of the criteria adopted by Congress in this and other provisions in section 307(d). Section 307(d)(4)(B)(i) provides that “[a]ll documents which become available after the promulgation of the rule has been published and which the Administrator determines are of central
relevance to the rulemaking shall be placed in the docket as soon as possible after their availability." This provision draws a distinction between comments and other information submitted during the comment period, and other documents which become available after publication of the proposed rule. The former are docketed irrespective of their relevance or merit, while the latter must be docketed only if a higher hurdle of central relevance to the rulemaking is met.

Congress also used the phrase “central relevance” in sections 307(d)(7)(B) and (d)(8), and by reference in (d)(9)(D), and in each case Congress set a more stringent hurdle than in section 307(d)(4). Under section 307(d)(7)(B), the Administrator is required to reconsider a rule only if the objection is “of central relevance to the outcome of the rule.” Likewise, section 307(d)(8) authorizes a court to invalidate a rule for procedural errors only if the errors were “so serious and related to matters of such central relevance to the rule that they would have been substantially changed if such errors had not been made.” Section 307(d)(9)(D) then applies both the section 307(d)(7)(B) and (d)(8) requirements in limiting a court’s ability to reverse an EPA final action found to be without observance of procedure required by law. In each of these provisions, it is not enough that the objection or error be of central relevance to the issues involved in the rulemaking, as in section 307(d)(4). Instead, the objection has to be of central relevance to the “outcome of the rule” itself, and the procedural error has to be of such central relevance that it presents a “substantial likelihood that the rule would have been substantially changed.” Central relevance to the issues involved in the rulemaking is not enough to meet the criteria Congress set under sections 307(d)(7)(B), (d)(8) or (d)(9)(D). These provisions all require that the objection or error be central to the substantive final decision that is the outcome of the rulemaking and that is taking effect. This is a higher hurdle than one for which a court’s ability to reverse is allowed by the APA. Thus, EPA also rejects TCEQ’s claim that EPA should reconsider the final rule under section 557 of the APA, even if the criteria for reconsideration under CAA section 307(d)(7)(B) are not met (TCEQ at 4).

As discussed in this decision, EPA is denying the petitions because they fail to meet these criteria. At the outset, the objections raised in the petitions to reconsider all regard non-final, non-binding guidance discussion that is not final rulemaking action that is ripe for either judicial review or for reconsideration. Additionally, in all cases the objections are not of central relevance to the outcome of the rule because they do not provide substantial support for the argument that the final promulgated regulation should be revised. This properly links the criteria to the promulgated outcome of the rulemaking, not just to the issues addressed in the rulemaking which may or may not have influenced that final action taken by EPA. It requires that the objection be of such substance and merit that it can be considered central to the final outcome of the rulemaking. This interpretation is consistent with section 307(d)(8), which also ties central relevance to the outcome of the rulemaking, in terms of a “substantial likelihood” that the promulgated rule would be “substantially changed,” and with section 307(d)(9)(D), which assumes that the objection regard an “action” that a court “may reverse” and for which a “procedure required by law” exists. This interpretation gives proper weight to the approach throughout sections 307(b) and (d) of the importance Congress attributed to preserving the finality of agency rulemaking decisions, once they have in fact been made. This interpretation is also consistent with the case law, as discussed below.

As mentioned above, EPA also received requests to administratively stay the final revised SO2 Primary NAAQS as part of the petitions for reconsiderations. Petitioners either tied their requests for an administrative stay to their requests for reconsideration under CAA section 307(d)(7)(B), referred to EPA’s general authority to prescribe such regulations as are necessary to carry out EPA’s functions under CAA section 301(a), did not refer to any specific statutory authority for granting an administrative stay, or filed the stay request under section 705 of the APA, which in turn applies only to hearings required under APA sections 553 or 554. See APA sections 557(a), 556(a). Since those provisions do not apply to actions promulgated under CAA section 307(d), APA section 557 is inapplicable. As mentioned above, EPA also received requests to administratively stay the final revised SO2 Primary NAAQS as part of the petitions for reconsiderations. Petitioners either tied their requests for an administrative stay to their requests for reconsideration under CAA section 307(d)(7)(B), referred to EPA’s general authority to prescribe such regulations as are necessary to carry out EPA’s functions under CAA section 301(a), did not refer to any specific statutory authority for granting an administrative stay, or filed the stay request under section 705 of the APA, which in turn applies only to hearings required under APA sections 553 or 554. As described below, EPA is denying the petitions to reconsider; hence there is no basis for issuance of a stay under CAA section 307(d)(7)(B). Nor is it necessary for EPA to grant a stay by rulemaking under authority of CAA section 301(a) to carry out the Agency’s functions in denying the petitions for reconsideration. APA section 705 authorizes an agency to postpone the effective date of an agency action pending judicial review when the agency finds that justice so requires. In this case, the revised SO2 Primary NAAQS was effective as of August 23, 2010. TCEQ’s request for an administrative stay relies upon APA section 705 was submitted by petition on the same day that the SO2 Primary
NAAQS became effective. Even if EPA believed that an administrative stay was warranted, which it does not, it is not clear whether EPA would have authority under APA section 705 to stay an agency action that has already gone into effect. Postponing an effective date implies action before the effective date arrives.

In any case, an administrative stay of the final SO$_2$ Primary NAAQS is not warranted. As explained in Part VI below, in response to the arguments raised by petitioners, (1) the petitioners have not made a strong showing on the merits, for all of the reasons upon which EPA is denying the petitions to reconsider; (2) the petitioners’ arguments concerning irreparable harm fail to adequately account for the fact that no final actions implementing the approaches discussed in the preamble have yet been taken under the revised NAAQS; (3) the petitioners’ arguments do not consider the possibility of harm to other parties if a stay of the NAAQS were to be granted; and (4) granting a stay would be contrary to the public interest.

III. Administrative Process Issues

A. Summary of Petitioners’ Arguments

Petitioners’ procedural objections come in several forms, with most petitioners raising them repeatedly. The central assumption of each objection is that EPA’s final NAAQS rulemaking took final action on the discussed implementation approaches, and that the discussion and approaches are of central relevance to the outcome of the final revised SO$_2$ Primary NAAQS. Further, petitioners often assert that but for the inclusion of the discussion of implementation approaches, which was allegedly done in a procedurally flawed manner, EPA would have promulgated a different revision of the SO$_2$ Primary NAAQS. They claim that notice and comment rulemaking is required for the implementation discussion deviates too sharply from the NPRM to “logically follow” from the proposal without first undergoing notice and comment procedures, as petitioners claim is required by Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 547 (D.C. Cir. 1983), and related cases. Presenting the implementation discussion in response to limited comments, petitioners argue, does not satisfy the claimed requirement to subject such a discussion to notice and comment proceedings, and EPA’s alleged procedural error was so severe that there is a substantial likelihood that the final NAAQS would have been changed if the error had not been made, resulting in EPA’s revised NAAQS not having been adequately justified. See UARG at 22–25; NEDA/CAP at 3–4; ASARCO at 2–8; MSCC at 1–2, 3–6, 6–9; TCEQ at 4, 11–14; ND and SD at 8–9; WVDEP at 1, 2; ADEQ at 1.

The petitioners argue that reconsideration is warranted because their objections regarding the implementation discussion “are based on actions” EPA took in the final rulemaking and “are of central relevance to the outcome of the NAAQS rulemaking. As such, petitioners claim, the public must be given an opportunity to comment not just on the regulatory provisions of the NAAQS itself but also on any intended implementation approach and possible methods for determining compliance. See UARG at 17–19; NEDA/CAP at 3–4; ASARCO at 4–6; MSCC at 1–2; TCEQ at 11–14; ND and SD at 7–8. Moreover, petitioners argue, EPA’s stated intention in the final rulemaking preamble to provide an opportunity for public comment on additional guidance cannot “cure” the alleged procedural defect of not having provided an opportunity to comment on the changed approach to implementation of the NAAQS, especially where such guidance would not be promulgated according to the CAA’s required procedures for rulemaking. See UARG at 27–28; NEDA/CAP at 3–4; ASARCO at 8–10.

Below, EPA summarizes each of the petitioners’ separate arguments regarding procedural objections. While the petitioners’ arguments are thematically similar, they are structured differently, and do not each raise the same points. Our responses, however, do not seek only to address each petition, but rather provide our answers to the various objections the petitioners raise.

1. UARG

UARG claims that the NPRM included nothing in either its preamble discussion or proposed regulatory text indicating that EPA intended to reduce the emphasis on monitoring in issuing designations or to enhance the emphasis on modeling compared to implementation in the past, and that nothing in the NPRM suggested EPA would discuss a new approach toward section 110(a)(1). UARG at 13. UARG points out that multiple petitioners filed comments on the NPRM addressing the proposed level of the NAAQS and the proposed revised design of the SO$_2$ monitoring network and other implementation aspects, but did not provide comments on any “changes to the way EPA had historically expected States to make their section 107(d) designations.” Id. at 13–14, fns. 29–33. UARG then claims that reconsideration is appropriate under CAA section 307(d)(7)(B) because its objections are based on actions EPA took for the first time in the final SO$_2$ NAAQS rulemaking and thus petitioners could not have raised them during the comment period, that UARG’s objections arose following promulgation of the rule and during the period for judicial review, and that the objections are of central relevance to the outcome of the rulemaking. Id. at 17. UARG claims petitioners did not object to EPA’s discussed implementation approach focusing on modeling because EPA did not discuss it in the NPRM, thus depriving interested parties of any meaningful opportunity to comment on all aspects of the proposed revised NAAQS, including its implementation. Id. at 18. Because EPA had not previously, according to UARG, implemented the SO$_2$ NAAQS based primarily on the use of modeling and because the discussion cannot in UARG’s view be considered a logical outgrowth of the NPRM, petitioners have not had a meaningful opportunity to comment. Id.

