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RESEARCH TRIANGLE PARK, NC 27711

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OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)

FROM: Stephen D. Page, Director *Michael Koerber for*
Office of Air Quality Planning and Standards

TO: Regional Air Directors, Regions 1 – 10

The purpose of this memorandum is to distribute non-binding guidance from the U.S. Environmental Protection Agency on the requirements of certain provisions of the Clean Air Act (CAA) titled, "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)."

Sections 110(a)(1) and 110(a)(2) of the CAA direct each state to develop and submit to the EPA a plan that provides for the implementation, maintenance, and enforcement of the national ambient air quality standards (NAAQS).¹ Moreover, section 110(a)(1) requires that each state make a new SIP submission within 3 years after promulgation of a new or revised primary or secondary NAAQS, for approval into the existing SIP to assure that the SIP meets the applicable requirements for such new or revised NAAQS. This type of SIP submission is commonly referred to as an "infrastructure SIP."

The attached guidance, developed with the benefit of extensive written comments from state and local air agencies on a draft version, provides advice on the development of infrastructure SIPs for the 2008 ozone NAAQS, the 2010 nitrogen dioxide NAAQS, the 2010 sulfur dioxide NAAQS, and the 2012 fine particulate matter (PM_{2.5}) NAAQS, as well as infrastructure SIPs for new or revised NAAQS promulgated in the future. This guidance does not address CAA section 110(a)(2)(D)(i)(I), which concerns interstate pollution transport affecting attainment and maintenance of the NAAQS. The EPA expects to issue guidance in the future with respect to section 110(a)(2)(D)(i)(I).

Section 110(a)(1) directs each state to make an infrastructure SIP submission to the EPA within 3 years of promulgation of a new or revised NAAQS,² after reasonable notice and public hearing.³ Section

¹ These CAA sections and this guidance may also apply, as appropriate under the Tribal Authority Rule in 40 CFR Part 49, to an Indian tribe that receives a determination of eligibility for treatment as a state for purposes of administering a tribal air quality management program under section 110(a) of the CAA. This memorandum and the guidance uses the term "air agency" to refer to a state or tribe that develops and submits an infrastructure SIP, except when quoting or paraphrasing a CAA section or EPA regulation that uses the term "state."

² The Administrator may specify a shorter period.

110(a)(2) specifies the substantive elements that infrastructure SIP submissions need to address, as appropriate, for EPA approval. Many of the elements listed in section 110(a)(2) relate to the general information and authorities that constitute the basic structural requirements for a SIP needed for an air agency's overall air quality management program to be effective – elements that have been required to be in place since the initial SIPs were submitted in response to the CAA of 1970. Other elements listed in section 110(a)(2) relate to SIP requirements that have been added in successive amendments to the CAA since 1970. Although the 110(a)(2) requirements do not explicitly distinguish among the different criteria pollutants or different NAAQS, the structural SIP provisions needed to meet these requirements may depend on the particular new or revised NAAQS whose promulgation has triggered the requirement for a new infrastructure SIP submission. For example, a new or revised NAAQS may be accompanied by new ambient monitoring requirements tailored to that NAAQS or new prevention of significant deterioration program requirements. Overall, the requirement for a new infrastructure SIP submission provides an opportunity for the air agency, the public and the EPA to review the basics of the air quality management program in light of each new or revised NAAQS.

We acknowledge that air agencies continue to express concerns about the EPA's issuance of timely guidance to assist their efforts to implement a new or revised NAAQS. Our goal in providing the attached guidance document is to provide air agencies with recommendations in order to develop infrastructure SIPs that will meet the CAA requirements for recently promulgated NAAQS. The EPA will work to assist air agencies in the development and completion of these infrastructure SIPs so they may be submitted as soon as possible.

The attached guidance is also intended to provide comprehensive recommendations for infrastructure SIPs for new or revised NAAQS promulgated in the future. Our expectation is that this guidance will help to address the timeliness concerns expressed by air agencies and serve as guidance to address infrastructure SIP requirements for future NAAQS. As a result, the EPA intends that air agencies may continue to rely on this guidance for preparing infrastructure SIP submissions necessary for future NAAQS revisions, until such time as this guidance is supplemented or replaced by future guidance. Moreover, as air agencies and the EPA develop and act upon infrastructure SIP submissions through notice-and-comment rulemaking, the EPA anticipates that additional clarity will be provided about the best means to meet the statutory requirements.

Although this guidance provides recommendations for the development and review of infrastructure SIPs for multiple NAAQS, we are not recommending whether an air agency should or should not make a single infrastructure SIP submission to address requirements for more than one NAAQS simultaneously. Air agencies should consult with the appropriate EPA Regional Office for advice regarding combining infrastructure SIP submissions for multiple NAAQS.

Please share this guidance with the air agencies in your Region.

For Further Information

If you have any questions concerning this guidance, please contact H. Lynn Dail, at (919) 541-2363, dail.lynn@epa.gov, or Lisa Sutton, at (919) 541-3450, sutton.lisa@epa.gov.

Attachment

³ The EPA's rules provide that a public hearing must be offered by the air agency, but is only required if a request is made.



Guidance on Infrastructure State Implementation
Plan (SIP) Elements under Clean Air Act
Sections 110(a)(1) and 110(a)(2)

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List of Selected Acronyms and Abbreviations

AERMOD	American Meteorological Society/EPA Regulatory Model
AMTIC	Ambient Monitoring Technology Information Center
AQI	Air Quality Index
CAA	Clean Air Act
CMAQ	Community Multi-scale Air Quality [Model]
CAMx	Comprehensive Air Quality Model with Extensions
CFR	Code of Federal Regulations
CSAPR	Cross-State Air Pollution Rule
EPA	Environmental Protection Agency
EGU	Electric generating unit
FIP	Federal implementation plan
FR	Federal Register
GHG	Greenhouse gases
IBR	Incorporation by reference
NAAQS	National Ambient Air Quality Standards
NO ₂	Nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NSR	New Source Review
OAQPS	Office of Air Quality Planning and Standards
Pb	Lead
PM _{2.5}	Fine particulate matter
ppm	Parts per million
PSD	Prevention of significant deterioration
RAVI	Reasonably Attributable Visibility Impairment
SHL	Significant harm level
SIP	State implementation plan (also, if indicated by the context, a tribal implementation plan)
SO ₂	Sulfur dioxide
SSM	Startup, shutdown, and malfunction
TAR	Tribal Authority Rule
TIP	Tribal Implementation Plan
UBR	Unavoidable breakdown rule
µg/m ³	Micrograms per cubic meter

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Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)

I. Introduction

Under Clean Air Act (CAA) sections 110(a)(1) and 110(a)(2), each state¹ is required to submit a state implementation plan (SIP)² that provides for the implementation, maintenance, and enforcement of each primary or secondary national ambient air quality standard (NAAQS). Moreover, section 110(a)(1) and section 110(a)(2) require each state to make this new SIP submission within 3 years after promulgation of a new or revised NAAQS.³ This type of SIP submission is commonly referred to as an “infrastructure SIP.”

Section 110(a)(1) generally directs each state to submit an infrastructure SIP to the U.S. Environmental Protection Agency after reasonable notice and public hearing.⁴ Section 110(a)(2) specifies the substantive elements these submissions need to address, as applicable, for the EPA’s approval. The subsections of section 110(a)(2) list a variety of requirements, some of which address authority, some of which address substantive requirements, and some of which consist of a combination of authority and substantive requirements. The conceptual purpose of an

¹ These CAA sections and this guidance may also apply, as appropriate under the Tribal Authority Rule (TAR) in [40 CFR part 49](#), to an Indian tribe that receives a determination of eligibility for treatment as a state for purposes of administering a tribal air quality management program under section 110(a) of the CAA. Tribes should look to the TAR and engage their respective EPA Regional Offices in discussing how this guidance may impact the development and approvability of their tribal implementation plans (TIPs). We encourage states to provide outreach and engage in discussions with tribes about their SIPs as they are being developed.

² In the CAA and in this guidance, “plan,” “SIP,” and “TIP” may, depending on context, refer either to (i) all or part of the existing state (or tribal) implementation plan (*i.e.*, the collection of all submissions previously approved by the EPA as meeting CAA requirements) or (ii) a submission that adds to or modifies the existing plan as directed by section 110(a)(1).

³ The Administrator may specify a shorter period.

⁴ The EPA rules provide that a public hearing must be offered by the air agency but is only required if a request is made.

infrastructure SIP submission is to assure that the air agency's⁵ SIP contains the necessary structural requirements for the new or revised NAAQS, whether by establishing that the SIP already contains the necessary provisions, by making a substantive SIP revision to update the SIP, or both. Overall, the infrastructure SIP submission process provides an opportunity for the responsible air agency, the public, and the EPA to review the basic structural requirements of the air agency's air quality management program in light of each new or revised NAAQS.

This non-binding guidance⁶ provides recommendations for air agencies' development and the EPA's review of infrastructure SIPs for the 2008 ozone primary and secondary NAAQS,⁷ the 2010 primary nitrogen dioxide (NO₂) NAAQS,⁸ the 2010 primary sulfur dioxide (SO₂) NAAQS,⁹ and the 2012 primary fine particulate matter (PM_{2.5}) NAAQS,¹⁰ as well as

⁵ This guidance uses the term "air agency" to generally refer to a state, territory, or tribe that develops and submits an infrastructure SIP or TIP, except when quoting or paraphrasing a CAA section or a EPA regulation that uses the term "state."

⁶ None of the recommendations contained in this guidance are binding or enforceable against any person, and no part of the guidance or the guidance as a whole constitutes final agency action that could injure any person or represent the consummation of agency decision making. Only final actions taken to approve or disapprove SIP submissions that implement any of the recommendations in this guidance would be final actions for purposes of CAA section 307(b). Therefore, this guidance is not judicially reviewable. This document is not a rule or regulation, and the guidance it contains may not apply to a particular situation based upon the individual facts and circumstances. This guidance does not change or substitute for any law, regulation, or other legally binding requirement and is not legally enforceable. The use of non-mandatory language such as "guidance," "recommend," "may," "should," and "can" is intended to describe the EPA's policies and recommendations. Mandatory terminology such as "must" and "required" is intended to describe controlling legal requirements under the terms of the CAA and the EPA regulations. Neither such language nor anything else in this document is intended to or does establish legally binding requirements in and of itself.

⁷ The EPA revised the levels of the primary and secondary 8-hour ozone standards to 0.075 parts per million (ppm). 40 CFR 50.15. [73 FR 16436 \(March 27, 2008\)](#).

⁸ The EPA revised the primary NO₂ standard by adding a 1-hour level of 100 parts per billion (ppb), while retaining the previous annual primary and secondary standards. 40 CFR 50.11(b) and (f). [75 FR 6474 \(February 9, 2010\)](#). The EPA has also recently reviewed the air quality criteria and the secondary NAAQS for nitrogen oxides and sulfur oxides and retained the current NO₂ and SO₂ secondary standards, [77 FR 20218 \(April 3, 2012\)](#).

⁹ On June 2, 2010, the EPA established a new 1-hour SO₂ standard at a level of 75 ppb. 40 CFR 50.17. This rule also provided for the automatic future revocation of the previous annual and 24-hour SO₂ NAAQS for most areas following 1 year after designation under the new NAAQS. 40 CFR 50.4(e). The previous 3-hour secondary standard remains in place indefinitely. 40 CFR 50.5. [75 FR 35520 \(June 22, 2010\)](#). The EPA has also recently reviewed the air quality criteria and the secondary NAAQS for nitrogen oxides and sulfur oxides and retained the current NO₂ and SO₂ secondary standards, [77 FR 20218 \(April 3, 2012\)](#).

