

Summary of Comments and Responses
Oklahoma's I-SIP Submittal for the 2010 Primary Sulfur Dioxide (SO₂) NAAQS
CAA Requirements Under § 110(a)(1) & (2)

DEQ received no request for a public hearing during the notice period, therefore, as stated in the public notice, a hearing was not held. One set of comments was received during the comment period, submitted on June 5, 2014 by Laurie Williams, Associate Attorney, on behalf of Sierra Club.

Sierra Club

Sierra Club (SC) prefaced its specific comments with considerable background discussion of the SO₂ NAAQS and I-SIPⁱ requirements under the CAA and EPA rules and policies, which required no response. The following is a summary of specific comments and responses.

Comments I.C.1 through 4

I.C.1: “The plain language and legislative history of the Clean Air Act require that infrastructure SIPs must impose emission limits adequate to prevent NAAQS exceedances in areas not designated nonattainment.” (Page 4)

I.C.2: “EPA regulations implementing the Clean Air Act require that infrastructure SIPs must impose emission limits adequate to prohibit NAAQS exceedances in areas not designated nonattainment.” (Page 5)

I.C.3: “Prior EPA interpretations of the act require that infrastructure SIPs must impose emission limits adequate to prohibit NAAQS exceedances in areas not designated nonattainment.” (Page 5)

I.C.4: “Supreme and Appellate Court opinions hold that infrastructure SIPs must impose emission limits adequate to prohibit NAAQS exceedances in areas not designated nonattainment.” (Page 6)

Response to Comments I.C.1 through 4: These comments are substantially the same as the SC commentsⁱⁱ EPA addressed extensively on March 27, 2014 at 79 Fed.Reg. 17043. EPA’s response indicated that it does not view the purpose of the I-SIP submittal as an attainment/maintenance demonstration, but primarily as an opportunity for a review of the state’s air quality management program, particularly as it accommodates a new or revised NAAQS. Both the CAA and EPA’s programs include multiple provisions for SIP changes to meet new and evolving requirements, including the Designations process. Oklahoma’s draft I-SIP submittal

describes how the state has integrated the requirements of CAA Section 110(a)(1) & (2) into its basic programs, including changes to date to accommodate the 2010 SO₂ NAAQS.

The EPA's responses in the referenced Federal Register notice included a number of statements that summarize an appropriate response to SC's comments, including:

EPA believes that section 110(a)(2)(A) is reasonably interpreted to require states to submit SIPs that reflect the first step in their planning for attaining and maintaining a new or revised NAAQS and that they contain enforceable control measures and a demonstration that the state has the available tools and authority to develop and implement plans to attain and maintain the NAAQS. *Id.*, pg. 17045

In light of the structure of the CAA, EPA's long-standing position regarding infrastructure SIPs is that they are general planning SIPs to ensure that the state has adequate resources and authority to implement a NAAQS in general throughout the state and not detailed attainment and maintenance plans for each individual area of the state. *Id.*, pg. 17046

Thus, the present-day [40 CFR Section] 51.112 contains consolidated provisions that are focused on control strategy SIPs and the infrastructure SIP is not such a plan. *Id.*, pg. 17049

Furthermore, EPA has explicitly addressed this issue in its September 2013 "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)" ("2013 I-SIP Guidance") There, EPA states that I-SIPs merely "should identify existing EPA-approved SIP provisions or new SIP provisions" that "limit emissions of pollutants relevant to the subject NAAQS," but "emissions limitations and other control measures needed" will be due on a later date for those areas designated nonattainment. 2013 I-SIP Guidance at 18. EPA has further confirmed this by stating that when evaluating I-SIPs, it has "long interpreted emission limits and control measures for attaining the standards as being due when nonattainment planning requirements are due" and that "EPA is not evaluating the existing SIP provisions for this purpose[;] instead, EPA is only evaluating whether the state's SIP has basic structural provisions for the implementation of the NAAQS." 79 Fed.Reg. 27241 at 27245 (May 13, 2014). Thus, an air agency is not obligated to provide additional emissions limitations or control measures until a designation of nonattainment has been made.