UARG’s central claim is the public must be given an opportunity to comment on “all aspects” of a NAAQS, not only its numerical level but also the approaches EPA may use to implement it. Id. Therefore, UARG asserts, EPA cannot make “substantial changes in methods being used to implement” a NAAQS without notice and a hearing. Id., citing Donner Hanna Coke Corp. v. Costle, 464 F.Supp. 1295, 1305 (W.D. N.Y. 1979). UARG claims that EPA may “require the use of a certain method” to determine compliance with the SO$_2$ NAAQS only if EPA provides notice of such, citing Wisc. Elec. Power Co. v.
UARG’s objections also rely upon its premises that EPA has not previously favored or required dispersion modeling to support SO\textsubscript{2} NAAQS compliance determinations, particularly in initial designations under CAA section 107(d), and that EPA is now interpreting CAA section 110(a)(1) “to require” that States include in SIPs submitted under that provision modeled demonstrations of NAAQS attainment and maintenance. Id. at 19–21. UARG disputes EPA’s cited examples as showing that the Agency has long utilized modeling in SO\textsubscript{2} NAAQS implementation, stressing its view that in the new SO\textsubscript{2} NAAQS EPA has now “required States to support their initial designation recommendations with modeling data alone or with both monitoring and modeling data.” Id. at 19–20. Instead, UARG claims, EPA has historically expressed a preference of reliance on monitoring data, and cites in support of this claim EPA’s February 1994 “SO\textsubscript{2} Guideline Document,” EPA–452/R–94–008; a Letter from Barber, Walter C., OAQPS, to Pickard, Ralph C., Indiana Air Pollution Control Board (Sept. 3, 1981) which stressed rulemakings for the Lead NAAQS and NO\textsubscript{2} NAAQS, 73 FR 66964 (Nov. 12, 2008) and 75 FR 6474 (Mar. 24, 2010), respectively. Id. at 20–21.

In arguing that the final SO\textsubscript{2} NAAQS is not a logical outgrowth of the NPRM, UARG focuses on the proposed revised monitoring requirements and absence of proposed requirements regarding modeling, and again claims that the final rule “would now require” States to conduct modeling for initial designations. Id. at 22. UARG claims that the final rule “does not adopt the monitoring approach that was discussed” in the NPRM, and that EPA “is adopting” a different modeling-based approach. Id. This alleged change is too radical a departure from the NPRM to satisfy the Small Refiner test, UARG claims, as commenters could not have anticipated that EPA “would adopt” a modeling approach “in the final NAAQS nor that EPA would “change” how it “is implementing” CAA section 110(d)(1). Id. at 22–23. Thus, asserts UARG, granting reconsideration “and conducting rulemaking on a modeling-based SO\textsubscript{2} NAAQS implementation approach” would provide the first opportunity for the public to comment and persuade EPA to “change the Rule.” Id. at 23. EPA itself must provide this opportunity to comment, UARG claims, and may not rely upon “bootstrapping” from comments regarding a modeling implementation approach to satisfy its burden. Id. at 23–24. UARG further claims that it would have submitted extensive comments on this approach that could have changed the final NAAQS, based on UARG’s view that the conservativeness of modeling approaches somehow has the effect of making the NAAQS more stringent than its numerical level. Id. at 24–25. EPA’s stated intention to provide further guidance, including an opportunity to comment on this guidance, is not an adequate substitute for conducting “full notice and comment rulemaking before changing the final rule” which allegedly “now requires” States to use modeling. Id. at 26–29.

2. NEDA/CAP

NEDA/CAP likewise claims that EPA committed procedural violations in the final NAAQS rule because the NPRM “provided that initial SO\textsubscript{2} designations were based on monitoring,” whereas EPA allegedly concedes that its “final action” reflects a change from the proposed approach. NEDA/CAP at 1–2. NEDA/CAP claims EPA never provided a meaningful opportunity to comment on this “major change to the NAAQS implementation process,” and that NEDA/CAP would provide “extensive information” on this issue if EPA grants reconsideration. Id. at 3. Like UARG, NEDA/CAP asserts that its objections, per CAA section 307(d)(7)(B), are based on actions EPA took for the first time in the final rule, could not have been raised during the public comment period on the NPRM, arose following promulgation of the final rule and during the period for judicial review, and are of central relevance to the outcome of the rulemaking. Id. at 4.

Also like UARG, NEDA/CAP claims that the public must be afforded a chance to comment on “all aspects of proposed revisions to NAAQS, including the method of implementation,” and that since EPA has allegedly “not previously utilized a modeling approach to implementation” the final preamble discussion of such an approach “mandating the use of modeling, instead of monitoring, in the initial implementation of the designation process is therefore a substantial departure from the proposal” and cannot be considered a logical outgrowth of the proposal. Id. NEDA/CAP further claims that the NPRM did not meet the requirement of CAA section 307(d)(3) to provide notice, a “critical legal issue regarding the requirement in the final rule for States to use modeling.” Id. at 4–5. Therefore, NEDA/CAP argues, the public did not receive the proper legal notice that EPA “might take away” State discretion in recommending area designations, and the public was deprived of its right to comment on this issue. Id. at 5, citing Appalachian Power v. EPA, 135 F.3d 791, 816 (D.C. Cir. 1998) for the proposition that a final rule is a logical outgrowth only if commenters “clearly understood” that a matter was under consideration.

3. ASARCO

ASARCO also alleges that the NPRM violated CAA section 307(d)(3) in not providing the public an opportunity to comment on the final rule preamble’s discussion of the anticipated implementation approach. ASARCO at 2. ASARCO also claims that the subsequent opportunity to comment on future guidance “cannot cure the violation.” Id. In addition to supporting UARG’s arguments, ASARCO stresses that the NPRM’s discussion of modeling was limited to how it could be used to identify where monitors should be placed within the proposed network that would have employed 348 monitors. Id. at 2–3. ASARCO claims EPA gave no notice of its position stated in the final preamble that modeling is a technically appropriate, efficient and readily available method to assess short-term ambient SO\textsubscript{2} concentrations, and disputes EPA’s explanation that the Agency has long preferred modeling over monitoring in SO\textsubscript{2} implementation. Id. at 3–4. Thus, ASARCO asserts, it was impracticable for commenters to address EPA’s “final determination to move toward a ‘hybrid’ approach.” Id. at 4.

ASARCO then claims that the discussed “hybrid” approach played a “central role in EPA’s final determinations” for implementation of the new NAAQS, such as how monitors in the scaled-back network design would be used. Id. It also “changed” how areas would be designated under the NAAQS, with areas with monitors showing no violations being designated as unclassifiable, ASARCO claims. Id. at 5. And such unclassifiable areas will have more “onerous requirements” than were described in the NPRM. Id. at 5–6. That EPA “will also require” modeling in SIPs demonstrating attainment is of “vital importance” to the stringency of the NAAQS, ASARCO claims, and thus is “of central relevance to the outcome of the Final Rule” such
that the public should have had an opportunity to comment on it, particularly since it “is a departure from how EPA has generally implemented NAAQS” according to ASARCO. Id. at 6.

EPA’s discussion in the final rule violates CAA sections 307(d)(3), (4) and (5), ASARCO claims, and cannot be supported as a response to public comments, none of which asked EPA to “shift the focus” from monitoring to modeling in showing NAAQS attainment, ASARCO claims. Id. at 6–7.

ASARCO cites several cases for the proposition that such a response to comments is not adequate to meet the initial notice and comment requirements of the CAA. Id. at 7, citing, e.g., McLouth Steel Products Corp. v. Thomas, 838 F.2d 1317, 1323 (D.C. Cir. 1988). ASARCO dismisses EPA’s observation that the discussed anticipated approach would address commenters’ complaints that the proposed monitoring network was too burdensome, and asserts that that burden would only be replaced by more burdensome modeling, which according to ASARCO prevents the discussion from being a logical outgrowth of the proposal. Id. at 7–8. Since EPA was required to have provided an opportunity to comment on the hybrid approach in the NPRM, ASARCO argues, the “promise of an opportunity to comment on guidance in the future,” at which point EPA “will not likely abandon the modeling requirement” ASARCO claims the final rule imposed, is insufficient. Id. at 8–9. This, ASARCO claims, runs afoul of cases such as Grand Canyon Air Tour Coal. v. FAA, 154 F.3d 455, 468 (D.C. Cir. 1998) (“agency’s mind must be open to considering comments”) and McLouth (the curative effect of later notice “depends upon the agency’s mind remaining open enough at the later stage”). Id. at 9. Thus, EPA is constrained by Kencnecc Corp. v. EPA, 684 F.2d 1007, 1019 (D.C. Cir. 1982) and PPG Indus., Inc. v. Costle, 659 F.2d 1239, 1250 (D.C. Cir. 1981), which rejected subsequent reconsideration as a cure for an initial procedural violation.

Id. ASARCO then asserts that subsequent monitoring guidance cannot cure the alleged procedural error, under Appalachian Power Co. v. EPA, 208 F.3d 1015, 1024 (D.C. Cir. 2000), because EPA notes that a purpose of a monitoring data interpretation rule for a NAAQS is to give effect to the form, level, averaging time and indicator specified in the regulatory text, resolving in advance ambiguities that might occur regarding use of monitoring data. Id. at 9–10. ASARCO asserts that since the promulgated regulation addressing monitoring applies only to situations where monitoring is used, “the same holds true” for reliance on modeling, which could render EPA’s specificity regarding monitoring “essentially meaningless without further direction on the use of modeling.” Id. at 10.

Finally, ASARCO claims that a notice and comment opportunity on implementation approaches must be provided since the approach allegedly “may affect the stringency of the standard,” as ASARCO in fact commented on the NPRM that current modeling is conservative and that there is a discrepancy between modeling and monitoring data. Id. at 11, citing Asarco Comments at 12 (EPA–HQ–OAR–2007–0352–0963.1) and UARG Comments at 32 (EPA–HQ–OAR–2007–0352–0967.1). EPA did not explain how modeling will be used to meet requirements for demonstrating NAAQS attainment, such as CAA section 107(d)(3)(E)(i) and (iii), ASARCO claims, or why modeling provides accurate or reliable information to reflect NAAQS compliance, and the failure to give the public notice of EPA’s “decision” to use modeling in the NPRM did not give the public sufficient information to understand the full implications of the revised NAAQS, ASARCO claims. Id. at 11–12.