¹⁰ The EPA revised the annual PM_{2.5} standard by lowering the level to 12.0 micrograms per cubic meter (µg/m³). [78 FR 3086 \(January 15, 2013\)](#).

infrastructure SIPs for new or revised NAAQS promulgated in the future. As a result, air agencies may continue to rely on this guidance for developing infrastructure SIPs for future new or revised NAAQS until this guidance is supplemented or replaced by future guidance. This guidance does not address section 110(a)(2)(D)(i)(I), which concerns interstate pollution transport affecting attainment and maintenance of the NAAQS. The EPA expects to issue guidance in the future with respect to this section of the CAA.

Section II of this document provides general guidance for the development of infrastructure SIPs, and section III presents guidance on the individual elements (and sub-elements) that constitute an infrastructure SIP.

II. General Guidance on Infrastructure SIPs

Which elements of CAA 110(a)(2) affect infrastructure SIPs?

Infrastructure SIP elements are addressed in portions of section 110(a)(2) of the CAA. Under this section, states are required to develop and maintain an air quality management program that meets various basic structural requirements, including, but not limited to: enforceable emission limitations; an ambient monitoring program; an enforcement program; air quality modeling capabilities; and adequate personnel, resources, and legal authority.

Although, as stated in section I of this document, infrastructure SIPs are required to be submitted within 3 years after the promulgation of a new or revised NAAQS, the EPA interprets section 110(a)(2) to exclude two elements that could not be governed by the 3-year submission deadline of section 110(a)(1). Both these elements pertain to part D, in title I of the CAA, which addresses SIP requirements and submission deadlines for designated nonattainment areas for a NAAQS. Therefore, the following elements are considered by the EPA to be outside the scope of infrastructure SIP actions: (1) section 110(a)(2)(C) to the extent that it refers to permit programs (known as “nonattainment new source review”) under part D; and (2) section 110(a)(2)(I) in its entirety, which addresses SIP revisions for nonattainment areas. Both these elements pertain to SIP revisions that collectively are referred to as a nonattainment SIP or an attainment plan, which would be due by the dates statutorily prescribed under subparts 2 through 5 under part D, extending as far as 10 years following area designations for some elements. Because the CAA directs states to submit these plan elements on a separate schedule, the EPA does not believe it is necessary for states to include these elements in the infrastructure SIP submission due 3 years after adoption or revision of a NAAQS. While an infrastructure SIP submission is not expected to meet the requirements for a nonattainment SIP, the scope of an infrastructure SIP does not exclude geographical areas that have been designated nonattainment for the new or revised NAAQS or an earlier NAAQS for the same pollutant. Sections 110(a)(1) and 110(a)(2) reflect the congressional intent that each air agency have an air quality program, covering all

geographical areas of the state, that includes the specified air agency authorities, requirements, and activities.

The infrastructure SIP submission requirement does not move up the date for any required submission of a part D plan for areas designated nonattainment for the new NAAQS. However, in order to cover all parts of the state or area of Indian country, an infrastructure SIP submission may reference pre-existing SIP emission limits or other rules contained in part D plans for the predecessor to the relevant new or revised NAAQS. It may also include recently adopted emission limits that are intended to be part of the not-yet-submitted part D plan for the new or revised NAAQS. To avoid confusion about the legal effect of the EPA's action on an infrastructure SIP submission, we intend to make clear in each final action that EPA approval of the infrastructure SIP submission is solely with regard to whether the submission meets particular infrastructure SIP required elements (as opposed to nonattainment SIP elements). This means that the EPA may approve a submission as meeting the air agency's obligation under section 110(a)(1) and 110(a)(2) stemming from the particular new or revised NAAQS, without necessarily determining whether the submission meets the applicable requirements for nonattainment SIPs under part D of title I of the CAA for the same or any other NAAQS. An approval on this basis will make the referenced or newly submitted SIP emission limits or other rules federally enforceable, and will make clear that there has been no disapproval of an applicable required SIP submission and thus that there is no federal implementation plan (FIP) obligation stemming from CAA section 110(a)(1) or (2).¹¹

Developing and Submitting an Infrastructure SIP Submission

Upon the promulgation of a new or revised NAAQS, the infrastructure SIP process should begin with the air agency's review of the adequacy of its existing SIP provisions for

¹¹In general, a finding by the EPA that an air agency has failed to submit a complete SIP or an action by the EPA to disapprove a SIP or SIP element initiates a FIP obligation, if the submission is required by the CAA. Mandatory sanctions would not apply under CAA section 179 because the failure to submit a SIP is neither with respect to a submission that is required under CAA title I part D nor in response to a SIP call under CAA section 110(k)(5). Some of the sections of this guidance document address FIP implications on individual elements more specifically.

purpose of meeting the infrastructure SIP requirements for the new or revised NAAQS. In order to develop an infrastructure SIP submission, an air agency may cite existing EPA-approved provisions and/or adopt new or revised statutory authorities and regulations, as necessary, in order to address each element of the infrastructure SIP. Further, with respect to a given NAAQS, an air agency may elect to make multiple submissions; each addressing some but not all elements or sub-elements of section 110(a)(2) so long as those submissions meet all of the infrastructure requirements in the aggregate. An air agency may also elect to make one submission to address infrastructure SIP requirements for multiple NAAQS, if it represents the submission as such during its adoption process and in its transmittal to the EPA. Of course, such a submission to address multiple NAAQS should establish how the air agency believes that the SIP meets each of the requirements of section 110(a)(2), as applicable, for each of the relevant NAAQS.

It is important that the SIP submission demonstrate the authority of the responsible air agency (or agencies, if responsibility for implementation is shared, *e.g.*, between state and local agencies) to implement the new or revised NAAQS that has triggered the need for the infrastructure SIP submission. This can be an issue for approval if an older underlying legal authority enumerates specific ambient standards by pollutant, indicator, averaging period, level, and/or date of promulgation but does not include the new or revised NAAQS in its list. Air agencies are encouraged to discuss any situations of this type with their respective EPA Regional Offices.

We encourage each air agency to consult with the appropriate EPA Regional Office, to consider the completeness of the submission, and to consider how the submission satisfies the applicable EPA regulations governing approval of infrastructure SIP submissions in [40 CFR part 51](#) ("Requirements for Preparation, Adoption, and Submittal of Implementation Plans"). The regulations are referenced in this document, some with overlapping provisions across subparts, and include the following:

- Subpart A – Air Emissions Reporting Requirements
- Subpart F – Procedural Requirements
- Subpart G – Control Strategy
- Subpart H – Prevention of Air Pollution Emergency Episodes

- Subpart I – Review of New Sources and Modifications
- Subpart J – Ambient Air Quality Surveillance
- Subpart K – Source Surveillance
- Subpart L – Legal Authority
- Subpart M – Intergovernmental Consultation
- Subpart O – Miscellaneous Plan Content Requirements
- Subpart P – Protection of Visibility
- Subpart Q – Reports

Once the air agency has made one or more infrastructure SIP submissions, the EPA will evaluate the submission(s) for completeness. The EPA's criteria for determining completeness of a SIP submission are codified at 40 CFR part 51 appendix V and are discussed in a later subsection of this guidance. An air agency's familiarity with the EPA's regulatory completeness criteria will benefit the air agency during the process of developing an approvable submission.

The EPA's review can be expedited if a SIP submission includes a detailed explanation of how the existing EPA-approved SIP in combination with any newly submitted provisions meets each of the applicable requirements of section 110(a)(2). The EPA expects the submissions to include a description of the correlation between each infrastructure element and an equivalent set of statutory, regulatory, and/or non-regulatory provisions, as appropriate, that are part of or (for some elements) are referred to by the existing SIP or the new submission. (Refer to section III for more detail on submission requirements for each individual element.) When an air agency's infrastructure SIP submission more clearly identifies the CAA element(s) being met by the SIP and how they are met, the EPA can more easily determine whether the submission is complete and approvable with respect to that element.

Certifications

Where an air agency determines that the provisions in or referred to by its existing EPA-approved SIP are adequate with respect to a given infrastructure SIP element (or subelement) even in light of the promulgation of a new or revised NAAQS, the air agency may make a SIP submission in the form of a certification. This type of infrastructure SIP submission may, *e.g.*,

take the form of a letter to the EPA from the Governor or her/his designee containing a "certification" (or declaration) that the already-approved SIP contains or references provisions that satisfy all or some of the requirements of section 110(a)(2), as applicable, for purposes of implementing the new or revised NAAQS. In such a case, the submission would not need to include a paper copy of the relevant pre-existing provisions (*e.g.*, rules or statutes).¹² Rather, the certification submission should provide citations to the state, local, or tribal statutes, regulations, or non-regulatory measures, as appropriate, in or referenced by the already EPA-approved SIP that meet particular infrastructure SIP element requirements and should include an explanation as to how those existing provisions meet the relevant requirements. The air agency should consult with its EPA Regional Office on the wording of this type of infrastructure SIP submission prior to making its submission. As for any other SIP submission, an air agency (unless the EPA has approved a request for parallel processing) would need to provide reasonable notice and

¹² In contrast, where an air agency's infrastructure SIP submission seeks the EPA's approval of or references a new provision (*e.g.*, a rule or statute) that has not already been approved, or submitted for approval, into the SIP, a complete SIP submission should include at least one hard copy and an exact duplicate electronic version of the adopted provisions (unless otherwise agreed to by the air agency and the Regional Office). Memorandum dated April 6, 2011, from Janet McCabe, titled "Regional Consistency for the Administrative Requirements of State Implementation Plans and the Use of Letter Notices." The EPA is investigating means to provide for states a method to transmit SIP submissions electronically with no requirement for paper copy submissions.

opportunity for comment prior to submitting a certification SIP submission to the EPA.¹³ This "reasonable notice and public hearing" requirement for approvable infrastructure SIP submissions appears at sections 110(a)(1) and the introductory text of section 110(a)(2), and it has much the same wording as the more generally applicable procedural requirement at section 110(l) of the CAA ("Plan Revisions"). *See* CAA sections 110(a)(1) and (2) and 110(l). Compliance with this procedural requirement is verified through an additional certification by the air agency that a public hearing (if one was requested) was held in accordance with the EPA's regulatory procedural requirements for public hearings.¹⁴ *See* [40 CFR 51.102](#) and [40 CFR part 51, appendix V](#), paragraph 2.1(g).

¹³ The EPA regulations at 40 CFR part 51 appendix V provide that a public hearing must always be offered and that a hearing must be held if requested. The EPA has received comment that when all of the elements in an existing infrastructure SIP were previously subject to a public comment process, including the opportunity for public hearing(s), when they were first submitted for the EPA's approval and incorporation into the SIP, no public comment requirements should apply to a "certification" infrastructure submission. The EPA believes this suggested interpretation is inconsistent with the plain text of section 110(a)(1) of the CAA. Section 110(a)(1) first provides that "[e]ach State shall, *after reasonable notice and public hearings*, adopt and submit to the Administrator, within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a [primary NAAQS] (or any revision thereof) ... a plan [*i.e.*, infrastructure SIP] which provides for implementation, maintenance, and enforcement of such primary standard." The clause "after reasonable notice and public hearings" is most naturally read as imposing that procedure on the immediately following phrase, "adopt and submit," the direct object of which is the infrastructure SIP itself. The suggested interpretation would instead apply the phrase "after reasonable notice and public hearings" to SIP revisions submitted before the promulgation of the new or revised primary NAAQS, despite the complete absence of a reference to those earlier SIP revisions in section 110(a)(1). Any possible residual ambiguity is removed by the last sentence of section 110(a)(1), which requires an infrastructure SIP for a secondary NAAQS to be considered (unless a separate public hearing is provided) "at the hearing required by the first sentence of this paragraph." The only possible interpretation of this sentence is that there must be an opportunity for public hearing for the infrastructure SIPs for both the primary and secondary NAAQS. This is a reasonable interpretation because it informs the public that the SIP is being revised and allows for comment as to whether the air agency's earlier approved regulations also satisfy the relevant obligation stemming from the promulgation of the new or revised NAAQS. Furthermore, the next footnote explains that the EPA has recently clarified procedures for providing notice and opportunity for comment that reduce the burden on air agencies while still assuring adequate notice to the public.