Comments II.A through C

Comment II: "The draft ISIP fails to include enforceable one-hour SO₂ emission limitations to ensure attainment and maintenance of the primary SO₂ NAAQS." (Page 8)

Comment II.A: “Oklahoma must revise the Draft ISIP to include enforceable one-hour SO₂ emission limits for sources currently allowed to cause exceedances of the NAAQS.” (Page 8)

Comment II.B: “Modeling is the appropriate tool for evaluating the adequacy of Infrastructure SIPs and ensuring attainment and maintenance of the SO₂ NAAQS.” (Page 12)

Comment II.C: “The Draft ISIP must include enforceable SO₂ emission limits with a one-hour averaging period that apply at all times.” (Page 16)

Response to Comments II.A through C:

As documented in the I-SIP Checklist, DEQ’s Air Quality program requires enforcement and compliance with all NAAQS, and the authority to require emission evaluations and limits in the appropriate form. However, the detailed comments provided are outside the scope of this I-SIP submittal. A demonstration that emissions allowed under the current Oklahoma SIP are adequate to attain a new SO₂ standard would be appropriately performed for an attainment SIP. As discussed in the previous response, this is not an attainment SIP – it is intended to show that the State has the legal authority and resources that meet the requirements of CAA Sections 110(a)(1)&(2) to implement 2010 SO₂ NAAQS. DEQ will continue to evaluate the significant SO₂ emission sources in Oklahoma that potentially impact attainment of the NAAQS, i.e., those identified in advance of the Designations process conducted under the proposed Data Requirements Rule for the 1-Hour SO₂ NAAQS ([79 Fed.Reg. 27446, May 13, 2014](#)) and/or the related proposed Settlement Agreement ([79 Fed.Reg. 31325, June 2, 2014](#)). The evaluation would identify any necessary and appropriate actions and/or emissions limitations needed to assure attainment and maintenance of the NAAQS, taking into account any SO₂ reductions that will occur in the near term due to implementation of federal measures (e.g., MATs, BART, CSAPR) and/or other announced retirements or modifications. Modeling has and will be used as a tool in emissions evaluations, as appropriate.

Comment II.D: “The Draft ISIP fails to include measures that ensure compliance with section 110(a)(2)(A) of the Act regarding the 2010 SO₂ NAAQS.” (Page 17) Specifically, the commenter stated that the requirements of Subchapter 31 Control of Emission of Sulfur Compounds of AQD’s rules, and in particular OAC 252:100-31-16 & -25, are inadequate to guarantee the attainment and maintenance of the NAAQS. The commenter also expressed concern over certain variance provisions included in the Oklahoma Clean Air Act (27A O.S. § 2-5-109) and excess emissions reporting requirements and enforcement provisions that may apply during periods of startup, shutdown, and malfunction (252:100-9-8).

Response: As previously stated, DEQ concurs with EPA’s position that this is an I-SIP submittal, not an Attainment or Maintenance SIP. Regarding the Subchapter 31 requirements, DEQ acknowledges that, as SC stated, 252:100-31-25 (Requirements for new fuel-burning) do

not, and never have, applied to pre-July 1972 equipment, and that 252:100-31-16 (Requirements for existing fossil fuel-fired steam generators) does not include specific emission limits for pre-July 1972 coal-fired power plants. Many of the requirements of Subchapter 31 were developed long before the development and implementation of the Title V program, the bulk of NSPS & NESHAPs, and other federal measures. Although various facilities are still technically subject to the requirements of Subchapter 31, in many cases other, more stringent requirements take precedence. [Significant changes were made to Subchapter 31 effective July 2012, including removal of certain older standards which were redundant and/or not protective of the new SO₂ NAAQS. The public comment period and hearings held on the rulemaking also served as an opportunity to receive related comments on Oklahoma's SIP. DEQ notes that the Sierra Club raised none of their concerns during the nearly year-long formal rulemaking process for the Subchapter 31 changes.] Subchapter 31 is only one portion of the infrastructure on which Oklahoma relies for attainment and maintenance of the SO₂ NAAQS.

Several years ago, DEQ made significant modifications to Subchapter 9 (Excess Emission Reporting Requirements), in large measure to accommodate changes in EPA enforcement policy regarding excess emissions during periods of startup, shutdown, and malfunction (SSM), and other issues. As documented in the checklist, the Subchapter 9 changes were submitted to EPA as a SIP revision on July 16, 2010. In a letter dated March 14, 2014 and at EPA's request, DEQ withdrew this SIP submittal to allow EPA to deal with the issues on a national basis. EPA included a discussion of the appropriate treatment of SSM and variance issues for the I-SIP submission in the 2013 I-SIP Guidance, page 19, Section III.