4. MSCC

MSCC claims that the grounds for its objections to the SO₂ Primary NAAQS arose after the public comment period, that its objections were impracticable to raise during the comment period, and that the objections are of central relevance to the outcome of the rule. MSCC at 1. Therefore, MSCC claims, the “final rules” are not a logical outgrowth of the “proposed rules,” and EPA failed to provide an adequate opportunity for notice and comment. Id. at 2. MSCC objects to EPA’s not having specifically, in the NPRM, asked for public comments on using monitoring and modeling in a combined “hybrid” manner to assess NAAQS compliance, or on whether to use modeling for larger sources and monitoring for smaller sources and those not conducive to modeling. Id.

Citing Small Refiner and related cases, MSCC argues that the test for whether a final rule is a logical outgrowth of its proposal is whether commenters should have anticipated whether a final requirement might be imposed, and were fairly apprised of the subjects and issues of the rulemaking. Id. at 3. In the Small Refiner Court’s differing treatment of final actions that were taken in response to numerous comments, and in response to a single comment. Id. at 4; see also Small Refiner at 546–549. MSCC argues that since no single commenter on the SO₂ NAAQS recommended EPA’s discussed “hybrid” modeling and monitoring approach to implementation, and since the NPRM made no mention of such an approach, EPA’s discussion cannot be a logical outgrowth. MSCC at 5. MSCC asserts that EPA “(1) focused its proposal entirely on changes to the existing monitoring network, (2) proposed no changes to modeling requirements, and (3) did not mention the word ‘hybrid’ even once.” Id. (emphasis removed).

That makes the connection between the NPRM and the final preamble discussion too tenuous, MSCC claims. Id.

Moreover, MSCC argues, the final rule’s preamble discussion deviates too sharply from the proposal for interested parties to have been afforded an opportunity to comment on it. Id. at 6. Thus, MSCC claims EPA failed to serve the purposes of public notice, namely to ensure the regulation will be tested by exposure to diverse public comment, provide fairness to affected parties, and enhance the quality of judicial review. Id. Citing numerous instances in the NPRM discussing the proposed changes to monitoring as a means of assessing NAAQS compliance, and contrasting these instances in the final preamble discussing a hybrid modeling and monitoring approach, which MSCC conceded EPA discussed partly in response to comments claiming that the proposed monitoring approach “was not a desirable one,” MSCC argues that the basic difference between the two approaches reflects impermissible procedural error. Id. at 7–8. MSCC argues that in not having first discussed a hybrid approach in the proposal it is not clear whether EPA would have discussed it in the same way in the final preamble. Id. at 8–9.

5. TCEQ

TCEQ asserts that in the final SO₂ NAAQS EPA “determined that dispersion modeling would be required to determine attainment” with the NAAQS in designations and re-designations, without having provided for public comment “on the impact of this decision on the form of the NAAQS or on whether modeling is permissible under the CAA.” Id. at 3. Like the other petitioners, TCEQ claims that this means the objections to the discussion arose after the public comment period and are of central relevance to the outcome of the rule, triggering the duty to reconsider it.
under CAA section 307(d)(7)(B). Id. at 4–5. TCEQ also claims EPA has authority to reconsider the rule under APA section 557, even if CAA section 307(d)(7)(B) does not require reconsideration. Id. at 4. TCEQ claims that its three primary objections, (1) that the hybrid modeling-monitoring discussion results in an inappropriate form of the NAAQS, (2) that EPA’s “interpretation” does not adhere to the regulatory text of 40 CFR 50.17(b), and (3) that a hybrid approach would be a “divergence from CAA section 110(a)(1) and (2) attainment and maintenance requirements for all areas, whether designated as nonattainment or not,” are of central relevance to the “final SO2 rule and its eventual implementation by states.” Id. at 5.

TCEQ argues that EPA’s introduction of the use of modeling in SO2 NAAQS implementation in the final preamble, as opposed to the NPRM, led TCEQ to limits it comments on the “form” of the NAAQS without consideration of issues such as whether EPA’s existing modeling guidelines and procedures would apply regarding elements such as evaluation of background sources and the integration of predicted concentrations with monitoring data. Id. at 6. TCEQ asserts that difficulties with integrating modeling and monitoring data that it claims have arisen regarding other pollutants will apply to SO2, and that EPA gave “no reason for TCEQ to expect that EPA would adopt a form of the SO2 standard with similar problems, without an opportunity to comment.” Id. at 7.

TCEQ also argues that amendments to proposed regulatory text were made without proposal for comment, such as adding the phrase “at an ambient monitoring site” to the 40 CFR 50.17(b) and (c) and Appendix T section 1(a) provisions addressing monitoring. Id. at 9. TCEQ observes that the explanatory preamble language regarding these monitoring provisions’ amendments, in which EPA noted that “[t]his text does not restrict or otherwise address approaches which EPA or States may use to implement the new 1-hour NAAQS, which may include, for example, use of modeling” (see 75 FR at 35582), “was never proposed for comment,” and claims that it reflects an interpretation that conflicts with the regulatory text and is not within EPA’s discretion. Id. at 9–10. TCEQ claims it had no notice that the regulatory text could be so amended, nor that EPA “intended to interpret this rule language in a manner inconsistent with its plain meaning, and thus could not have commented on this issue during proposal.” Id. at 10.

TCEQ also claims that as a result of the final preamble discussion unclassifiable areas “will now be required to submit maintenance plans, to show maintenance and attainment of the NAAQS, containing elements that were not clearly discussed in the proposed rule.” Id. at 10–11. TCEQ asserts it “could not have foreseen that EPA would change its admitted historical interpretation of the maintenance requirement upon adoption of the final SO2 NAAQS, and thus could not have commented on this change.” Id. at 11. TCEQ also claims that EPA’s discussion of the use of modeling “could not have been anticipated by Texas or other stakeholders given that the use of modeling to determin[e] nonattainment areas was” in TCEQ’s view removed in the 1990 CAA Amendments. Id. at 12–13.

Consequently, TCEQ argues, the final rule is not a logical outgrowth of the NPRM, and is like a rule struck down in National Mining Ass’n v. Mine Safety and Health Admin., 116 F.3d 520, 531 (D.C. Cir. 1997), where the agency’s rule changed longstanding practice after issuing a proposal that would have left that aspect of the rules unchanged. MSCC at 13–14. TCEQ further argues that the SO2 NAAQS is analogous to the situation in Environmental Integrity Project v. EPA, 425 F.3d 992, 998 (D.C. Cir. 2005), stating that a logical outgrowth may not include an agency decision to repudiate its proposed interpretation and adopt its inverse. MSCC at 14.

6. North Dakota and South Dakota

ND and SD object to EPA’s not having publicly discussed “its intention to have states use modeling data over monitoring data” until the final preamble. ND and SD at 2. After presenting their substantive objections to EPA’s preamble discussion (id. at 2–7), ND and SD claim they did not have an opportunity to raise them during the comment period because the NPRM did not discuss the use of modeling, and that their objections are of central relevance to the final rule. Id. at 7. Thus, ND and SD argue, EPA must reconsider the final rule and provide an opportunity to comment, in order to cure the NPRM’s alleged failure to satisfy the CAA section 307(d)(3) requirement to provide an adequate opportunity to comment on the proposal. Id. at 7–8. ND and SD assert that the final rule departs too sharply from the proposal to satisfy the Small Refiner test for a logical outgrowth, and that EPA’s final rule preamble discussion cannot be supported as a response to comments received from the public. Id. at 8–9.

7. WVDEP

Although not submitted as a formal petition for reconsideration under CAA section 307(d)(7)(B), WVDEP communicated with EPA Region 3 by a letter entitled “Objection to Final SO2 NAAQS Rule [75 FR 35520; Docket No. EPA–HQ–OAR–2007–0352]” to raise objections very similar to those presented in the actual petitions. WVDEP claims that the “final rule contains a number of significant changes from the proposed rule, which warrant supplemental rule-making.” WVDEP at 1. Therefore, WVDEP urges EPA to “reconsider its intended approach,” and asserts that EPA “should conduct supplemental rule-making and offer proper opportunity for public review and comment of significant changes from the proposed rule.” Id. at 2.

8. ADEQ

Similarly, ADEQ did not submit its own formal petition for reconsideration under CAA section 307(d)(7)(B), but sent a letter to EPA in support of TCEQ’s and ND and SD’s petitions. ADEQ asserted EPA had failed to properly conduct notice and comment rulemaking “regarding a significant departure from the monitoring approach set forth in the proposed rule,” thus denying ADEQ the opportunity to comment.” ADEQ at 1.

B. Responses to the Claims and Arguments Raised by the Petitioners

EPA presents its responses to the petitioners’ procedural objections below in a collective format, rather than on a petitioner-by-petitioner basis, since the objections to a great extent are identical, incorporate other petitioners’ arguments, or repeat similar arguments. Where necessary and appropriate, EPA responds to specific claims raised by individual petitioners within our broader responses.

1. Petitioners Object to Agency Action Which Is Not Final

Petitioners’ claims, arguments and the information they submit do not undermine or lead us to change our scientific and other conclusions regarding what SO2 Primary NAAQS is requisite to protect public health with an adequate margin of safety, as determined under section 109 of the CAA. Nor do they change or undermine our conclusions regarding the promulgated requirements for an SO2 monitoring network centered on areas where there is an increased coincidence
of population and SO\textsubscript{2} emissions. The petitions do not change EPA’s final decisions regarding the need to revise the prior SO\textsubscript{2} Primary NAAQS, and those revisions should be. The petitioners’ arguments are not based on consideration of the body of scientific information that informed EPA’s final decisions in promulgating the revised SO\textsubscript{2} Primary NAAQS. In fact, petitioners’ arguments have nothing to do with EPA’s scientific conclusions, and provide no new information or basis for EPA to revisit those conclusions or the specific SO\textsubscript{2} Primary NAAQS that EPA promulgated.