¹⁴ Additional guidance regarding how an air agency may submit a SIP or a SIP revision can be found in a memorandum dated April 6, 2011, from Janet McCabe, Deputy Assistant Administrator, Office of Air and Radiation, to Regional Administrators, titled "Regional Consistency for the Administrative Requirements of State Implementation Plans and the Use of 'Letter Notices'." Refer also to a memorandum dated Nov. 22, 2011, jointly from Janet McCabe, Deputy Assistant Administrator, Office of Air and Radiation, and Becky Weber, Director, Air and Waste Management Division, Region 7, to Air Division Directors, Regions 1-10, titled "Guidelines for Preparing Letters Submitting State Implementation Plans (SIPs) to EPA and for Preparing Public Notices for SIPs." These guidance memos identify certain streamlining approaches that are available to an air agency, depending on the situation.

As with any SIP submission, the EPA's review can be expedited if a SIP certification submission includes a detailed explanation of how the existing SIP meets each of the applicable requirements of section 110(a)(2). This should include a description of the correlation between each infrastructure element and an equivalent set of statutory, regulatory, and/or non-regulatory provisions, as appropriate, that are part of or are referenced by the existing SIP. When an air agency's infrastructure certification submission more clearly identifies the CAA element(s) being met by the SIP and how they are met, the EPA can more easily determine whether the submission is complete and approvable with respect to that element.

Determining Completeness of an Infrastructure SIP Submission

Section 110(k)(2) directs the EPA to take final action on a SIP submission within 1 year after the submission is determined to be complete under section 110(k)(1). If the EPA makes an affirmative finding that a SIP submission is complete, the date of the finding establishes the "completeness date" for the submission. If, however, the EPA makes no affirmative completeness finding, then the submission is deemed complete by operation of law on the date 6 months after the submission date. A finding that an infrastructure SIP submission is complete does not necessarily mean that the submission is approvable; the completeness review only addresses whether the air agency has provided information sufficient to commence formal EPA review for approvability. Refer to [40 CFR part 51 appendix V \("Criteria for Determining the Completeness of Plan Submissions"\)](#).

Historically, when reviewing infrastructure SIP submissions, the EPA has operated on the basis that the elements and sub-elements of section 110(a)(2) for a given NAAQS are, for the most part, severable.¹⁵ The EPA may elect to make a finding of failure to submit in whole or in part, based upon whether a state has made a complete infrastructure SIP submission for the relevant elements of section 110(a)(2). For a state that has not made any infrastructure SIP

¹⁵ See, e.g., [76 FR 81371 \(December 28, 2011\)](#), "Approval and Promulgation of Implementation Plans; Texas; Infrastructure and Interstate Transport Requirements for the 1997 Ozone and the 1997 and 2006 PM_{2.5} NAAQS, Final Rule," where the EPA approved severable portions of infrastructure SIP revisions submitted by Texas.

submission, the EPA generally will make a finding with respect to all of the relevant elements.¹⁶ For a state that has made a SIP submission but whose submission is incomplete for some of the relevant elements, the EPA generally will issue a finding of failure to submit only with respect to those elements. This separation makes clear what mandatory EPA duty subsequently exists with respect to each element or subelement. If the EPA has made separate findings as to the completeness of submissions for two or more elements (and sub-elements), the 12-month statutory deadline for EPA action to approve or disapprove the elements for which the air agency has made a complete submission and the 24-month statutory deadline for EPA action to promulgate FIPs for incomplete elements would apply separately. The EPA intends to continue its practice of acting on infrastructure SIP elements together or separately, as appropriate.

Any SIP submission is deemed by operation of law to be complete six months after submission, unless the EPA has before that date made an affirmative finding that the submission is complete or incomplete. Any inconsistency between the scope of the submission as described in the pre-submission public notice of the SIP submission and the actual submission, or between the description of the scope of the submission in the transmittal letter to the EPA and the actual substantive coverage of the submission can create ambiguity as to which infrastructure SIP elements in fact have been submitted and thus are capable of becoming complete by operation of law (and triggering a deadline for the EPA's action) and which have in fact not yet been submitted.¹⁷ To provide clarity for all parties, air agencies should be very clear and accurate in the wording of their public notices and transmittal letters. It is also advisable for the air agency to discuss this wording with its EPA Regional Office before submission. On its part, an EPA Regional Office, in receipt of a submission with any inconsistencies of the type described, should consider steps it can take or ask the air agency to take prior to the six-month point in order to avoid the creation of ambiguity or an incorrect result as to which SIP elements have actually

¹⁶ Under the TAR, a tribe is not subject to deadlines for certain planning requirements (including submission of infrastructure SIPs). *See* 63 FR 7254 (Feb. 12, 1998) for more information.

¹⁷ The EPA's experience is that the existence of a FIP for PSD or regional haze may increase the risk of such inconsistencies occurring inadvertently. FIP-related aspects are discussed in more detail in the next section of this guidance.

been submitted and are complete and consequently subject to a statutory deadline for the EPA action.

Section 2.3 of 40 CFR part 51 appendix V waives certain completeness requirements if the EPA has granted an air agency request for parallel processing of the submission. Under the parallel processing approach, the EPA proposes to approve a draft SIP submission so that final approval can be given more quickly after the final adoption of any new measures as state, local, or tribal law and conclusion of the public comment process normally required for any SIP submission. The EPA intends to grant requests for parallel processing of infrastructure SIP submissions if (1) the only missing elements of completeness are final state adoption of rules or other provisions and/or conclusion of the public comment process for the SIP submission, including evidence thereof as specified in section 2.3 of appendix V, and (2) the schedule provided by the air agency for the conclusion of the adoption process and/or the public comment process for the SIP submission is reasonably expeditious.¹⁸ In such a case, the EPA generally would also either make a finding of completeness for the submission or allow it to become complete by operation of law. If both these conditions are not met, the EPA will not grant the parallel processing request. However, the EPA generally will not make a finding of failure to submit a complete SIP but may be required to do so if under a court order.

Effect of a Federal Implementation Plan on an Infrastructure SIP

The CAA directs states to submit SIPs to the EPA for approval. In some cases, and for various reasons, the EPA may have previously determined that an air agency had not satisfied a SIP requirement, and so accordingly promulgated a FIP to address the gap in the SIP. The infrastructure SIP process can be affected when an air agency is currently subject to a FIP that is related to an infrastructure SIP element. Therefore, this section describes the potential impact of pre-existing FIPs on the infrastructure SIP process. This explanation is relevant not only for air

¹⁸ With regard to the 1992 EPA Memorandum from John Calcagni, Air Quality Management Division, OAQPS, to EPA Air Division Directors, Regions I through X, "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (Act) Deadlines," October 29, 1992, note that the EPA no longer considers the section titled "Requests for Parallel Process to Meet Act Deadlines" to be its guidance for infrastructure SIPs that are submitted with requests for parallel processing.

agencies that currently have a FIP in effect but also for air agencies that may be subject to a FIP in the future.

The EPA's obligation to promulgate a FIP is set out in section 110(c) of the CAA. A FIP may be triggered if the EPA takes any of the following actions: (1) the EPA finds that a state has failed to make a required SIP submission; (2) the EPA finds that a required submission was incomplete; or (3) the EPA disapproves a required SIP submission in whole or in part. If the EPA takes one of these actions, section 110(c) obligates the EPA to promulgate a FIP within 2 years of the action, a deadline that is commonly referred to as a "FIP clock." In order to remove the EPA's FIP obligation, the state must make a SIP submission that meets the applicable CAA requirements and is approved by the EPA prior to the EPA's promulgation of a FIP. Whenever the EPA promulgates a FIP for a state air agency, the FIP rulemaking will identify the specific CAA provisions that required the promulgation of the FIP, and the FIP will be codified in the appropriate section of 40 CFR part 52.

Under the TAR, a tribe is not subject to deadlines for planning requirements (including submission of infrastructure SIPs).¹⁹ In general, the concept of failure to submit a complete implementation plan does not apply in tribal situations, and there is no FIP clock started if a tribe has not submitted an infrastructure TIP. Under the TAR, in the absence of an approved tribal implementation plan the EPA will promulgate a FIP for one or more infrastructure SIP elements when and if it is necessary and appropriate to do so. For example, the EPA has promulgated new source review FIPs to govern permitting of sources in Indian country.

If the EPA has promulgated a FIP, then this means that the EPA has previously determined that the air agency's SIP did not meet some CAA requirement as of the date of promulgation of that FIP. While the intent and effect of the FIP is to achieve the same air quality protection as the SIP should have achieved, it is the EPA's interpretation of sections 110(a)(1) and 110(a)(2) that the EPA cannot give "credit" for the FIP when determining whether an air agency has met any later obligations under these sections.

¹⁹ See 63 FR 7254 (February 12, 1998) for more information on the TAR.

As an example of a FIP that affects the infrastructure SIP submission process, we note that, for various reasons, several states do not have EPA-approved major source preconstruction permit programs in their SIPs for prevention of significant deterioration (PSD) as required by part C of title I of the CAA. The EPA has promulgated a set of PSD rules which establish authority for the EPA (or an air agency to which the EPA has delegated authority to administer the federal PSD program)²⁰ to issue preconstruction permits to major stationary sources in any area not covered by a PSD program in a SIP.²¹ The EPA has also promulgated FIPs for each area without a SIP-approved PSD program, indicating that this set of federal PSD rules applies in that area.²² Such a PSD FIP may be relevant to infrastructure Element C, Element J, Element D(i)(II), and the portion of Element D(ii) related to notification to other states. As another example, the EPA has promulgated full or partial FIPs to address reasonably attributable visibility impairment (RAVI) and regional haze for some air agencies.²³ A RAVI FIP or a regional haze FIP may be relevant to Element D(i)(II). These linkages are further discussed in the section pertaining to each of these elements.

The infrastructure SIP process will vary to some extent depending on whether or not the air agency's SIP submission purports to, and actually does, satisfy infrastructure SIP requirements that are currently being met by means of a FIP, as explained in the following paragraphs.

Consider an air agency that is currently subject to a FIP that is relevant to certain infrastructure SIP elements makes a submission and states in a general way in the transmittal letter that the submission satisfies all elements of CAA section 110(a)(2), or if it specifically states that the submission satisfies the elements to which the FIP is relevant, the EPA would

²⁰ The EPA is planning on extending the opportunity for delegation of new source review permitting to qualified tribes.

²¹ See [40 CFR 52.21](#); Prevention of Significant Deterioration of Air Quality.

²² See, e.g., [40 CFR 52.738](#) for the PSD program applicable to sources in Illinois.