Comment II.E: "Enforceable emission limits are necessary to avoid future nonattainment designations." (Page 18)

Response: As stated in a previous response, DEQ will continue to evaluate the significant SO₂ emission sources in Oklahoma that potentially impact attainment of the NAAQS, and identify any appropriate additional actions and/or emissions limitations, in addition to any SO₂ reductions that will occur in the near term due to implementation of federal measures (e.g., MATs, BART, CSAPR) and/or other announced retirements or modifications. DEQ is pleased that the commenter recognizes the role of placing enforceable limits in permits.

Comment III: "The draft ISIP must be revised to address sources significantly contributing to nonattainment or interference with maintenance of the NAAQS in downwind states." (Page 20) Specifically, the commenter stated that DEQ cannot rely on its PSD rule under OAC 252:100-8-35, since it would only require a NAAQS evaluation when a PSD was being built or undergoing a major modification. Sierra Club also expressed concerns over the potential impact of SO₂ emissions of three facilities on tribal lands of the Cherokee Nation, the Ponca and Otoe Missouri Nation, and the Muskogee Creek Nation.

Response: The checklist has been modified to more explicitly state that, per EPA’s 2013 I-SIP Guidance, DEQ is not asserting that Oklahoma meets all requirements of the interstate transport provisions of § 110(a)(2)(D)(i)(I) in this SIP submittal, and to update the status of transport requirements. As EPA has stated in its evaluation of several states’ I-SIPs (e.g., *see* 59 Fed.Reg. 46708), EPA is continuing to evaluate the impact of the Supreme Court’s *EME Homer City* decision on states’ § 110(a)(2)(D)(i)(I) obligations. Following this decision, the D.C. Circuit court lifted the stay on CSPAR on October 23, 2014. While this *I-SIP submittal* does not make an assertion regarding § 110(a)(2)(D)(i)(I), Oklahoma’s SIP does not rely solely on OAC 252:100-8-35 to provide protections against interstate transport of pollutants. DEQ fully expects to address transport issues in a future SIP submission under specific EPA guidance as to Oklahoma’s obligation for the 2010 SO₂ NAAQS under § 110(a)(2)(D)(i)(I).

As stated in the proposed checklist, DEQ’s preliminary analyses of possibly significant emission sources in Oklahoma do not indicate that, for the revised SO₂ NAAQS, Oklahoma contributes significantly to nonattainment in or interferes with maintenance by any other state. DEQ believes that the evaluations being conducted in advance of the Designations process will identify and address any interstate transport issues, particularly because the attainment and maintenance concerns for the 2010 1-hour SO₂ NAAQS are primarily source-related. This would, of course, extend to protection of potentially affected tribal lands.

Comment IV: “Oklahoma’s draft I-SIP fails to include information regarding the emergency episode plan.” (Page 21) The commenter asserted that the I-SIP must include a copy of the plan (or a link to the plan) so that the public could evaluate whether Oklahoma’s approved plan meets the requirements of CAA § 110(a)(2)(G).

Response:

The proposed I-SIP submittal documents Oklahoma’s EPA-approved Emergency Episode Plan (EEP) for all covered pollutants in Chapter 6 of the state’s SIP, which was submitted in 1972 and revised in 1988. [*see* 40 CFR §§ 52.1934 and 52.1960(c)(38)] DEQ acknowledges that the full original SIP document is not currently available online. DEQ would be happy to provide the best copy available of these historical documents upon request under the state Open Records Act. No request for a copy of the EEP was received from the public during the comment period. It is important to note that an EEP contingency plan would not be required under 40 C.F.R. § 51.152 for SO₂ for any region of Oklahoma.

An EEP or contingency plan for a particular pollutant is required under 40 CFR § 51.152 for any region classified as Priority II or higher (i.e., Priority I or IA). The Priority II Region classification levels in 40 CFR § 51.150 for Sulfur Dioxides are currently set at 60–100 µg/m³ (0.02–0.04 ppm) annual arithmetic mean; 260–445 µg/m³ (0.10–0.17 ppm) 24-hour maximum;

or any concentration above 1,300 $\mu\text{g}/\text{m}^3$ (0.50 ppm) three-hour average. The highest monitored SO_2 values for the previous 3 years (2011 to 2013) were 0.00496 ppm annual arithmetic mean; 0.0278 ppm 24-hour maximum; and 0.105 ppm three-hour average – all well below the Priority II classification level. Therefore, Oklahoma’s regions are classified as Priority III according to 40 C.F.R. § 51.150, and under 40 C.F.R. § 51.152(c), “Areas classified Priority III do not need to develop episode plans.” Thus, Oklahoma is not required to submit a new EEP for SO_2 at this time.