Instead, petitioners’ arguments rely on an apparent assumption that EPA’s non-binding preamble discussion of anticipated approaches for separate future implementation actions constituted, itself, final agency action that governs those future actions now and imposes immediate binding requirements to implement the NAAQS in a certain way. Although petitioners do not demonstrate how EPA’s discussion has such final, binding and enforceable effect, their requests that EPA reconsider the final rule necessarily relies upon their implicit assumption that EPA has already taken final rulemaking action on the discussed implementation approaches. Only if EPA had taken such final action on the discussed approaches could there be an issue regarding whether EPA’s discussion was a “logical outgrowth” of the proposed rule, and whether it was of “central relevance” to the actually promulgated revised SO\textsubscript{2} Primary NAAQS.

Similarly, for EPA’s discussion to constitute a “procedural error,” it would first have to have been an actual “determination” that is a final action, but it is not. EPA plainly stated that the discussion represented non-binding guidance regarding future expected actions, that EPA’s anticipated approach could continue to evolve as further expected guidance is developed, and that EPA expected there to be circumstances in which the anticipated approaches may not apply. See 75 FR at 35552, n.22. In other words, regarding the implementation discussion, EPA has not yet taken a final action that could be presently “reconsidered” under CAA section 307(d)(7)(B). Instead, any interested party may raise its objections to EPA’s future use of an approach like that presented in the preamble discussion (should that ever occur) in a specific action that applies it, such as a designation action under CAA section 107(d)(1) or a SIP approval action under section 110.

As the preamble makes clear, EPA has not taken any final action or promulgated any regulatory requirements regarding either designations under CAA section 107(d) or SIPs under CAA section 110(a)(1), and, in particular, has taken no final action on its approach to making attainment determinations. To the contrary, the preamble specifically preserves EPA’s ability to make those decisions solely on the basis of monitoring data. See 75 FR at 35552, n.22. Nothing in the final promulgated rule prevents a State, for example, from basing its designation recommendation on monitoring data. EPA did not promulgate or revise any requirements regarding the use of modeling in the final SO\textsubscript{2} NAAQS. Because the preamble discussion regarding implementation is not final agency rulemaking action, it is not appropriate for reconsideration under CAA section 307(d)(7)(B).

In the preamble to the final rule, EPA explained that the Agency anticipated that in subsequent actions it would continue its historic practice of relying on both modeling and monitoring for determining whether an area is in attainment with the SO\textsubscript{2} NAAQS, and adopted rules for a smaller monitoring network than EPA initially proposed. See 75 FR at 35550–51. But the preamble makes clear that, except for the promulgated requirements relating to the scope of the monitoring network and the new Federal Reference Method, EPA is still developing its policy for such future actions as designations and SIP approvals, and intends to issue further guidance in the future through a notice-and-comment process. Id. And, as noted above, the preamble also states EPA’s expectation that any decisions about whether to base an attainment designation or determination on monitoring alone, without reliance on modeling, would similarly be made on a case-by-case basis through rulemaking. Id. at 35552 n.22.

The procedural objections boil down to a claim that the preamble of the final rule requires the use of air quality modeling for determining whether an area is in attainment with the revised SO\textsubscript{2} NAAQS, that this approach differs from the approach discussed in the preamble to the proposal, and that the public did not have an opportunity to comment on the approach discussed in the final rule. This claim lacks merit for two reasons.

First, in objecting to the implementation discussion in the preamble, petitioners do not challenge any provision of the promulgated regulations, but rather a discussion in the preamble, e.g., 75 FR at 35550–54. Although preamble discussions may in some situations constitute final agency action, it is clear that EPA’s particular discussions in the preamble to this final rule regarding designations and implementation do not. Rather, the discussions regarding the potential use of modeling are, at most, non-binding guidance. The preamble specifically states: “In many respects, both the overview discussion below and the subsequent more detailed discussions explain our expected and intended future action in implementing the 1-hour NAAQS—in other words, they constitute guidance, rather than final agency action—and it is possible that our approaches may continue to evolve as we, States, and other stakeholders proceed with actual implementation. In other respects, such as in the final regulatory provisions regarding the promulgated monitoring network, we are explaining EPA’s final conclusions regarding what is required by this rule. We expect to issue further guidance regarding implementation * * * EPA intends to solicit public comment prior to finalizing this guidance.” Id. at 35550.

Moreover, nowhere in the preamble (much less in any promulgated regulation) does EPA state that modeling must be used for designating areas as attainment, nonattainment or unclassifiable. Thus, the alleged requirement to which petitioners object does not exist. Rather, the preamble states: “We expect that EPA’s final area designation decisions in 2012 would be based principally on data reported from SO\textsubscript{2} monitors currently in place today, and any refined modeling the State chooses to conduct specifically for initial designations.” Id. at 35552. The preamble then goes on to say “EPA anticipates making the determination of when monitoring alone is ‘appropriate’ for a specific area on a case-by-case basis, informed by the area’s factual record, as part of the designation process.” Id. at 35552 n.22.

In short, EPA has simply not taken the final agency action alleged by petitioners, and there is no such rulemaking action for EPA to reconsider as part of the SO\textsubscript{2} NAAQS. To the contrary, the preamble states that EPA believes that its historic approach to SO\textsubscript{2} designations continues to appear to be appropriate, while at the same time giving States and other entities the flexibility to recommend the appropriate mix of data to rely on, including the possibility of relying entirely on monitoring if supportable. States and other parties will have opportunities to provide input on
designations and SIP actions before they are issued, see CAA section 107(d)(1)(ii), and those future actions, which would for the first time constitute final agency action regarding EPA’s anticipated approaches, should be where any claims that EPA may be inappropriately using modeling can and should be raised. See Pa. Dept. of Envt’l Prot. v. EPA, 429 F.3d 1125 (D.C. Cir. 2005). At this point, EPA’s non-binding preamble discussion regarding its anticipated approaches in designations and SIP actions is merely an announcement of general principles addressing EPA’s exercise of its discretion when taking those actions, and does not impose any requirements on States in those processes. See Catawba County v. EPA, 571 F.3d 20, 40 (D.C. Cir. 2009).

EPA therefore rejects the asserted notion that the non-binding preamble discussion is an “aspect” of the final promulgated NAAQS that must be established as a requirement through notice and comment rulemaking. EPA always treats implementation issues and establishment of NAAQS separately and independently, as required by the CAA and the Supreme Court’s ruling in Whitman v. American Trucking Ass’ns. In advance of taking subsequent designation actions and SIP actions, the CAA nowhere requires that EPA promulgate an approach to designations or general implementation, and EPA did not do so here as an “aspect” of the SO\textsubscript{2} Primary NAAQS in presenting its discussion of anticipated implementation approaches, apart from establishing reduced requirements related to the size of the monitoring network to which petitioners do not appear to object. EPA similarly rejects the argument that the non-binding preamble discussion had any kind of final impact on the promulgated NAAQS. Instead, it is clear from the regulatory text at 40 CFR 50.17 that the level of the NAAQS is simply expressed as 75 ppb measured in the ambient air as SO\textsubscript{2}, with a specified averaging time and form. The additional regulatory language in 40 CFR 50.17(b) and (c) and in Part 50 Appendix T addressing how attainment is shown via monitoring is specific to when monitoring is used. None of these provisions is affected in any way by the preamble’s discussion of the ability to also use modeling to assess SO\textsubscript{2} concentrations. See 75 FR at 35583; see also section IV.B below. These provisions are not currently affected by the non-binding guidance, and they would not have been affected if EPA had either presented its guidance discussion in the NPRM or had waited until a first designation or SIP action in which modeling were used, just as the prior SO\textsubscript{2} NAAQS, and related monitoring requirements, set forth in 40 CFR 50.4(a)-(d) and Part 50 Appendix A were never affected by EPA’s and States’ use of modeling to assess compliance with those standards over the last 30 years.

As mentioned before, many petitioners captioned their petitions initially as seeking a “clarification” that EPA intends to implement the NAAQS consistently with the promulgated regulatory text, and only in the alternative sought reconsideration and a new round of notice and comment proceedings if EPA instead intended to implement the NAAQS according to the preamble discussion. When those regulatory provisions in Part 50 addressing assessment of compliance with the NAAQS at an ambient monitoring site are applicable (i.e., when monitoring is being used), EPA expects that those provisions will be followed by States and by EPA. Additionally, since EPA’s actual use of implementation approaches resembling (or refining or departing from) those discussed in the final rule preamble will be taken in future actions to which interested parties may provide comments, criticisms, or objections, EPA will (and must) consider that input before taking final actions. But because the non-binding preamble discussion of anticipated approaches does not reflect final action, EPA disagrees that those provisions will be followed by States and by EPA. EPA’s implementation discussion does not suffice. To justify reconsideration, a petitioner has to show why the promulgated NAAQS are erroneous for some aspect of the final NAAQS itself in complaining about the added burden they claim modeling would impose on States and pollution sources. In fact, issues regarding future implementation are legally irrelevant to the setting of the NAAQS. And, again, in no respect does the preamble discussion of modeling as an implementation tool affect either the promulgated NAAQS in 40 CFR 50.17 or the provisions addressing when monitoring is used to assess compliance. Consequently, we reject petitioners’ assertions that the non-binding preamble discussion of the possible future implementation approaches is “of central relevance” to the promulgation of the SO\textsubscript{2} Primary NAAQS or to the monitoring network design requirements, and we therefore conclude that reconsideration of the rule in light of that discussion is not warranted.

An objection is of central relevance if it provides substantial support for the argument that the underlying promulgated decisions, in this case the NAAQS set forth in 40 CFR 50.17 and requirements addressing network design requirements for monitoring, should be revised. None of the petitioners’ arguments summarized above provide substantial support for such a claim. Even in opposing the use of modeling may be difficult, if attempted, and in their characterizations of the NAAQS as an allegedly “probabilistic” standard and of modeling as a “deterministic” tool, they present no information indicating that the scientific conclusion of what NAAQS is requisite to protect public health with an adequate margin of safety is erroneous. Nor do they explain how the regulatory provisions in Part 58 are erroneous for the purpose of network design. A petition for reconsideration cannot merely object to a non-binding guidance discussion and claim that is sufficient to require initiation of the reconsideration of related, but not affected, promulgated regulations. Allegations that such a discussion is of central relevance will not suffice. To justify reconsideration, a petitioner has to show why the objectionable guidance discussion demonstrates that the Agency’s underlying decision on the promulgated NAAQS should be changed.