²³ Some of these regional haze FIPs relied on the Cross-State Air Pollution Rule (CSAPR), which was subsequently vacated by the U.S. Court Appeals for the D.C. Circuit. *EME Homer City Generation, L.L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012). The Supreme Court has accepted the EPA's petition for it to review the D.C. Circuit's decision. Air agencies should consult with their EPA Regional Offices regarding the current status of this litigation and the implications if any for infrastructure SIP submissions.

evaluate whether the submission, in fact, contains existing or new substantive provisions to address the section 110(a)(2) requirement presently covered by the FIP. If the submission does not substantively address the elements or sub-elements presently covered by the FIP, then the EPA Regional Office should encourage the air agency to clarify its intentions as to which elements have been submitted. The air agency might then clarify that it has made no submission for certain elements, in which case the EPA would not make a finding of complete submission for those elements and those elements could not become complete by operation of law. (The EPA may make a finding of failure to submit for those elements.) In the absence of such a clarification, the EPA Regional Office should determine that the air agency has failed to make a complete submission for those elements. Such a finding generally would create an obligation for the EPA to adopt a FIP within 24 months. However, based on the PSD FIP example and to the extent that the SIP deficiency is addressed by continuing to implement the existing PSD FIP, the EPA would have no additional FIP obligation under section 110(c) and the air agency would not have to take any further action for the current FIP-based permitting process to continue operating. Mandatory sanctions would not apply under CAA section 179 because such a finding of failure to submit a complete SIP was made neither with respect to a submission that is required under CAA title I part D nor in response to a SIP call under CAA section 110(k)(5).

To provide further clarity, consider how the following three scenarios may prompt differing EPA actions.

First scenario. Under this scenario, the transmittal letter for the infrastructure SIP submission makes clear that the submission is not intended to satisfy certain elements that can be addressed by continuing to apply the FIP. In this situation, the EPA would make a completeness finding that extends only to the SIP elements actually submitted by the air agency, and a finding that other relevant applicable elements were not submitted.²⁴ The EPA would be required to take action only on the elements that were submitted, within 12 months after those elements have been determined to be complete. The overall infrastructure SIP would not be approvable with

²⁴ If, instead, the submission that clearly addressed only some required elements has become complete at the 6-month point by operation of law, the EPA would still consider the air agency to not have made a complete submission for the missing elements.

respect to the elements that were not submitted, and thus the EPA could only partially approve the overall infrastructure SIP.²⁵

Second scenario. Under the second scenario, suppose the air agency makes a SIP submission that references the existence of a PSD FIP and asserts that the existence of the FIP is a sufficient basis for EPA approval of the submission with respect to these elements. The EPA would not consider the existence of the PSD FIP, even if referenced in the submission, as meeting completeness or approvability criteria for these elements. This is because a FIP is not a state plan and thus cannot serve to satisfy the state's obligation to submit a SIP. The EPA's action on the SIP submission would indicate that the air agency has not met the underlying statutory obligations in section 110(a)(2) with respect to Elements C and J. However, when the SIP deficiency is being addressed by the existing PSD FIP, the EPA would have no additional FIP obligation under section 110(c) and the state would not have to take any further action for the current FIP-based permitting process to continue operating. In this example, the EPA may be able to approve a state-developed SIP later, if the air agency develops and submits a SIP meeting all statutory and regulatory requirements relevant to Elements C and J.

Third scenario. Under this scenario, the transmittal letter for the infrastructure SIP submission explicitly or implicitly indicates that the submission is intended to satisfy all required elements (including the elements that may be addressed by continuing to apply the existing PSD FIP), and the 6-month point has passed without any clarification by the air agency or any finding by the EPA Regional Office regarding completeness. In this situation, the EPA will generally treat the submission as having been intended to address all the required elements and to be complete for all elements. The 12-month clock for EPA action on the submission would apply to all elements and the EPA would proceed to disapprove the submission for the same elements with respect to the subject NAAQS that were previously addressed in the context of earlier NAAQS by the FIP. However, similar to the first scenario in which the SIP deficiency has

²⁵ *Note:* Because an infrastructure SIP is not a required plan submission under part D of title I of the CAA, disapproval of (or a finding of failure to submit) an infrastructure SIP or element thereof does not trigger mandatory sanctions under CAA section 179, unless the submission was required in response to a SIP call under section 110(k)(5) of the CAA.

already been addressed, to the extent that the existing FIP addresses the deficiency, the EPA would have no additional FIP obligation under section 110(c) and the state would not have to take any further action for the current FIP-based permitting process to continue operations. As in the first scenario, the EPA may be able to approve a state-developed SIP later, if the air agency develops and submits a SIP meeting all statutory and regulatory requirements relevant to Elements C and J.

For some state air agencies and some sources in Indian country, there are RAVI or regional haze FIPs in place that may be relevant to the subelement of Element D(i)(II) related to interference with measures by another state to protect visibility. This subelement is sometimes referred to as the “visibility transport” prong or simply, as “prong 4.” While fully approved RAVI and regional haze SIPs can be relied upon in satisfying this subelement, as explained later in this document, it may be possible in some cases for the element to be satisfied even if there is a FIP in place. Air agencies in this situation should read the section on Element D(i)(II) and consult with their respective EPA Regional Offices on this aspect of their infrastructure SIP submission.

If a new submission in fact does address the substance of the element or subelement covered by a FIP, the EPA would review the submission and may approve the infrastructure SIP. The EPA may also withdraw the FIP that had been addressing that element or subelement for previous NAAQS, if all relevant CAA requirements are met by the SIP.

III. Guidance on Individual Infrastructure SIP Elements

The EPA interprets section 110(a)(1) and section 110(a)(2) to require infrastructure SIP submissions to meet the elements of section 110(a)(2), as applicable. As described in section II, the EPA interprets the portion of section 110(a)(2)(C) that pertains to a permitting program that applies to nonattainment NSR within nonattainment areas, and the requirements of section 110(a)(2)(I) that pertain to the specific requirements for attainment plans for designated nonattainment areas, to be outside the scope of the infrastructure SIP requirements because of the separate statutory schedules for area designations and submission of attainment plans provided elsewhere in the CAA. With respect to the remaining elements of section 110(a)(2), subsections (A) through (M), the CAA imposes an obligation on states to address those elements, as appropriate, within the 3-year infrastructure SIP submission deadline. This section provides recommendations to air agencies about how to make infrastructure SIP submissions to meet these remaining relevant elements, as applicable.

Element A – Section 110(a)(2)(A): Emission Limits and Other Control Measures

Each such plan shall –

(A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Chapter.

To satisfy Element A, an air agency's submission should identify existing EPA-approved SIP provisions or new SIP provisions that the air agency has adopted and submitted for EPA approval that limit emissions of pollutants relevant to the subject NAAQS, including precursors of the relevant NAAQS pollutant where applicable. Emissions limitations and other control measures needed to attain the NAAQS in areas designated nonattainment for that NAAQS will be due on a different schedule from the section 110 infrastructure elements and will be reviewed and acted upon with regard to approvability for the specific purposes of such an attainment plan under CAA title I part D through a separate process at a later time. *See* "Which elements of CAA

110(a)(2) affect infrastructure SIPs?" in section II of this guidance for additional discussion of this distinction.

There are two issues that relate to Element A for which we are providing general guidance. These are whether air agencies would need to correct the following in order for the EPA to approve their infrastructure SIP submissions: (1) previously approved emissions limitations that may treat startup, shutdown, and malfunction (SSM) events inconsistently with the CAA as interpreted by our longstanding guidance on excess emissions (the EPA's SSM Policy) and more recently by multiple courts; and (2) previously approved SIP provisions for "director's variance" or "director's discretion" that purport to allow revisions to or exemptions from SIP emission limitations with limited public process or without requiring further approval by the EPA.²⁶ The guidance provided here is consistent with the EPA interpretations articulated in provisions in several recent EPA final actions on SIPs.^{27, 28}

In recent infrastructure SIP actions, the EPA has drawn an important distinction with respect to SSM issues and director's discretion issues in this particular context. The EPA does not interpret section 110(a)(2) to require air agencies and the EPA to address potentially deficient

²⁶ For further description of EPA's SSM Policy, *see, e.g.*, a memorandum dated September 20, 1999, titled, "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown," from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Robert Perciasepe, Assistant Administrator for Air and Radiation. Also, the EPA issued a proposed action on February 12, 2013, titled "State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction." This rulemaking responds to a petition for rulemaking filed by the Sierra Club that concerns SSM provisions in 39 states' SIPs. It clarifies and restates the EPA's SSM SIP policy.

²⁷ *See, e.g.*, a SIP call issued to Utah (72 FR 21639, Apr. 18, 2010) concerning treatment of malfunction events under Utah's "unavoidable breakdown rule" (UBR). The EPA determined that Utah's SIP was substantially inadequate because its UBR allowed operators of CAA-regulated facilities to avoid enforcement actions when they suffer an unexpected and unavoidable equipment malfunction. In this SIP call, the EPA called on Utah to promulgate a new UBR that conforms to the EPA's interpretation of the CAA. Litigants maintained that the SIP call was arbitrary and capricious and asked the Tenth Circuit Court to vacate it. The Court denied the petition for review of the Utah SIP call. *U.S. Magnesium, LLC v. EPA*, U.S. Court of Appeals, No. 09-1269, January 14, 2011.

²⁸ As another example that presents the EPA's position on infrastructure SIPs with respect to this issue, *see* the preamble language in the final rule published in the *Federal Register* on [July 13, 2011 \(76 FR 41075\)](#), "Approval and Promulgation of Air Quality Implementation Plans; Illinois; Indiana; Michigan; Minnesota; Ohio; Wisconsin; Infrastructure SIP Requirements for the 1997 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards." In section II of the preamble, the EPA described at length the position summarized in this guidance regarding existing provisions related to excess emissions during periods of SSM and existing provisions related to "director's variance" or "director's discretion."

pre-existing SIP provisions of these types in the context of acting on an infrastructure SIP submission. The EPA considers this a reasonable interpretation of the CAA in such a context. The EPA notes that it has alternative tools in the CAA to address existing SIP deficiencies of this type, in appropriate circumstances.

However, any “new” provisions in the infrastructure SIP submission that are relevant to SSM (*e.g.*, any newly created enforcement discretion provisions, affirmative defense provisions, or special emissions limitations that apply during SSM periods but that have not already been approved by the EPA) should be consistent with the EPA’s policy on what types of SSM provisions are permissible in SIPs under the CAA. For instance, new provisions as part of an approvable SIP submission cannot allow an air director the discretion to determine whether an instance of excess emissions is a violation of an emission limitation, because such a determination could bar the EPA and citizens from enforcing applicable requirements. Similarly, new provisions in a SIP for the exercise of enforcement discretion with regard to SSM events may only apply to state or tribal government personnel so that they do not limit enforcement by the EPA or citizens. Excess emissions, including those occurring during SSM periods, might prevent attainment and maintenance of the NAAQS and compliance with other applicable CAA requirements. The EPA views all periods of excess emissions as violations of the applicable emission limitation. Therefore, if an infrastructure SIP contains provisions that have not already been approved by the EPA, and that impermissibly exempt from enforcement excess emissions that may occur at a facility during SSM periods or that otherwise are inconsistent with the EPA’s interpretation of the CAA as outlined in its SSM Policy, the EPA will not propose to fully approve the submission as meeting section 110(a)(1) and (2) requirements.

With regard to “director’s discretion” to revise emission limits, any “new” provisions in the infrastructure SIP submission (*i.e.*, provisions that have not already been approved by the EPA) should be consistent with the EPA’s interpretation of the CAA as expressed in its policy regarding director’s discretion.²⁹

²⁹ See 77 FR 34309 and 34311 (June 11, 2012). “Approval and Promulgation of Implementation Plans; Tennessee; 110(a)(1) and (2) Infrastructure Requirements for the 1997 Annual and 2006 24-Hour Fine Particulate National Ambient Air Quality Standards, Proposed Rule.”

The EPA will continue to consider for approval, as it has in recent final SIP actions,³⁰ SIPs that provide for a limited affirmative defense to civil penalties for excess emissions occurring during properly demonstrated and documented malfunction periods.