Nevertheless, the EEP approach is a 1948-vintage conceptⁱⁱⁱ. An Emergency Episode Action Plan, as it was sometimes referred to, was beneficial at a time when pollutants could be predicted to build-up over multiple days or weeks from a broad variety of sources to a level that would greatly exceed the health and safety standards, and a number of the sources (e.g., power plants) could be shut down without causing a shut-down of the electric grid.

Oklahoma’s EEP will be updated as needed if and when EPA revises the classification levels in 40 CFR § 51.150. However, the EEP as a functional concept in Oklahoma in 2014 has largely been replaced by air quality monitoring, prediction, & notification [tools](#), including the Air Quality Index (AQI), Ozone Watches, and Air Quality Health Advisories^{iv}. These tools have evolved along with other safeguards, and are more appropriate under today’s conditions. The exceedance levels covered under an EEP are more indicative of a catastrophic event, rather than even a significant NAAQS exceedance. It would be difficult and likely impractical to predict such an event a day or so in advance and quickly shut down larger sources of SO_2 until the episode passes. [An exception could be when a malfunctioning large source is the *cause* of the episode, but then a shutdown or curtailment would likely result from an existing permit/rule requirement, physical limitation, or the State’s ordinary emergency powers.] The DEQ doubts that the commenter would prefer that limited resources be diverted from emergency prevention and response efforts that are working, in order to redevelop a plan that has never been and likely never will be used.

Comment (Footnote 14): “Sierra Club disagrees that Oklahoma can ignore its duty to address visibility requirements under Clean Air Act section 110(a)(2)(J). See Draft ISIP at 14. The statute clearly states that each plan shall meet the requirements relating to visibility protection.” (Footnote 14, page 21)

Response:

The draft I-SIP submittal reviews DEQ’s existing infrastructure related to visibility obligations under CAA § 110(a)(2). However, EPA’s 2013 I-SIP Guidance states that there are no new visibility protection requirements under Part C of the CAA that would result from a revised NAAQS, and therefore the visibility sub-element of § 110(a)(2)(J) need not be addressed in an

infrastructure SIP submission^v. DEQ notes the commenter's disagreement with EPA's stated policy.

ⁱ Note that in its comments, Sierra Club uses the term Infrastructure SIP or ISIP to refer to the state's full existing and EPA-approved program and SIP, as distinguished from the state's "I-SIP submittal," i.e., its review and certification of the adequacy of its program and SIP.

ⁱⁱ Sierra Club comments on Virginia's 2008 ozone I-SIP revision contended that EPA could not approve the section 110(a)(2)(A) portion of the submittal because the plain language of 110(a)(2)(A) of the CAA, legislative history of the CAA, case law, EPA regulations such as 40 CFR 51.112(a), and EPA interpretations in rulemakings, require the inclusion of enforceable emission limits in an infrastructure SIP to prevent NAAQS violations in areas not designated nonattainment. 79 Fed.Reg. 17045, 3-27-14. DEQ will not repeat or attempt to expand on EPA's full legal analysis of these Sierra Club comments.

ⁱⁱⁱ The concept of an emergency episode plan, including a warning system based on combined air pollution and weather conditions, was recommended by public health agencies at least in part as a result of the 1948 Donora (PA) Smog incident <http://www.donorasmog.com/>

^{iv} Starting in 1991, for the Tulsa metropolitan area, and 1992 for the Oklahoma City metropolitan area, the ODEQ has called ozone alerts. These alerts are called by 4:00 pm the day before, and advertised in many ways to encourage the public to do what they can to reduce their emissions and exposure. Additionally, for the last five years, the Oklahoma DEQ has issued health alerts when it has determined that the ozone, SO₂ or PM concentrations are projected to approach the primary NAAQS.

^v page 55, Section III. Guidance on Individual Infrastructure SIP Elements, Element J – Section 110(a)(2)(J): Consultation with Government Officials, Public Notification, and PSD and Visibility Protection, *2013 I-SIP Guidance*