Petitioners have not met this burden. The core defect in petitioners’ arguments is that they do not address the scientific evidence regarding the NAAQS, and do not address the policy or technical rationale supporting EPA’s promulgated revisions to the network design monitoring requirements. TCEQ’s and others’ claims that the guidance discussion conflicts with the
“form” of the NAAQS are misplaced. The form of the NAAQS defines the air quality statistic that is to be compared to the level of the standard in determining whether an area attains the standard. See 75 FR 6474, 6479 n. 5 (Feb. 9, 2010). For the revised primary SO\textsubscript{2} NAAQS, the form is the three year average of the 99th percentile of the daily maximum 1-hour average concentrations of SO\textsubscript{2}. EPA justified in detail its decision to revise the previous expected exceedance-based form with a percentile-based form, as well as its choice of using the 99th percentile of the air quality distribution. 75 FR at 35539–41. Air quality distributions can, of course, be generated by modeling tools or by monitoring. See REA section 8.4 where EPA generated one-hour SO\textsubscript{2} air quality distributions in the exposure analysis. In any case, all such questions are fact-dependent and await specific circumstances for resolution. Indeed, if EPA had first presented its non-binding discussion on implementation in the NPRM, and had said no more on this subject in the final rulemaking notice, it would not have failed to promulgate any required regulatory “aspect” of the NAAQS itself, and such placement of the discussion in the NPRM would not have made it of any more central relevance to the separate scientific decision of whether the NAAQS should be revised and how, or to the reasonableness of the limited promulgated requirements relating to minimum size of a monitoring network.

Although implementation guidance discussions may be of central relevance to future actions that employ approaches discussed therein, they are not so regarding final promulgated NAAQS that are required to be based on entirely different criteria—and may not be based on cost of implementation considerations at all—where the rulemaking does not actually promulgate implementation requirements. Thus, the implementation discussions to which petitioners object could not lawfully be of central relevance to the promulgated SO\textsubscript{2} Primary NAAQS. See Whitman v. American Trucking Associations, 531 U.S. 471, 475–76.

3. EPA’s Implementation Discussions Were Logical Outgrowths of the Proposed Rule

Even if the preamble’s non-binding implementation discussion could be both “final action” and “of central relevance” to the outcome of the promulgated NAAQS decision, we consider the discussion to be a “logical outgrowth” of the proposal. The CAA does not require us to have presented the discussion in the NPRM before we could further address the expected implementation approaches in the final rule’s preamble or in other guidance documents. The NPRM contained initial discussions of how the proposed revised NAAQS might be implemented, and therefore the general issues and related specific issues regarding implementation were squarely opened up for public comment. Although the NPRM did not specifically address this fact, it has long been EPA’s practice in implementing the prior SO\textsubscript{2} Primary NAAQS to rely upon both modeling and monitoring to determine whether areas have attained the NAAQS. See, e.g., EPA’s February 1994 SO\textsubscript{2} Guideline Document (available at http://www.epa.gov/ttn/oarpg/t1/memoranda/SO2_guide_092109.pdf) at 2–5 (“For SO\textsubscript{2} attainment demonstrations, monitoring data alone will generally not be adequate.”) and at 2–1 (“Attainment determinations for SO\textsubscript{2} will generally not rely on ambient monitoring data alone, but instead will be supported by an acceptable modeling analysis which quantifies that the SIP strategy is sound and that enforceable emission limits are responsible for attainment.”). The NPRM was published with this history of prior SO\textsubscript{2} NAAQS implementation, and there was no reason for any interested party to have assumed that over 30 years’ worth of prior implementation actions might not have some bearing on the way a revised NAAQS might be implemented.

To the extent the NPRM, in not explicitly discussing that prior history, was interpreted by interested parties to announce a proposed change to that longstanding practice, the rulemaking process inherently leaves open the possibility that an agency will choose not to adopt any proposed change. Therefore, interested parties could have foreseen that EPA might not, in fact, make any such change but instead discuss our expectation to continue our past practice, and they had ample opportunity to comment on that possibility or ask directly whether EPA intended to follow it. In such circumstances, affected parties can be expected to be aware that not adopting a change reflecting a departure from the Agency’s prior practice is a possibility. See American Iron & Steel Inst. v. EPA, 886 F.2d 390, 400 (D.C. Cir. 1989) (“One logical outgrowth of a proposal is surely, as EPA says, to refrain from taking the proposed step.”).

In fact, some interested parties did comment on the related issue of the burden of relying on monitoring, and suggested that EPA instead use modeling to relieve that administrative burden. See 75 FR at 35551. Moreover, ASARCO notes that it and others commented on their view that modeling is overly conservative, when used to assess compliance. Partly in response to comments, EPA explained its anticipated approaches of continuing to rely upon both modeling and monitoring, and made clear that except for the promulgated provisions relating to the scope of the monitoring network and associated requirements, the Agency was still developing its policy for future actions such as area designations and determinations of NAAQS attainment, and would decide whether to base such actions on modeling or monitoring on a case-by-case basis through rulemaking. It cannot credibly be asserted that EPA’s mind does not remain open to other views following these explanations.

Petitioners’ arguments that providing an opportunity for public comment on future guidance documents would not cure EPA’s alleged procedural defect in the final preamble discussion ignore the fact that such an opportunity necessarily will be provided in subsequent regulatory actions issuing designations and acting in response to SIP submissions. While the CAA does not require that EPA provide an opportunity for public comment on designations, States initiate the process and present their own views to EPA in submitting designations recommendations, and EPA’s responses to those recommendations must be well-reasoned and are judicially reviewable. Further, EPA has recently elected to provide a brief public comment period on designations as well. SIP actions undergo public notice and comment in two stages, once at the state level and again at the federal approval/disapproval stage.

Thus, while EPA disagrees with the petitioners’ view that the non-binding preamble discussion on future implementation represents final agency action of central relevance to the NAAQS decision, even if the final rule’s guidance discussion were to have final effect, EPA committed no procedural error in presenting this discussion in the final rule’s preamble, and reconsideration is not warranted. This is true particularly as further administrative process in which objections can be raised before binding actions are taken will be provided before any of EPA’s discussion has a direct and binding effect in any specific case, which will be based on the relevant facts of its own situation, which even EPA’s allegedly “adopted” guidance explicitly provides.
4. EPA Is Not Required To Promulgate Regulatory Requirements Regarding NAAQS Implementation and May Discuss Implementation Issues Through Non-Binding Guidance

As explained above in our explanation for why petitioners’ objections are not of central relevance to the outcome of the revised NAAQS, EPA disagrees with petitioners’ assertions that the Agency is required under the CAA to promulgate, as regulatory provisions, requirements addressing future implementation of the NAAQS of the type petitioners demand. Nothing in CAA sections 107(d), 110 or 192, or anywhere else in the CAA requires this. The prior SO2 Primary NAAQS rulemaking did not contain such regulatory requirements on implementation, while EPA has provided numerous guidance documents for implementing the prior SO2 NAAQS that address issues such as the use of modeling. See, e.g., SO2 Guideline Document, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, EPA–452/R–94–008, Feb. 1994. Moreover, EPA does not assume that petitioners thought that the proposed monitoring network of less than 400 monitors would have generated data from the nationwide inventory of significant sources of SO2. Petitioners never commented that EPA should have proposed additional measurement requirements to cover situations in which monitors would have been unusable to predict future source emissions, or were simply non-existent in an area that sought designation as attainment or non-attainment and was in search of some kind of supporting factual record. Consequently, we disagree with petitioners’ claims that it is now improper to continue to address implementation issues in non-binding guidance such as that which EPA has frequently issued regarding SO2 NAAQS implementation and which EPA presented in the preamble. Although we stress that the preamble’s inclusion of such guidance and statements regarding the intent to issue further guidance do not warrant reconsideration of the final rule, we also note that the continued development of guidance necessarily represents a continuing evaluation and “reconsideration” of the issues addressed therein, and we fully expect to continue to evaluate implementation issues as we proceed to develop such guidance and take implementing actions. In sum, EPA denies petitioners’ procedural claims because EPA was not required to issue initial guidance through use of notice and comment rulemaking.

IV. Statutory and Regulatory Issues

A. Summary of Petitioners’ Arguments

In addition to their procedural objections, the petitioners raise several objections based on their views that EPA’s implementation discussion provided in the final rule preamble conflicts with applicable statutory and regulatory provisions. At the outset, EPA regards it as impossible for our non-binding guidance to have an effective “conflict” with the CAA or our regulations, as it is not final and imposes no independent requirements. Thus, we respond to petitioners’ arguments conditionally, while reserving the right to reach different final conclusions than are reflected in our preliminary, non-final responses provided here if petitioners were to raise these and other objections in the context of future final actions such as designations or SIP approvals/disapprovals.