In summary, the EPA in recent final actions on infrastructure SIP submissions has maintained that the CAA does not require that new infrastructure SIP submissions address *existing* potentially inadequate provisions concerning SSM or director's discretion in order to be approved as meeting the CAA section 110(a)(1) and (2) requirements triggered by the new or revised NAAQS. The EPA's stated position has been that it can approve an infrastructure SIP submission, even if the infrastructure SIP may incorporate by reference previously approved SIP provisions that are or may not be consistent with the EPA's SSM Policy and its policy on director's discretion to revise emission limits. The EPA articulated this position in a number of infrastructure SIP actions taken in 2011, noting in the preambles for those actions that existing provisions for SSM and director's discretion may be dealt with separately, outside the context of acting on an air agency's new infrastructure SIP submission.³¹ However, if an air agency submits an infrastructure SIP submission that would create a *new* SIP provision related to SSM that is inconsistent with the EPA's interpretation of the requirements of the CAA, the EPA may disapprove it. We intend to continue this practice and affirm it as part of this guidance.

³⁰ See [75 FR 68989 at 68992 \(November 10, 2010\)](#), "Approval and Promulgation of Implementation Plans; Texas: Excess Emissions During Startup, Shutdown, Maintenance, and Malfunction Activities." In *Luminant Generation Co. v. EPA*, No. 10-60934, 2012 WL 4841615 (5th Cir. 2012), the Court upheld the EPA's approval of an affirmative defense for malfunctions and disapproval of an affirmative defense provision in a SIP submission that pertained to "planned activities," which included startup, shutdown, and maintenance. The EPA disapproved this provision, in part because it provided an affirmative defense for maintenance. The Court rejected challenges to the EPA's disapproval of this provision, holding that under *Chevron* step 2, the EPA's interpretation of the CAA was reasonable. See also the *Federal Register* notice signed on February 12, 2013, restating the EPA's policy on affirmative defense provisions and proposing 36 SIP calls to correct affirmative defense and other SSM-related SIP provisions.

³¹ As one example of preamble language that presents the EPA's position on infrastructure SIPs with respect to this issue, see the final rule published in the *Federal Register* on July 13, 2011 (76 FR 41075), "Approval and Promulgation of Air Quality Implementation Plans; Illinois; Indiana; Michigan; Minnesota; Ohio; Wisconsin; Infrastructure SIP Requirements for the 1997 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards." In section II of the preamble, the EPA described at length the position summarized here regarding existing provisions related to excess emissions during periods of SSM and existing provisions related to "director's variance" or "director's discretion."

Element B – Section 110(a)(2)(B): Ambient Air Quality Monitoring/Data System

Each such plan shall –

(B) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to –

- (i) monitor, compile, and analyze data on ambient air quality, and*
- (ii) upon request, make such data available to the Administrator.*

To meet Element B requirements, the best practice for an air agency submitting an infrastructure SIP would be to submit, for inclusion into the SIP (if not already part of the SIP), the statutory or regulatory provisions that provide the air agency or official with the authority and responsibility to perform the actions listed in the bullets below along with a narrative explanation of how the provisions meet the requirements of this element.³²

- Monitor air quality for the relevant NAAQS pollutant(s) at appropriate locations in accordance with the EPA's ambient air quality monitoring network requirements. *See the EPA's Ambient Monitoring Technology Information Center (AMTIC) website, 40 CFR part 53 ("Ambient Air Monitoring Reference and Equivalent Methods"), and 40 CFR part 58 ("Ambient Air Quality Surveillance"). See also 40 CFR 51.190 (referencing 40 CFR part 58).*³³
- Submit data to the EPA's Air Quality System (AQS) in a timely manner in accordance with 40 CFR part 58. Under 40 CFR part 58, subpart B ("Monitoring Network"), for example, *see 40 CFR 58.16 ("Data submittal and archiving requirements").*
- Provide to the EPA Regional Office information regarding air quality monitoring activities, including a description of how the air agency has complied with monitoring requirements, and an explanation of any proposed changes to the network.

³² The EPA recognizes that some air agencies may have general authorizing provisions that do not specifically enumerate specific activities but do implicitly authorize the air agency to perform such activities, in which case inclusion of those provisions would meet the intent of this best practice.

³³ Note that despite the recent reorganization of 40 CFR part 58 without a corresponding conforming update of the cross-reference to part 58 in 40 CFR 51.190, all requirements under part 58 must still be met.

Submission of annual monitoring network plans consistent with the EPA's ambient air monitoring regulations is one way of providing this information. Under 40 CFR part 58, subpart B, *see, e.g.*, [40 CFR 58.10](#) ("Annual monitoring network plan and periodic network assessment").

- Obtain the EPA's approval of any planned changes to monitoring sites or to the network plan, consistent with applicable requirements in [40 CFR 58.14](#) ("System Modification").

If an air agency chooses not to include the relevant statute or regulation in its SIP, then the air agency should provide a reference or citation to the authority provisions along with a narrative explanation of how the provisions meet the requirements of this element, as well as a copy of the relevant authority to accompany the SIP as required by 40 CFR 51.231.

For any new or revised NAAQS, the infrastructure SIP submission should provide assurance that the state will meet changes in monitoring requirements related to the new or revised NAAQS.

Element C – Section 110(a)(2)(C): Programs for Enforcement of Control Measures and for Construction or Modification of Stationary Sources.

Each such plan shall –

(C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this Subchapter.

This element consists of three sub-elements; enforcement, state-wide regulation of new and modified minor sources and minor modifications of major sources; and preconstruction permitting of major sources and major modifications in areas designated attainment or unclassifiable for the subject NAAQS as required by CAA title I part C (*i.e.*, the major source

PSD program).^{34,35} While this section outlines the general requirements for approvability of an infrastructure SIP with respect to Element C, air agencies previously subject to FIPs with respect to this element for major source PSD in the context of earlier NAAQS have the option, as discussed in more detail below and in Section II: “Which elements of CAA 110(a)(2) affect infrastructure SIPs?”, to remain subject to those FIPs as the remedy for infrastructure SIP deficiencies for a new or revised NAAQS.

Enforcement: To satisfy this subelement, an infrastructure SIP submission should identify the statutes, regulations, or other provisions in the existing SIP (or new provisions that are submitted as part of the infrastructure SIP to be incorporated into the SIP) that provide for enforcement of those emission limits and control measures that the air agency has identified in its submission for purposes of satisfying Element A (Emissions limits and other control measures).

Regulation of minor sources and minor modifications: To satisfy the subelement for pre-construction regulation of the modification and construction of minor stationary sources and the minor modification of major stationary sources, an infrastructure SIP submission should identify the existing EPA-approved SIP provisions and/or include new provisions that govern the minor source pre-construction program that regulates emissions of the relevant NAAQS pollutant(s). The EPA rules addressing SIP requirements for pre-construction regulatory programs that apply to minor sources and minor modifications are at [40 CFR sections 51.160 through 51.164](#).

³⁴ The terms "major" and "minor" categorize a stationary source or a modification of a stationary source, for NSR applicability purposes, in terms of an annual emissions rate (tons per year) or change in annual emission rate for a pollutant. The pre-construction minor NSR program generally applies to minor stationary sources and minor modification projects at major stationary sources. A major “stationary source” is defined in the applicable PSD or nonattainment NSR regulations. Some air agencies exempt small minor sources and modifications from pre-construction regulatory requirements.

³⁵ As explained in section II of this document, the EPA considers evaluation of permit provisions that implement CAA title I part D (the major source nonattainment NSR program) to generally be outside the scope of infrastructure SIP actions. Hence, to address the sub-element regarding major source permitting, only the major source permitting program applicable in areas designated attainment or unclassifiable is an issue. In contrast, because part D does not impose any special requirements for permitting of minor sources in nonattainment areas, the infrastructure SIP due 3 years after a new or revised NAAQS should address Element C with regard to minor sources in unclassifiable, attainment, and nonattainment areas, without regard to designation.

Preconstruction PSD permitting of major sources:³⁶ To satisfy the subelement regarding the PSD program required by CAA title I part C, an infrastructure SIP submission should demonstrate that one or more air agencies has the authority to implement a comprehensive PSD permit program under CAA title I part C, for all PSD-subject sources located in areas that are designated attainment or unclassifiable for one or more NAAQS. The infrastructure SIP submission should also identify the existing SIP provisions that govern the major source PSD program. As explained in more detail below, to be approvable the infrastructure SIP submission should also address any new or revised PSD permitting program requirements for which the deadline for SIP submissions has passed as of the date of EPA's proposed action on the infrastructure submission.

The SIP permitting provisions that implement CAA title I part C (the PSD program) govern preconstruction review and permitting of any new or modified major stationary sources of air pollutants regulated under the CAA (as well as any precursors to the formation of those pollutants when identified for regulation by the Administrator) in areas designated as attainment or unclassifiable. The EPA rules providing the minimum requirements for approvable PSD programs can be found generally at [40 CFR 51.166](#) (general provisions for PSD programs approved in SIPs) and [40 CFR 51.307](#) (specific provisions pertaining to new source review for potential impacts on air quality related values in Class I areas).

The EPA interprets Element C to mean that each infrastructure SIP submission for a particular NAAQS would need to demonstrate that the air agency has a complete PSD permitting program in place covering the requirements for all regulated NSR pollutants, including greenhouse gases (GHG), in order to demonstrate that the SIP meets Element C.³⁷

Element C requires that each infrastructure SIP contain a permitting program "as required by part C." CAA title I part C is applicable to all pollutants subject to regulation under the CAA. *See, e.g.*, CAA section 165(a)(4). There is no specific language in the last clause of Element C

³⁶ The discussion here of the PSD portion of Element C also applies in full to the PSD portion of Element J.

³⁷ *See, e.g.*, [77 FR 64737 \(October 23, 2012\)](#), "Partial Approval and Partial Disapproval of Air Quality State Implementation Plans; Nevada; Infrastructure Requirements for Ozone and Fine Particulate Matter."

that restricts its application to only those provisions of CAA title I part C that pertain to the particular new or revised NAAQS addressed by the particular infrastructure SIP action. Because the scope of CAA title I part C is comprehensive (covering all pollutants subject to regulation under the CAA, including GHG), the EPA likewise reads the unrestricted reference to CAA title I part C in Element C to mean that this provision has the same scope as CAA title I part C itself. Thus, an infrastructure SIP submission for any one of the recently revised NAAQS must be “comprehensive” in that it would need to meet all CAA title I part C requirements for other regulated NSR pollutants as well.

The broad scope of Element C with respect to major source PSD permitting raises the question of how the EPA will proceed when the timing of requirements for multiple, related SIP submissions (*e.g.*, for mandatory PSD SIP revisions) impacts the ability of the air agency and the EPA to address certain substantive issues in the infrastructure SIP submission in a reasonable fashion. It is appropriate for the EPA to take into consideration the timing of related requirements for SIP submissions in determining what an air agency can reasonably be expected to have addressed in an infrastructure SIP submission for a NAAQS at the time when the EPA acts on such submission. The EPA does not consider it reasonable to interpret Element C to require the EPA to propose to disapprove an air agency’s infrastructure SIP submission because the air agency had not submitted a PSD permitting program revision that was not yet due as of the date of EPA’s proposed action. Because it would be unreasonable to propose such a disapproval, the EPA likewise does not consider it reasonable to take final disapproval action under such circumstances. In other words, the EPA interprets these CAA sections to allow the EPA to approve an infrastructure SIP submission for the major source PSD permitting subelement of Element C (and Element J) provided that the EPA has already approved or is simultaneously approving the air agency’s SIP submission(s)³⁸ with respect to all structural PSD permitting program revision requirements that were due under the EPA regulations or the CAA on or before the date of the EPA’s proposed action on the infrastructure SIP submission. To adopt a different approach, by which the EPA could not act on an infrastructure SIP or at least

³⁸ These submissions may be submitted separately or together with the infrastructure SIP submission on which the EPA is proposing action.

could not approve an infrastructure SIP whenever there was any impending revision to the PSD permitting program regulations required by another collateral rulemaking action, would result in regulatory gridlock and make it impracticable or impossible for the EPA to act on infrastructure SIPs if the EPA had recently revised its PSD permitting regulations but the submission required by such revisions was not yet due. The EPA believes that such an outcome would be an unreasonable reading of the statutory process for the infrastructure SIPs contemplated in sections 110(a)(1) and (2).

Consequently, the EPA generally plans to proceed as follows. The EPA may propose to approve an infrastructure SIP submission with respect to the major source PSD permitting subelement of Element C if the air agency has submitted, in a timely manner, all structural PSD permitting program provisions for which the SIP submission deadline has passed as of the date of the proposed approval.³⁹ Subject to consideration of public comments on the proposed action, the EPA believes it may proceed to fully approve an infrastructure submission with respect to Element C if all such structural PSD permitting program submissions have been or are being simultaneously fully approved into the SIP. The EPA does not intend to treat any structural PSD permitting program requirement for which the SIP submission deadline falls *after* the date of the EPA's proposed action on the infrastructure SIP as a required criterion for approval of the infrastructure SIP. The PSD permitting program revisions treated in this manner may include not only those related to the new or revised NAAQS whose promulgation has triggered the need for a new infrastructure SIP submission but also those related to any other regulated NSR pollutants as required by CAA title I part C and 40 CFR part 51.166.⁴⁰

If an air agency lacks a PSD permitting program in its existing EPA-approved SIP addressing all regulated NSR pollutants, and it is already subject to a FIP, then major stationary

³⁹ Structural PSD program provisions include provisions necessary for the PSD program to address all regulated sources and NSR pollutants, including GHG. Structural PSD program provisions do not include provisions which under 40 CFR 51.166 are at the option of the air agency, such as the option for air agencies to provide grandfathering of complete permit applications with respect to the 2012 PM_{2.5} NAAQS.

⁴⁰ See, e.g., "Approval and Promulgation of Implementation Plans; Mississippi: New Source Review – Prevention of Significant Deterioration; Fine Particulate Matter (PM_{2.5}) National Ambient Air Quality Standards," [77 FR 59095 \(September 26, 2012\)](#), a recent infrastructure SIP approval action that addressed a state's PSD SIP status with respect to the 2008 PM_{2.5} NSR Rule.

sources within its jurisdiction are subject to the federal PSD permitting requirements in [40 CFR 52.21](#). Some air agencies are subject to a FIP for PSD permitting of all regulated NSR pollutants, and fewer air agencies are subject to a FIP for PSD permitting that is limited to particular pollutants (such as GHG). For sources subject to a pre-existing FIP for PSD permitting, either the EPA Regional Office issues PSD permits or, in instances where federal authority is delegated by the EPA Regional Office to it, the state or local air agency issues the PSD permits under the FIP (and tribes might be delegated in the same manner in the future). The EPA recognizes that some states have indicated a preference to operate under an EPA-administered PSD permitting program. Many air agencies have for some time been delegated the authority to implement a PSD FIP program. Other states have implemented their SIP-approved PSD permitting program. When an area is already subject to a FIP for PSD permitting (whether or not a state, local, or tribal air agency has been delegated federal authority to implement the PSD FIP), the air agency may choose to continue to rely on the PSD FIP to have permits issued pursuant to the FIP. If so, the EPA could not fully approve the infrastructure SIP submission with respect to Element C; however, the EPA anticipates that there would be no adverse consequences to the air agency or to sources from this lack of full approval of the infrastructure SIP. Mandatory sanctions would not apply under CAA section 179 because the failure to submit a PSD SIP is neither with respect to a submission that is required under CAA title I part D, nor in response to a SIP call under CAA section 110(k)(5). This relationship between a pre-existing FIP and the EPA's action on an infrastructure SIP element is also explained in section II of this document.

The EPA has maintained that the CAA allows the EPA to approve infrastructure SIP submissions that do not implement the NSR Reform Rules promulgated mainly in 2002.⁴¹ We articulated this position in a number of infrastructure SIP final actions taken in 2011, noting in the preambles for those actions that existing SIP provisions for PSD programs that have not

⁴¹ The NSR rules have undergone a series of improvements over many years. Significant reforms were promulgated in a rulemaking commonly referred to as the "2002 NSR Reform Rules," which were published in the *Federal Register* at 67 FR 80186 (December 31, 2002).

addressed the NSR Reform Rules may be dealt with separately, outside the context of acting on a state's infrastructure SIP.⁴²

Air agencies may wish to reduce the need to amend their major source PSD rules after each new or revised NAAQS by writing them so that their coverage of pollutants and NAAQS automatically updates with the promulgation of a new or revised NAAQS, and/or so that the specific PSD program requirements automatically update to stay matched with the federal PSD program requirements in 40 CFR 52.21. Depending on state or tribal law provisions, it may be possible to do one or both of these through the use of "rolling" incorporation by reference (IBR). An advantage of the rolling IBR approach is that it enables air agencies to quickly implement requirements of the CAA that may be immediately applicable to regulated sources upon the effective date of the new or revised NAAQS and before the deadline for air agencies to make infrastructure SIP submissions to the EPA. For example, one of the PSD program requirements is the requirement under section 165(a)(3) of the CAA that a permit applicant show it will not cause or contribute to a violation of any NAAQS. This requirement generally⁴³ applies to any NAAQS in effect on the date a PSD permit decision is issued and is not deferred until an infrastructure SIP submission is due. Where permissible under state or tribal law, a rolling IBR approach is advisable to enable air agencies to implement this type of CAA requirement immediately upon the effective date of a NAAQS, thus ensuring that there is a mechanism in place for regulated sources in the state or an area of Indian country to meet CAA requirements resulting from a new or revised NAAQS as soon as it becomes applicable.

⁴² As one example of the preamble language that presents the EPA's position on infrastructure SIPs with respect to the issue of NSR Reform, see the final rule published in the *Federal Register* on July 13, 2011, "Approval and Promulgation of Air Quality Implementation Plans; Illinois; Indiana; Michigan; Minnesota; Ohio; Wisconsin; Infrastructure SIP Requirements for the 1997 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards." 76 FR 41075. In section II of the preamble, the EPA applied the described position to existing provisions for PSD programs in light of the "NSR Reform Rules" that we promulgated mainly in 2002; see 67 FR 80186 (Dec. 31, 2002).

⁴³ In some circumstances, the EPA has authorized "grandfathering" of pending PSD permit applications. See 78 FR 3086, January 15, 2012.

Elements D(i)(I) and (II) – Section 110(a)(2)(D)(i): Interstate Pollution Transport

Each such plan shall –

(D) contain adequate provisions –

(i) prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will –

(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C of this subchapter to prevent significant deterioration of air quality or to protect visibility.

Section 110(a)(2)(D)(i) contains two subsections: (D)(i)(I) and (D)(i)(II).

Section 110(a)(2)(D)(i)(I) addresses any emissions activity in one state that contributes significantly to nonattainment, or interferes with maintenance, of the NAAQS in another state. The EPA sometimes refers to these requirements as prong 1 (significant contribution to nonattainment) and prong 2 (interference with maintenance). Neither prong 1 nor prong 2 is addressed in this guidance. This guidance does not modify any prior statements by the EPA with respect to prongs 1 and 2 and does not address, discuss, or in any way alter any requirements set forth in either prong.

Element D(i)(II) requires SIPs to include provisions prohibiting any source or other type of emissions activity in one state from interfering with measures required of any other state to prevent significant deterioration of air quality or from interfering with measures required of any other state to protect visibility (referring to visibility in Class I areas). The EPA sometimes refers to these requirements under subsection 110(a)(2)(D)(i)(II) as prong 3 (interference with PSD) and prong 4 (interference with visibility protection). The EPA interprets section 110(a)(2) to require air agencies to address prong 3 and prong 4 as part of each infrastructure SIP submission.

Prong 3: Under section 110(a)(2)(D)(i)(II), SIPs would need to have provisions prohibiting emissions that would interfere with measures required to be in any other air agency's

SIP under part C of the CAA to prevent significant deterioration of air quality. Because part C requires an air agency's PSD permitting program to address all pollutants subject to regulation under the CAA, the EPA interprets prong 3 to mean that the infrastructure SIP submission should have provisions to prevent emissions of any regulated pollutant from interfering with any other air agency's comprehensive PSD permitting program, in addition to the new or revised NAAQS that is the subject of the infrastructure submission. Moreover, the infrastructure SIP should address the potential for such interference by sources throughout the jurisdiction of the air agency.

One way to meet prong 3 ("interference with PSD"), specifically with respect to those in-state sources and pollutants that are subject to PSD permitting, is through an air agency's confirmation in its infrastructure SIP submission that new major sources and major modifications are subject to a comprehensive EPA-approved PSD permitting program in the SIP that applies to all regulated NSR pollutants and that satisfies the requirements of the EPA's PSD implementation rule(s), as discussed above for purposes of Element C. This is because in order to be approved by the EPA, a major source PSD permitting program would need to fully consider source impacts on air quality in other states.

In-state sources not subject to PSD for any one or more of the pollutants subject to regulation under the CAA because they are in a nonattainment area for a NAAQS related to those particular pollutants may also have the potential to interfere with PSD in an attainment or unclassifiable area of another state. The EPA cannot ignore this potential when reviewing an infrastructure SIP for this prong. The EPA will consider and may rely on an air agency's EPA-approved nonattainment NSR provisions in determining whether a SIP satisfies prong 3 with respect to sources located in areas subject to nonattainment NSR for any one or more pollutants

and thus not subject to PSD permitting for those NAAQS pollutants.⁴⁴ SIP revisions to address nonattainment NSR requirements for any new or revised NAAQS are, however, due on a separate timeframe under section 172(b) of the CAA and are not subject to the timeframe for submission of infrastructure SIPs under section 110(a)(1). Therefore, a fully approved nonattainment NSR program with respect to any previous NAAQS may generally be considered by the EPA as adequate for purposes of meeting the requirement of prong 3 with respect to sources and pollutants subject to such program. Also, if an air agency makes a submission indicating that it issues permits pursuant to 40 CFR part 51 appendix S in a nonattainment area because a nonattainment NSR program for a particular NAAQS pollutant has not yet been approved by the EPA for that area, that permitting program may generally be considered by the EPA as adequate for purposes of meeting the requirements of prong 3 with respect to sources and pollutants subject to such program. Such reliance for infrastructure purposes would not constitute approval under CAA title I part D, and the EPA will explain this in the preambles to any proposed or final actions that rely on this rationale to support the conclusion that prong 3 is satisfied.

For an air agency without an EPA-approved major source PSD program and/or, where required, an EPA-approved nonattainment NSR program, it may still be possible for the EPA to also find, given the facts of the situation, that other SIP provisions and/or physical condition are adequate to prohibit interference with other air agencies' measures to prevent significant deterioration of air quality.