1. Consistency With “Cooperative Federalism” of CAA

Several petitioners raise a broad philosophical objection to EPA’s non-binding implementation discussion, namely that it is allegedly in conflict with the scheme of “cooperative federalism” of the CAA under which States are to be given the first opportunity, before EPA, to make judgments regarding how pollution sources should be controlled in order to attain the NAAQS. UARG asserts that the discussed anticipated modeling approach “usurps the role that States are to play when making [section] 107(d) designations and thus is inconsistent with [c]ongressional intent.” UARG at 18. In the 1977 Amendments to the CAA that added section 107, UARG claims, States were “the basic units from which pollution control decisions, plans, administration, and enforcement would follow. On the other hand, the federal government’s role was merely to provide guidance and set national standards.” Id. at 25, citing H.R. Rep. No. 95–294, at 289 (1977). EPA then claims that Congress “granted States the power to make initial designations of areas within State borders.” Id. In support of this claim, UARG cites the legislative history of differing versions of the bills addressing designations in the 1990 CAA Amendments, and claims that the House Report shows the bill “was amended to leave the States’ power intact.” Id. at 26. UARG then claims that case law supports the view that States are given deference in determining whether areas are designated as attainment, nonattainment or unclassifiable. Id., citing Pa. Dept. of Envtl Prot. v. EPA, 429 F.3d 1125, 1129 (D.C. Cir. 2005). UARG asserts that EPA’s final rule “directs States to submit [section] 107(d) attainment/nonattainment designation recommendations by June 2, 2011,” and that if States “must use modeling” that “EPA now appears to require,” they will not be able to do so due to EPA’s not yet having provided additional guidance. Id. at 26–27. “This essentially deprives States of their powers to make their [section] 107(d) designation recommendations by the compliance deadline,” and “will limit the ability of States to use their sound judgment in making designation recommendations and developing maintenance SIPs,” UARG claims. Id. at 27.

ASARCO endorses UARG’s claims, and adds that “EPA appears to be usurping the role of the State in an effort to impose more stringent controls on sources than may be necessary because of overly conservative modeling results even where monitoring may show no exceedances of the revised NAAQS.” ASARCO at 10. TCEQ less explicitly raises this objection, but argues in several places that states such as Texas have primary responsibility in implementing the NAAQS and have been left in “an untenable position” of having to make designation recommendations before EPA provides further modeling guidance. TCEQ at 2–3, 15. North Dakota and South Dakota echo these points, arguing that EPA’s guidance discussion “limits the role that Congress intended States to play in the ambient standard implementation process, and it limits the discretion that States [are] to have in choosing the appropriate tools for making determinations of whether or not areas within their jurisdiction are attaining” the NAAQS. ND and SD at 4. They explain that they currently use monitors to measure ambient pollution levels, and that models can be difficult and time-consuming to use and are allegedly less accurate, predicting higher pollution levels than monitors detect. Id. at 5. As EPA has not yet provided additional specific guidance on how to use modeling for the new NAAQS, States will not be able to undertake the designations recommendation work that EPA “is insisting” they perform. Id. This deprives states of their authority under section 107(d), North Dakota and South Dakota assert, and is compounded by EPA’s discussion that “requires the use of conservative modeling” in section 110(a)(1) SIPs that would be due from
unclassifiable areas, if States choose to not perform modeling in time for initial designations. *Id.* at 6.

2. Consistency With CAA Section 107(d) Designation Requirements

UARG disputes EPA’s preamble explanation that it has previously employed modeling in making designations under CAA section 107. UARG at 6–9, 19. UARG states that the examples of prior actions cited in EPA’s discussion cites, instead, addressed situations where EPA has decided to not change a designation of nonattainment because modeling showed violations where monitoring did not, or addressed instances where EPA issued a SIP call for an attainment area based on modeled violations. *Id.* at 19–20. Although States sometimes choose to use modeling, UARG claims EPA has “never before required States to conduct modeling data to make their initial attainment designations.” *Id.* at 20. UARG then asserts that EPA’s prior guidance reflects a preference for monitoring over modeling, including when there is a conflict between the two, and that in the context of other NAAQS EPA has clearly favored monitoring. *Id.* at 20–21, n. 38.

NEDA/CAP, without further analysis regarding section 107(d), claims that EPA’s discussion “is a significant departure from prior procedures for designating areas and re-designating unclassifiable areas.” NEDA/CAP at 5. ASARCO objects that EPA has not explained how “its modeling proposal will meet” the requirements of CAA section 107(d), that an area show it has attained the NAAQS based on permanent and enforceable reductions in emissions. ASARCO at 11. North Dakota and South Dakota’s federalism objections also reflect their arguments that EPA’s guidance is inconsistent with CAA section 107, which they interpret as giving States the ability to use their sound judgment, as opposed to EPA’s, in making designation recommendations. ND and SD at 4–5. They claim monitoring is preferable to modeling to implement section 107(d), more accurate, and will avoid overestimating SO2 concentrations that result in nonattainment designations triggering the requirement for pollution controls to solve “problems that do not exist in the real world.” *Id.* at 5–6. For example, use of modeling to designate areas under section 107 might result in electric utility plants being forced to control their SO2 pollution with “potentially unfeasible emission control requirements” that cause electricity rates to increase substantially. *Id.* at 6.

4. Consistency With CAA Section 171(2) Definition of “Nonattainment Area”

Two petitioners attempt to buttress their objections with claims that EPA’s guidance discussion conflicts with how Congress revised the statutory definition of “nonattainment area” in the 1990 CAA Amendments to section 171(2). NEDA/CAP asserts that “Congress repealed the language from Section 171(2) which allowed states to use either modeling or monitoring for its attainment designation.” NEDA/CAP at 5. Prior to 1990, NEDA/CAP observes, section 171(2) defined “nonattainment area” as one “which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the Administrator to be reliable) to exceed any [NAAQS].” *Id.* But in 1990 Congress deleted references to the type of data used to identify NAAQS nonattainment, which NEDA/CAP claims means that it is “arbitrary and capricious for EPA to rely entirely on modeling to determine whether an area is meeting the NAAQS.” *Id.* It argues that the Senate Committee’s report supports this view, in stating that “EPA may rely for these designations on sound data that is available, preferably air quality monitoring data, but in some cases where appropriate and necessary, the [EPA] may rely on modeling or on statistical extrapolation from monitored concentrations of another pollutant.” S. Rep. No. 101–228, at 15 (1989). TCEQ endorses this reading as a “clear direction by Congress that modeling is not to be used to determine nonattainment areas for a NAAQS pollutant,” as part of its argument that “there is no possible way the public could have foreseen that EPA would ‘require modeling for compliance and implementation.’” TCEQ at 12–13.

5. Consistency With SO2 Primary NAAQS Regulatory Text

All petitioners except MSCC argue that EPA’s guidance discussion conflicts with the promulgated regulatory text of the NAAQS. UARG argues that the promulgated regulatory text of the final rule “nearly mirrors the language” of the proposed rule regarding the use of monitoring to measure SO2 concentrations, but the preamble’s guidance discussion suggests EPA “intends to require the use of air quality modeling analyses.” UARG at 1, 14–15. UARG notes that the regulation does not require States to use modeling for section 107(d) designations or for section 110(a)(1) SIPs. *Id.* at 16. “Given the difference between the preamble discussion and the actual regulatory
language," UARG asks that EPA clarify that the regulatory language reflects how EPA intends the NAAQS to be implemented. Id.

NEDA/CAP contrasts the regulatory text of 40 CFR 50.17(b) and of Appendix T, which apply to situations where monitoring is used, to EPA’s guidance discussing regarding modeling, echoing UARG’s view that the final regulation “nearly mirrors” the proposed regulatory text. NEDA/CAP at 2–3. NEDA/CAP asserts that “the rule is therefore internally inconsistent and confusing,” and similarly requests that EPA clarify that the NAAQS will be implemented according to the regulatory text. Id. at 3.

ASARCO argues that the revised regulatory text, like the prior SO₂ NAAQS’ text at 40 CFR 50.4, refer to attainment for SO₂ based on measuring ambient air concentrations through monitoring. ASARCO at 4. ASARCO then endorses UARG’s view that the preamble discussion is inconsistent with “the plain language of the Final Rule.” Id. at 10, n. 12. TCEQ contrasts the regulatory text not just with the general preamble guidance discussion but also with specific preamble language addressing the relationship of the regulatory text applicable to monitoring situations to other possible methods for assessing SO₂ levels. TCEQ at 5, 9–10. TCEQ asserts that EPA’s statement recognizing that the monitoring-specific language does not speak to other measurement approaches “commits EPA to interpret [its] adopted rule language in a way that inherently conflicts with the plain language of the rule,” which TCEQ says the Agency may not do. Id. at 9–10.

TCEQ claims EPA undertook this “change in its interpretation” without notice and comment procedures in contravention of Paralyzed Veterans of America, et al., v. D.C. Arena L.P., 117 F.3d 579, 586 (D.C. Cir. 1997), and that EPA’s “error is compounded by the fact that EPA interprets the rule language as permissive, while stating elsewhere in the Final Rule that monitoring data demonstrating attainment will not be deemed adequate” absent confirming modeling data. Id. at 10, n. 37.

North Dakota and South Dakota also claim the guidance discussion is inconsistent with the regulatory provisions, and ask EPA to clarify how it intends States to implement the NAAQS. ND and SD at 2–3, 4, 7. Like the other petitioners, they focus on the regulatory text that specifically addresses situations in which monitors are required to be used. Id. at 4. ADEQ endorses North Dakota’s and South Dakota’s position. ADEQ at 1. WVDEP takes a different approach from other petitioners, characterizing the final regulatory text of 40 CFR 50.17(b) as a “substantive alteration” that “implies that monitored air quality data cannot represent, for regulatory purposes, an area larger than the site boundaries,” which WVDEP calls a “fundamental, disturbing change from past practice.” WVDEP at 1.

B. Responses to the Petitioners’ Statutory and Regulatory Arguments

As stated earlier, EPA regards it as impossible for our non-binding preamble guidance to have an effective “conflict” with the CAA or our regulations, as it is not final and imposes no independent requirements. Only in subsequent designations actions under section 107 or in SIP actions under sections 110 or 192 would the objections petitioners raise relate to final actions that could theoretically represent the “conflicts” that petitioners allege. Thus, we respond to petitioners’ arguments conditionally, while reserving the right to reach different final conclusions than are reflected in our preliminary, non-final responses provided here, if petitioners were to raise these and other objections in the context of future final actions such as designations or SIP approvals.