Prong 4: Under section 110(a)(2)(D)(i)(II), an infrastructure SIP submission cannot be approved with respect to prong 4 (visibility transport) until the EPA has issued final approval of SIP provisions that the EPA has found to adequately address any contribution of that state's

⁴⁴ Refer, *e.g.*, to a memorandum issued by William T. Harnett, Director, OAQPS/AQPD, "Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards," dated August 15, 2006. According to that 2006 Harnett memo, in section 5, "[t]he implementation of a PSD and NNSR permitting program in each state serves to prevent significant deterioration in neighboring states and thus largely satisfies the requirements of section 110(a)(2)(D)(i)(II) of the CAA." Nevertheless, nonattainment-related provisions, although identified in section 110(a)(2) of the CAA, are considered by the EPA to be outside the scope of infrastructure SIP actions, as discussed in section II of this guidance.

sources to impacts on visibility program requirements in other states. The EPA interprets this prong to be pollutant-specific, such that the infrastructure SIP submission need only address the potential for interference with protection of visibility caused by the pollutant (including precursors) to which the new or revised NAAQS applies. Carbon monoxide does not affect visibility, so an infrastructure SIP for any future new or revised NAAQS for carbon monoxide need only state this fact in order to meet prong 4. Significant impacts from lead (Pb) emissions from stationary sources are expected to be limited to short distances from the source and most, if not all, Pb stationary sources are located at distances from Class I areas such that visibility impacts would be negligible. Although Pb can be a component of coarse and fine particles, Pb generally comprises a small fraction of coarse and fine particles. Furthermore, when evaluating the extent to which Pb could impact visibility, Pb-related visibility impacts were found to be insignificant (*e.g.*, less than 0.10 percent).⁴⁵ Although we anticipate that Pb emissions will contribute only negligibly to visibility impairment in Class I areas, the air agency's submission of an infrastructure SIP for a new or revised Pb NAAQS should include an explanation in support of the air agency's conclusion (and, if appropriate, should include control measures in its submission to limit impacts in other states).

One way in which prong 4 may be satisfied for any relevant NAAQS is through an air agency's confirmation in its infrastructure SIP submission that it has an approved regional haze SIP that fully meets the requirements of 40 CFR 51.308 or 51.309. 40 CFR 51.308 and 51.309 specifically require that a state participating in a regional planning process include all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process. *See*, for example, 40 CFR 51.308(d)(3)(ii). A fully approved regional haze SIP will ensure that emissions from sources under an air agency's jurisdiction are not interfering with measures required to be included in other air agencies' plans to protect visibility. However, if the air agency has submitted a 5-year progress report SIP that indicates that the regional haze SIP is deficient with respect to ensuring reasonable progress toward natural visibility conditions in a

⁴⁵ Memorandum from Mark Schmidt, OAQPS, "Ambient Pb's Contribution to Class I Area Visibility Impairment," June 17, 2011.

Class I area in another state, the infrastructure SIP submission would need to explain how nevertheless the overall SIP satisfies prong 4.

After the next round of regional haze SIPs become due in 2018, the EPA may find it appropriate to supplement the guidance provided here regarding the relationship between regional haze SIPs and prong 4.

A number of air agencies do not have fully approved regional haze SIPs in place and instead have FIPs in place, which cannot be relied upon to satisfy prong 4.⁴⁶ The presence of a regional haze FIP does not necessarily require disapproval of the infrastructure SIP for prong 4. A state air agency may elect to satisfy prong 4 by providing, as an alternative to relying on its regional haze SIP alone, a demonstration in its infrastructure SIP submission that emissions within its jurisdiction do not interfere with other air agencies' plans to protect visibility. Such an infrastructure SIP submission would need to include measures to limit visibility-impairing pollutants and ensure that the reductions conform with any mutually agreed regional haze reasonable progress goals for mandatory Class I areas in other states.⁴⁷

If the EPA determines the SIP to be incomplete or partially disapproves an infrastructure SIP submission for prong 4, a FIP obligation will be created. If a FIP or FIPs are already in effect that correct all regional haze SIP deficiencies, there will be no additional practical consequences from the partial disapproval for the affected air agency, the sources within its jurisdiction, or the

⁴⁶ Some approved regional haze SIPs have relied on the fact that electric generating units (EGUs) in the state must comply with a FIP previously promulgated by the EPA as part of the CSAPR to satisfy best achievable retrofit technology requirements for EGUs. In this limited way, if a regional haze SIP of this type has itself been approved by the EPA, it is possible for FIP provisions to be taken into account by the EPA in determining whether an infrastructure SIP may be approved for prong 4.

⁴⁷ As examples of the possibility that an infrastructure SIP submission can satisfy prong 4 even though the regional haze SIP has not been fully approved, *see*: (i) "Approval and Promulgation of State Implementation Plans; State of Colorado; Interstate Transport of Pollution Revisions for the 1997 8-Hour Ozone and 1997 PM_{2.5} NAAQS: 'Interference With Visibility' Requirement – Final Rule", 76 FR 22036 (April 20, 2011); and (ii) "Approval and Promulgation of Implementation Plans; Kentucky; 110(a)(1) and (2) Infrastructure Requirements for the 2008 8-Hour Ozone National Ambient Air Quality Standards – Final Rule," 78 FR 14681 (March 7, 2013). In the first action, the EPA approved the infrastructure SIP submission with respect to prong 4 without having approved a regional haze SIP, based on the state's demonstration that it does not interfere with other states' measures to protect visibility through their regional haze SIPs. In the second proposed action, the EPA approved Kentucky's submission with respect to prong 4 based on the partial approval of its regional haze SIP and its CSAPR SIP.

EPA. The EPA will not be required to take further action with respect to prong 4 because the FIP already in place would satisfy the requirements with respect to prong 4. In addition, unless the infrastructure SIP submission is required in response to a SIP call under CAA section 110(k)(5), mandatory sanctions under CAA section 179 would not apply because the deficiencies are not with respect to a submission that is required under CAA title I part D. Nevertheless, the EPA continues to encourage all air agencies that may be subject to full or partial FIPs for regional haze requirements to consider adopting additional SIP provisions that would allow the EPA to fully approve the regional haze SIP and thus to withdraw the FIP and approve the infrastructure SIP with respect to prong 4.

Element D(ii) – Section 110(a)(2)(D)(ii): Interstate Pollution Abatement and International Air Pollution

Each such plan shall –

(D) contain adequate provisions –

(ii) insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement).

Element D(ii) is satisfied when an infrastructure SIP ensures compliance with the applicable requirements of CAA sections 126(a), 126(b) and (c), and 115.

Interstate Pollution Abatement:

Sec. 126. (a) Each applicable implementation plan shall –

(1) require each major proposed new (or modified) source –

(A) subject to part C (relating to significant deterioration of air quality) or

(B) which may significantly contribute to levels of air pollution in excess of the national ambient air quality standards in any air quality control region outside the State in which such source intends to locate (or make such modification), to provide written notice to all nearby States the air pollution levels of which may be affected by such source at least sixty days prior to the date on which commencement of construction is to be permitted by the State providing notice, and

(2) identify all major existing stationary sources which may have the impact described in paragraph (1) with respect to new or modified sources and provide notice to all nearby States of the identity of such sources not later than three months after the date of enactment of the Clean Air Act Amendments of 1977.

Under section 126(a)(1) of the CAA, each SIP would need to contain provisions requiring each new or modified major source required by CAA title I part C to be subject to PSD to notify neighboring air agencies of potential impacts from the source. Consistent with EPA's interpretation of part C with respect to the requirements of Element C, the notification requirements apply to potential impacts from all PSD-regulated pollutants, not only the new or revised NAAQS for which the infrastructure SIP submission is being made. Section 126(a)(1) also requires that each SIP contain provisions requiring each new or modified major source to provide similar notification if it may significantly contribute to levels of pollution in excess of a NAAQS in any air quality control region outside of the state in which the source is located.

Air agencies with PSD programs that have been approved into their SIPs should already have a regulatory provision in place, consistent with [40 CFR 51.166\(q\)\(2\)\(iv\)](#), which requires the permitting authority to notify air agencies whose lands may be affected by emissions from that source. Inasmuch as the information that the permitting authority provides to other air agencies is submitted by the source to the permitting authority, the EPA considers the notification by the permitting authority to satisfy the requirement of CAA section 126(a)(1)(A) that a new or modified major source subject to part C notify neighboring air agencies of its potential downwind impact.

A state that is subject to a FIP for its PSD program may not have an infrastructure SIP that satisfies Element D(ii) with respect to section 126(a)(1) of the CAA, depending on the scope of the gap in the SIP that led to the PSD FIP. Where some or all pollutants in a state are subject to a PSD FIP, the EPA may find the infrastructure SIP submission to be incomplete with respect to Element D(ii) and could not fully approve the infrastructure SIP submission with respect to Element D(ii) if the approved SIP has no other provision meeting the notification requirements of section 126(a)(1). Nonetheless, as noted above, the EPA anticipates that there would be no adverse consequences to the air agency or to sources within its jurisdiction from this lack of full approval. The EPA would not likely be required to take further action with respect to notification under this element, because the federal PSD rules should fully address the notification issue through the requirements of [40 CFR 52.21\(q\)](#) and [40 CFR 124.10\(c\)\(vii\)](#) and thus satisfy the FIP

requirement triggered by the disapproval of the infrastructure SIP.⁴⁸ In addition, unless the infrastructure SIP submission is required in response to a SIP call under CAA section 110(k)(5), mandatory sanctions under CAA section 179 would not apply because the deficiencies are not with respect to a submission that is required under CAA title I part D.

The EPA notes that the requirement stated in CAA section 126(a)(2) was a one-time obligation on states that does not apply to the EPA's review of infrastructure SIP submissions.

Interstate Pollution Abatement:

Section 126...

(b) Any State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of section 110(A)(2)(D)(ii) or this section. Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition.

(c) Notwithstanding any permit which may have been granted by the State in which the source is located (or intends to locate), it shall be a violation of [this section and] the applicable implementation plan in such State –

(1) for any major proposed new (or modified) source with respect to which a finding has been made under subsection (b) to be constructed or to operate in violation of [this section and] the prohibition of section 110(a)(2)(D)(ii) or this section, or

(2) for any major existing source to operate more than three months after such finding has been made with respect to it.

The Administrator may permit the continued operation of a source referred to in paragraph (2) beyond the expiration of such three-month period if such source complies with such emission limitations and compliance schedules (containing increments of progress) as may be provided by the Administrator to bring about compliance with the requirements contained in section 110(a)(2)(D)(ii) as expeditiously as practicable, but in no case later than three years after the date of such finding. Nothing in the preceding sentence shall be construed to preclude any such source from being eligible for an enforcement order under section 113(d) after the expiration of such period during which the Administrator has permitted continuous operation.

⁴⁸ 40 CFR part 124, including 124.10(c)(vii), provides for EPA notification to states whose lands may be affected by emissions from the source and applies to all federal PSD permits issued in accordance with 40 CFR 52.21.

Please note that the EPA has concluded that the cross-reference in CAA section 126(b) to CAA section 110(a)(2)(D)(ii) is a scrivener's error and that Congress intended to refer to section 110(a)(2)(D)(i). *See Appalachian Power Co. v. EPA*, 249 F.3d -1032, 1040-44 (D.C. Cir. 2001). Section 110(a)(2)(D)(i), in short, prohibits any source or emissions activity in a state from emitting any amount of air pollutant which will contribute significantly to nonattainment or interfere with maintenance of the NAAQS in another state. (42 U.S.C. § 7410.)