Regarding the claimed conflict with federalism principles underlying the CAA that place primary responsibility for implementation on States and restrict EPA’s roles, EPA has taken no action that can be characterized as encroaching in States’ roles in future implementation. As EPA explained in the preamble, decisions on what data should be used to support individual designations or SIP actions will be made on case-by-case bases and through future rulemaking, and States are not restricted by our non-binding guidance from recommending designations based on monitoring, modeling, or a combination. We have, however, as we commonly do in advance of designations under revised NAAQS, provided guidance regarding what we currently expect would provide the most accurate data to support those actions, and we expect to provide further guidance. Even the petitioners, in their objections, concede that providing guidance for stakeholders to subsequently use is an appropriate role for EPA. It is difficult to understand how this can result in EPA having presently usurped States’ roles in future implementation. Moreover, EPA notes that although it is true that States have the initial role of recommending designations for CAA section 107(d) and in developing and submitting for approval SIPs under sections 110 and 192 to show implementation, attainment, maintenance and enforcement of the SO₂ NAAQS, EPA has the ultimate responsibility to make final decisions in these actions, whether or not States even fulfill their own initial roles. See, e.g., CAA sections 107(d)(1)(B)(ii), 107(d)(3)(E), and 110(c)(1)(A)–(B). Moreover, as the DC Circuit explained in response to similar arguments that EPA guidance in the designations process “impermissibly encroaches on states’ statutory prerogative to have a first-say on area designations within their borders,” although EPA indeed must wait its turn following the period for States to recommend designations before EPA makes any individual designations, “nothing in section 107(d)(1) prevents EPA from developing general principles to govern its exercise of discretion when the time comes, or from announcing those general principles before the states submit their initial designations. To the extent petitioners think that EPA owes the states a measure of substantive deference under section 107(d)(1) (* * *) we disagree. Though EPA may, of course, go along with states’ initial designations, it has no obligation to give any quantum of deference to a designation that it ‘seems necessary’ to change.” Catawba County v. EPA, 571 F.3d at 40 (emphasis in original).

Similarly, EPA does not agree that its guidance discussion can presently pose a “conflict” with either the terms of CAA section 107 or the Agency’s past practice in issuing designations and re-designations, as petitioners assert. EPA has not yet taken any designation action that arguably “departs” from our past practice, and as petitioners concede, the final regulation itself does not impose a binding requirement that States conduct modeling in the manner to which petitioners object. EPA observes, however, that the Agency has previously extensively used modeling to support designation and re-designation decisions for the SO₂ primary NAAQS, as explained in the preamble, and that our long-standing guidance supports this approach for SO₂ NAAQS, particularly in the absence of monitoring data. See, e.g., Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, to Regional Office Air Division Directors, “Redesignation of Sulfur Dioxide Nonattainment Areas in the Absence of Monitored Data,” Oct. 18, 2000; Memorandum from Sheldon Meyers, OAQPS Director, “Section 107 Designation Policy Summary,” April 21, 1983. [Available at: http://www.epa.gov/ttn/naaqs/so2/so2_tech_res.html].
EPA does not agree that the preamble discussion of the possible approach of implementing CAA section 110(a)(1) actually imposes a requirement to demonstrate attainment with the revised NAAQS on a specific schedule as a consequence of the final rule. As petitioners observe, we have not promulgated such a requirement, and the application of this approach in a future section 110(a)(1) SIP approval or disapproval action would be the first instance in which EPA could allegedly act in conflict either with the applicable provision of section 110(a)(1) itself or with our prior practice regarding this provision for SO2 or any other NAAQS pollutant. If any interested party objects to such an approach that EPA might propose in such a future action, EPA will respond to that objection. In the meantime, we note that section 110(a)(1) is fairly straightforward in providing that following revision of a NAAQS States are to adopt and submit SIPs that “provide[] for implementation, maintenance, and enforcement” of the NAAQS, and EPA is required on a case-by-case basis to take action under CAA section 110(k)(3) to approve or disapprove such a SIP based on whether it meets the applicable requirements of the Act. EPA has not yet “significantly changed” how this statutory requirement applies.

As for the argument that the 1990 CAA amendment to section 171(2)’s definition of “nonattainment area” forces a conflict with the EPA’s preamble discussion, again, EPA does not consider it possible for non-binding guidance to create such a conflict. Petitioners should present this argument, if at all, in the context of an actual implementation action that could theoretically cause such a conflict. Moreover, petitioners’ argument appears to make the remarkable claim that because the amended section 171(2) definition removed explicit reference to both monitoring and modeling, it somehow follows that EPA may use the former type of non-referenced data to support nonattainment designations but may not use the latter. It is not clear how the statutory text can compel this result, and the legislative history cited by petitioners appears to endorse the use of both monitoring and modeling, as necessary and appropriate, on a case-by-case basis. Clearly, the opportunity to endorse or object to the use of either monitoring or modeling (or some combination) will be available in future implementation actions, but it is not apparent that Congress issued an absolute prohibition on the use of modeling that EPA’s guidance in advance of such an action could violate.

In response to the arguments that the preamble guidance conflicts with the promulgated regulatory text of the final rule, again EPA points out that there can be no such effective conflict between promulgated final action (the regulations) and non-binding guidance discussions that address how EPA may act in future. The final regulatory text is binding, as are the final preamble explanations of how that specific regulatory text must be implemented, but the rest of EPA’s implementation discussion is not.

In any case, EPA addressed the relationship of the regulatory provisions in section 50.17 (b) referring to “at an ambient monitoring site” and similar provisions in Part 50 Appendix T related to when the primary NAAQS for SO2 “are met at an ambient air quality monitoring site” and the non-binding guidance elsewhere in the preamble relating to potential implementation strategies. EPA noted that the references to monitoring in the rule “makes clear that the regulatory text refers to situations where compliance with a NAAQS is measured by means of monitoring. This text does not restrict or otherwise address approaches which EPA or States may use to implement the new 1-hour NAAQS, which may include, for example, use of modeling.” 75 FR at 33582. There consequently is no such conflict as petitioners allege, even if EPA’s implementation discussions were other than non-binding initial guidance. Thus, where monitoring is used, sections 50.17 and the corresponding provisions in Part 50 Appendix T are to be followed. But where on case-by-case bases additional tools are used to accurately assess SO2 concentrations, such as where monitoring would not yield reliable data of the maximum 1-hour daily concentrations in an area or location, it is clear that States and EPA may make use of those tools separate from the regulatory provisions governing monitoring’s use to evaluate whether the ambient air quality exceeds the NAAQS for SO2 as defined by the specified level, averaging time, and form. Nothing in the Act prohibits this approach. See, e.g., CAA sections 107(d)(3) (any “air quality data” may be used for redesignations); 110(a)(1) (does not address the issue of the types of data States may use in devising plans for implementation, maintenance, and enforcement of a primary NAAQS); 192(a) (does not specify the types of data that must support a demonstration that a non-attainment area has attained a NAAQS). Again, only in those possible future actions would it be possible to evaluate whether the State’s or EPA’s implementation actually then “conflicts” with the regulatory text.

Finally, it must be repeated that whether monitoring or modeling is used in assessing compliance with the NAAQS, all elements of the NAAQS must be satisfied so that the ultimate determination remains identical: whether the three-year average of the 99th percentile of daily maximum 1-hour average concentrations of SO2 exceed 75 ppb. The preamble discussion of implementation approaches is consistent with, and does not affect, this requirement.

V. Impact on Final Standard Issue

A. Petitioners’ Arguments

Several petitioners claim that EPA’s guidance discussion has a present impact on the promulgated NAAQS, either to make it more stringent, of the wrong “form,” or impossible to measure compliance with. UARG asserts that the guidance “has the effect of making the new standard more stringent than the lower end of the range of the standard in the Proposed SO2 Rule because of the conservatism of modeling analyses.” UARG at 18. Later, however, UARG states that “the new 1-hour standard for SO2 could effectively become more stringent than the lower end of the 50 to 100 ppb range that was proposed for comment based on studies that relied on monitored SO2 levels.” Id. at 28 (emphasis added). “EPA’s recommended approaches for modeling of sources of SO2—including EPA’s insistence on the use of peak emission rates for all modeled sources—will in all likelihood substantially over-predict concentrations of SO2 thereby possibly falsely indicating violations of the new 1-hour SO2 NAAQS.” Id. at 28–29 (emphasis added). UARG continues that “[m]odeled predictions of source impacts will also likely be unrealistically high because of the approaches that are being used to determine the regional background values that should be added to predicted source impacts. [* * *] Although EPA does not require States to use this approach, the Agency’s failure to have in place rules that suggest better options make[s] it likely that States could continue their current practice.” Id. at 29 (emphasis added). “In short,” UARG argues, “because models routinely over-predict short-term concentrations of SO2, the use of modeling to assess compliance with the new SO2 standard could have the effect of making the new SO2 standard—as implemented—more stringent than 75 ppb and, indeed,
could effectively make the standard more stringent than even the lower end of the 50 to 100 ppb range that EPA” proposed. Id. (emphasis added).

ASARCO cites Appalachian Power Co. v. EPA, 208 F.3d at 1027, and Donner Hanna Coke Corp., 464 F. Supp. At 1304, for the proposition that the method of determining compliance can affect the stringency of the standard or the level of performance needed to meet the standard. ASARCO at 11. ASARCO notes that it commented on the proposed rule to claim that current modeling is conservative and that there is a discrepancy between modeling and monitoring data. Id. “How attainment must be demonstrated similarly can affect the stringency of the standard and the requirements that may be imposed on sources within the area,” ASARCO asserts. Id. (emphasis added).

TCEQ, with the endorsement of ADEQ (see ADEQ at 2), makes a different kind of argument, alleging that EPA’s guidance discussion lacks an explanation for why dispersion modeling is an appropriate comparison or ‘fit’ for the form of the standard,” and that EPA’s actual promulgation of 40 CFR 50.17(b) governing compliance shown by monitoring is itself arbitrary and capricious. TCEQ at 3. The guidance results in “an inappropriate form of the standard,” TCEQ claims, which it asserts is “probabilistic as opposed to “deterministic,” which it considers EPA’s generally preferred modeling method to be. Id. at 5–9.

TCEQ states that in the REA, EPA developed a statistical model to determine 5-minute peak SO₂ concentrations and concluded that at a given level of SO₂, a 99th percentile form of a 1-hour standard is effective at limiting 5-minute peak SO₂ concentrations. Id. at 5–6. TCEQ characterizes the form of the final NAAQS as “the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations,” as set forth in 40 CFR 50.17(b) applicable to situations in which monitoring is used. Id. at 6. TCEQ states that following the proposed SO₂ NAAQS, EPA issued guidance regarding implementation of the PM2.5 and NO₂ NAAQS which indicates there is difficulty integrating modeling and monitoring data, which “would also be true for the SO₂ standard.” Id. at 6–7. TCEQ complains that EPA has, like for PM2.5 and NO₂, adopted a “form” of the SO₂ NAAQS for which the Agency has not yet explained how to translate the modeling results into a form appropriate for comparison with the new standard. Id. at 7. TCEQ asserts EPA must refine modeling procedures to “realistically address the frequency of peak short-term impacts in order to appropriately implement the new 1-hour SO₂ NAAQS,” and that the “joint frequency of worst-case cumulative emissions and adverse dispersion conditions become more important for probabilistic ambient standards.” Id.

EPA’s preferred model for SO₂ implementation, “AERMOD,” instead, is a “deterministic” model that provides point estimates based on a worst-case set of input parameters that TCEQ argues is not appropriate for probabilistic standards. Id. at 7–8. Use of peak emissions for all sources on a continuous basis will lead to overestimates of the frequency of peak total impacts, TCEQ claims, while a model should instead consider the use of a frequency distribution of emissions for the sources being considered in order to “match” the adopted form of the standard. Id. at 8. TCEQ recognizes that EPA allows States to propose to use other models than AERMOD, but complains that EPA “requires an arduous demonstration before [it] will approve the use of other models.” Id. TCEQ claims that EPA’s preferred air dispersion models have not been developed to predict short-term locations of maximum concentration or account for a probabilistic standard. Id. TCEQ claims that where the probability of simultaneous occurrence of peak emissions and worst-case meteorology is low, standard modeling will exaggerate ambient concentrations, particularly where sources do not operate continuously, as “clearly conservative modeled projections inappropriate for use in designations.” Id. at 8–9.

B. EPA’s Response

First, as UARG’s arguments suggest by their own terms, and as we have explained regarding the other procedural and substantive objections petitioners raise, the claims that EPA’s discussion has an impact on the promulgated standard ignore the fact that the guidance is not final binding action that has any immediate and direct effect on anything. As UARG appears to recognize, future implementation actions using EPA’s “recommended” approaches which EPA “does not require” “could” have an impact by “possibly” or “likely” resulting in States using modeling in a way to “likely” overestimate SO₂ emissions only if, in fact all of that actually occurs, which it may not. Thus, UARG’s claim as presented necessarily concludes any arguable impact on NAAQS compliance of the guidance discussion is speculative at this point.

There is no reason to accept this result as inevitable, and if, in a given case (such as PSD permitting), UARG believes that a particular modeling method is over-predicting SO₂ emissions in a manner that is not representative of a source’s potential to cause or contribute to a NAAQS exceedance, it will in that future action be able to object based on the facts then presented. But here there are no such facts to dispute, and it is therefore not possible for the guidance itself, as expressed in EPA’s preamble, to have any impact on the NAAQS.

Likewise, ASARCO’s objection raises an issue that does not presently exist, as the final rule does not in fact provide that modeling “must” be used to demonstrate attainment, but instead leaves for future actions the decision whether in specific cases monitoring or modeling or some combination of the two will best measure ambient SO₂ concentrations. If EPA were to determine in a given action that the monitoring data were not sufficient to determine an area’s attainment status, and thus that the area would have to be categorized as unclassifiable until sufficient monitoring data or modeling results were available, that designation would be the result of the insufficiencies in the data, not of anything that EPA has done in the final rule or discussed in the preamble guidance. Although it might seem to petitioners that monitoring, where actually conducted, should be inherently more accurate than modeling, this is not necessarily the case with respect to SO₂. In fact, “[i]n the past, EPA used a combination of modeling and monitoring for SO₂ during permitting, designations and re-designations in recognition of the fact that a single monitoring site is generally not adequate to fully characterize ambient concentrations, including the maximum ground level concentrations, which exist around stationary SO₂ sources.” 75 FR at 35599. This is especially important because “[t]he 1-hour NAAQS is intended to provide protection against short-term (5 minute to 24 hour) peak exposures.” Id. See American Lung Ass’n v. EPA, 134 F. 3d at 392–93 (remanding EPA’s determination that such exposures to SO₂ do not constitute a threat to public health) and 75 FR at 35536 (5–10 minute SO₂ exposures can result in adverse health effects to asthmatics).

TCEQ’s more detailed and alternative argument claiming that the discussion of modeling makes the form of the standard when monitoring is to be used unlawful must be similarly rejected, since at this point it is entirely
speculative as to whether the alleged poor “fit” between modeling and the standard will in fact occur in any specific instances. TCEQ has presented no facts to support a claim that the guidance discussion itself compels that this result has already or must inevitably occur. Moreover, TCEQ presents no argument as to why the form of the standard is inappropriate. See 75 FR at 35539–41 (discussing and justifying at length EPA’s choice of a 99th percentile form for the new 1-hour standard). Like UARG and ASARCO, TCEQ appears to implicitly object to the fact that EPA did not in the final rule either require modeling to be used in all cases or promulgate specific requirements regarding modeling’s use from which States may not deviate or to which no alternatives may be recommended in future implementation. Ironically, the petitioners thus appear to complain of the flexibility that they and States will have in future implementation actions to recommend data measurement tools that they believe will more accurately predict SO2 emissions concentrations. Certainly such flexibility, no matter how “arduous” it seems in application, cannot be the basis for a claim that a guidance discussion has any present and immediate impact on the promulgated NAAQS.

VI. Stay of Final Rule Issue

A. Summary of Petitioners’ Requests

Nearly all of the petitioners requested that EPA stay the effectiveness of the final SO2 NAAQS pending some period of reconsideration. UARG at one point requests a stay of the final NAAQS “pending completion of rulemaking,” and at another asks for a stay “while EPA decides whether to reconsider key portions of the Rule,” but ultimately requests a stay “for a period of three months” with the possibility of being extended. UARG at 3, 30, 32. UARG bases its request for a stay under CAA sections 307(d)(7)(B) and 301(a) on the perceived hardships that could befall pollution sources if they are required to achieve increasingly lower emissions rates, at increasingly higher costs, on the asserted restriction of State discretion resulting from EPA’s guidance discussion, and on States’ future burden of having to adopt and submit SIPs that show attainment via modeling. Id. at 30–31. NEDA/CAP requests a stay of the SO2 NAAQS pending “agency review and action on” its petition to “prevent confusion and to conserve resources in responding to the final rule’s requirements for initial attainment/ nonattainment designations.” NEDA/CAP at 6. ASARCO claims EPA “should stay the effective date of the rule to provide adequate notice and opportunity to comment on the rulemaking,” and therefore “fully supports” UARG’s request for a stay. ASARCO at 12.

TCEQ argues EPA should stay the NAAQS under APA section 705’s authority to postpone the effective date of action, pending judicial review, when an agency finds that justice so requires. TCEQ at 15. Under this standard, TCEQ argues, it is not required to demonstrate irreparable harm to support granting a stay. Id. at 15–16. North Dakota and South Dakota, “because of the hardships that could result from implementation of EPA’s 1-hour SO2 Standard in the manner described in the Final Rule’s preamble,” asks for a three-month stay, followed by an extension through the completion of rulemaking if EPA decides to change the rule. ND and SD at 9–10. ADEQ, in supporting the petitions of TCEQ and North Dakota and South Dakota in general, appears to also seek a stay. ADEQ at 2.

B. EPA’s Response

Consistent with our position in the litigation on the final SO2 Primary NAAQS in response to the motion filed by North Dakota to judicially stay the rule, EPA concludes that there is no basis for an administrative stay of the final SO2 Primary NAAQS. Under CAA section 307(d)(7)(B), EPA may issue a stay for up to three months if it grants a petition and initiates reconsideration of a final rule. Since we are denying the petitions to reconsider, an administrative stay is not warranted under that authority. In addition, a stay is not otherwise warranted. First, the petitioners have not made a strong showing of likelihood of success on the merits, for all of the reasons we present above for denying the petitions to reconsider. Second, the petitioners’ speculative arguments do not show that they will suffer irreparable harm (as no implementation actions have yet been taken reflecting EPA’s discussed possible approaches), and they fail to account for the non-binding nature of the final rule preamble’s implementation guidance discussion, the opportunities for interested parties to assert their views in the future implementation actions about which petitioners are concerned, and EPA’s stated intention to provide further implementation guidance. Third, petitioners’ arguments that a stay would not harm other parties flatly ignore the harm to the public that would occur from delayed attainment of the SO2 Primary NAAQS and deferred public health benefits, and they therefore fail to show that such a stay would not be contrary to the public interest.

In addition, it is not necessary for EPA to grant a stay under CAA section 301(a) to carry out the Agency’s functions in denying the petitions for reconsideration, since EPA intends to take no further action regarding the petitions following this denial. APA section 705 authorizes an agency to postpone the effective date of an agency action pending judicial review when the agency finds that justice so requires. In this case, the revised SO2 Primary NAAQS was effective as of August 23, 2010. TCEQ’s request for an administrative stay relying upon APA section 705 was submitted by petition on that same day that the SO2 Primary NAAQS became effective. Even if EPA believed that an administrative stay was warranted under TCEQ’s theory that the total absence of irreparable harm is not an impediment to granting an administrative stay in this matter, which it does not, it is not clear whether EPA would have authority under APA section 705 to stay an agency action that has already gone into effect. Postponing an effective date implies action before the effective date arrives.

VII. Conclusion

For all of the reasons discussed above, the petitions to reconsider the final revised SO2 Primary NAAQS are denied, as are the petitions for an administrative stay.

Dated: January 14, 2011.

Lisa P. Jackson, Administrator.