The required content of an infrastructure SIP with respect to Element D(ii) is affected by sections 126(b) and 126(c) of the CAA only if: (1) the Administrator has, in response to a petition, made a finding under section 126(b) of the CAA that emissions from a source or sources within the air agency's jurisdiction emit prohibited amounts of air pollution relevant to the new or revised NAAQS for which the infrastructure SIP submission is being made; and (2) under section 126(c) of the CAA, the Administrator has required the source or sources to cease construction, cease or reduce operations, or comply with emissions limitations and compliance schedule requirements for continued operation. Where appropriate, the EPA recommends that an infrastructure SIP submission concerning section 126(c) include a statement to the following effect: "No source or sources within the state [or tribal area] are the subject of an active finding under section 126 of the CAA with respect to the particular NAAQS at issue." Otherwise, where a source or sources within the air agency's jurisdiction are subject to such a finding and there are substantive SIP requirements imposed by the Administrator under section 126(c) of the CAA, then we encourage the air agency to consult with its EPA Regional Office.

International Air Pollution:

Sec. 115. (a) Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.

(b) The notice of the Administrator shall be deemed to be a finding under section 110(a)(2)(H)(ii) which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a). Any foreign country so affected by

such emission of pollutant or pollutants shall be invited to appear at any public hearing associated with any revision of the appropriate portion of the applicable implementation plan.

Section 115 of the CAA authorizes the Administrator to require a state to revise its SIP under certain conditions to alleviate international transport into another country. Because of the appearance of the phrase “applicable requirements of section[...]115” in Element D(ii), the EPA interprets this requirement to be NAAQS-specific. That is, when acting on an infrastructure SIP submission for a new or revised NAAQS, the EPA will look to whether the Administrator has made a finding with respect to emissions of the particular NAAQS pollutant and its precursors, if applicable. Where appropriate, the EPA recommends that infrastructure SIP submission requirements concerning section 115 include a statement to the following effect: "There are no final findings under section 115 of the CAA against this state [or tribal area] with respect to the particular NAAQS at issue." If there are one or more final findings under section 115 of the CAA, then we encourage the air agency to consult with its EPA Regional Office.

Element E – Section 110(a)(2)(E): Adequate Resources and Authority, Conflict of Interest, and Oversight of Local Governments and Regional Agencies

Each such plan shall –

(E) provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the State comply with the requirements respecting State boards under section 128, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision.

Subelement (i): The SIP should provide necessary assurances⁴⁹ that the air agency has adequate personnel and funding to implement the relevant NAAQS. In accordance with the EPA's regulations at 40 CFR part 51, subpart M ("Intergovernmental Consultation"), the infrastructure SIP submission should identify the organizations that will participate in developing, implementing, and enforcing the EPA-approved SIP provisions related to the new or revised NAAQS and thus require resources for doing so. The infrastructure SIP submission should identify the responsibilities of such organizations and include related agreements among the organizations. For compliance with section 110(a)(2)(E), *see* [40 CFR 51.240 \("General plan requirements"\)](#). Also, in accordance with the EPA's regulations at 40 CFR part 51, subpart O ("Miscellaneous Plan Content Requirements"), the infrastructure SIP submission should describe the resources that are available to these organizations for carrying out the SIP. Resources to be described should include: (1) those available to these organizations as of the date of infrastructure SIP submission; (2) those considered necessary during the 5 years following infrastructure SIP submission; and (3) projections regarding acquisition of the described resources. For compliance with section 110(a)(2)(E) with respect to resources, *see* [40 CFR 51.280 \("Resources"\)](#).

Further, the infrastructure SIP submission should assure that the responsible state, local, and/or regional agencies, or a tribal authority, have adequate authority under statutes, rules, and regulations to carry out SIP obligations with respect to the relevant NAAQS. *See* the EPA's regulations at [40 CFR part 51, subpart L \("Legal Authority"\)](#) and [subpart O](#). In accordance with the EPA's regulations at subpart L, the infrastructure SIP submission should show that the responsible organizations have the legal authority to carry out the provisions identified in the SIP submission.

⁴⁹ As with any SIP submission, the EPA's review can be expedited if a SIP submission for this element includes a detailed explanation of how the existing SIP (supplemented by any new provisions included in the submission) meets each of the applicable requirements of section 110(a)(2)(E)(i). This should include a description of the correlation between the requirements of this element and an equivalent set of statutory, regulatory, and/or non-regulatory provisions, as appropriate. When an air agency's infrastructure submission more clearly identifies each CAA element being met by the SIP submission and explains how it is met, the EPA can more easily determine whether the submission is complete and approvable with respect to that element.

In accordance with [40 CFR 51.231](#), the infrastructure SIP submission should identify the provisions of law or regulations that the air agency determines provide the necessary authority, and the air agency should submit copies of those laws or regulations with the infrastructure SIP submission. If an official, legal copy of a particular law or regulation has already been provided to the EPA in an earlier SIP submission, that copy only needs to be referenced with sufficient specificity to avoid ambiguity, rather than a new copy submitted.⁵⁰ For compliance with section 110(a)(2)(E) with respect to legal authority, *see* [40 CFR 51.230](#) and [40 CFR 51.231](#).

Having reviewed and approved air agency SIP submissions with respect with this element, the EPA expects that it would be unusual for air agencies to need to make SIP revisions regarding personnel, funding, or legal authority in order to satisfy this subelement. However, for any new or revised NAAQS, the air agency should explain in the infrastructure SIP submission how resources and personnel and legal authority are adequate and provide any additional assurances needed to meet changes in resource requirements by the new or revised NAAQS.

Subelement (ii):

State Boards:

The infrastructure SIP submission (possibly in combination with earlier submissions already approved by the EPA) would need to include the statutory or regulatory provisions that impose the requirements mandated by CAA section 128 pertaining to certain boards, bodies, and personnel involved in approving permits or enforcement orders. Because CAA section 110(a)(2)(e)(ii) directs states to “provide requirements that the state comply with the

⁵⁰ Refer to a memorandum dated November 22, 2011, jointly from Janet McCabe, Deputy Assistant Administrator, Office of Air and Radiation, and Becky Weber, Director, Air and Waste Management Division, Region 7, to Air Division Directors, Regions 1-10, titled "Guidelines for Preparing Letters Submitting State Implementation Plans (SIPs) to EPA and for Preparing Public Notices for SIPs."

requirements respecting state boards under section 128,”⁵¹ the provisions that implement CAA section 128 would need to be contained within the SIP. That is, the EPA would not approve an infrastructure SIP submission that only provides a narrative description of existing air agency laws, rules, and regulations that are not approved into the SIP to address CAA section 128 requirements. If an existing rule regarding conflict of interest and disclosure requirements has been adopted under the authority of a state or tribal law, the rule would need to be included in the SIP submission, but the authorizing law would not. If the state or tribal law is self-executing and there is no rule that could be included in the SIP, then the law would need to be incorporated into the SIP. Inclusion of an existing law in the SIP does not prevent the state legislature or tribal council from amending that law at a later date as a matter of state law, although eventually the EPA-approved SIP will need to be updated with any such amendment in order to revise the federally enforceable SIP.

All air agencies are subject to the provisions of CAA section 128. However, if there is no board or body authorized to approve permits or enforcement orders under the CAA, then a negative declaration to that effect may serve to satisfy the "board or body" requirements under paragraph (a)(1) of CAA section 128. It is the EPA’s stated interpretation that a multi-member board or body that has authority under state or tribal law to hear appeals of CAA permits or

⁵¹ *Sec. 128. (a) Not later than the date one year after the date of the enactment of this section, each applicable implementation plan shall contain requirements that –*

(1) any board or body which approves permits or enforcement orders under this Act shall have at least a majority of members who represent the public interest and do not derive any significant portion of their income from persons subject to permits or enforcement orders under this Act, and

(2) any potential conflicts of interest by members of such board or body or the head of an executive agency with similar powers be adequately disclosed.

A State may adopt any requirements respecting conflicts of interest for such boards or bodies or heads of executive agencies, or any other entities which are more stringent than the requirements of (paragraphs (1) and (2)), and the Administrator shall approve any such more stringent requirements submitted as part of an implementation plan.

enforcement orders is considered to have authority to “approve” those permits or enforcement orders. Accordingly, the requirements of section 128(a)(1) related to public interest and limitations on sources of income are applicable to such a board or body and would need to be met through provisions incorporated into the SIP.^{52,53}

The provisions of section 128(a)(2), which concern disclosure of potential conflicts of interest, would need to be substantively met by provisions incorporated into the SIP, regardless of whether it is a board, some other body, or the head of an executive agency that has responsibility for approving permits or enforcement orders in that state or an area of Indian country. It is the EPA’s stated interpretation that a multi-member board or body that has authority under state or tribal law to hear appeals of CAA permits or enforcement orders is considered to have authority to “approve” those permits or enforcement orders. Accordingly, the requirement of section 128(a)(2) related to disclosure is applicable to such a board or body and would need to be met through provisions incorporated into the SIP.

In 1978, the EPA issued a guidance memorandum recommending ways air agencies could meet the requirements of section 128, including suggested interpretations of certain terms in section 128.⁵⁴ EPA has not issued further guidance or regulations of general applicability on the subject since that time. However, as part of its actions on several infrastructure SIP submissions, the EPA has more recently proposed certain interpretations of section 128 as applied to these specific submissions, invited comment on these interpretations, and finalized its actions. Within those actions, EPA has thus provided additional interpretation of the terms of section 128 given specific facts and circumstances, consistent with the statutory requirements.

⁵² The EPA expressed this interpretation in a proposed action on the infrastructure SIP for Arizona. June 27, 2012. “Partial Approval and Disapproval of Air Quality Implementation Plans; Arizona: Infrastructure Requirement for Ozone and Fine Particulate Matter.” 77 FR 38239. This action was finalized on [November 5, 2012, 77 FR 66398](#).

⁵³ “Approval and Promulgation of State Implementation Plans; Hawaii Infrastructure Requirements for the 1997 8-Hour Ozone and the 1997 and 2006 Fine Particulate Matter National Ambient Air Quality Standards.” 77 FR 47530 (August 9, 2012). The EPA’s action on the infrastructure SIP for Arizona referenced the proposal for this action on the infrastructure SIP for Hawaii.

⁵⁴ See Memorandum from David O. Bickart to Regional Air Directors, “Guidance to States for Meeting Conflict of Interest Requirements of Section 128,” Suggested Definitions, March 2, 1978.

See, e.g., EPA's proposed (77 FR 44555, July 30, 2012) and final (77 FR 66398, November 5, 2012) actions on an infrastructure SIP submission from Arizona. Unlike the recommendations of the 1978 guidance memorandum, in this action the EPA interpreted the term “state board” to exclude an individual official. As in the 1978 guidance memorandum, in this action the EPA interpreted the requirement regarding representation of the public interest and limitations on income to apply to a board that does not issue permits and compliance orders but does hear appeals of permits and compliance orders. The EPA notes that air agencies in different jurisdictions may have very different organizational structures and very different allocations of authorities and responsibilities with respect to permits and enforcement orders. Thus, the EPA recommends that air agencies consult with their respective EPA Regional Offices about the most appropriate method for assuring that the requirements of section 110(a)(2)(E)(ii) and section 128 are met in that jurisdiction under the relevant facts and circumstances.

Subelement (iii): The infrastructure SIP submission should provide necessary assurances⁵⁵ that the state retains responsibility for ensuring adequate implementation of SIP obligations with respect to relevant NAAQS. A state may authorize a local or regional agency to carry out the SIP or a portion of the SIP within that agency's jurisdiction, if the SIP demonstrates that the local agency has the necessary legal authority. However, in these cases the infrastructure SIP submission needs to also provide assurances that the state air agency retains responsibility for ensuring adequate implementation of the SIP. Under subpart L, *see* [40 CFR 51.232](#) ("[Assignment of legal authority to local agencies](#)").

⁵⁵ As with any SIP submission, the EPA's review can be expedited if a SIP submission for this element includes a detailed explanation of how the existing SIP meets each of the applicable requirements of section 110(a)(2)(E)(i). This should include a description of the correlation between the requirements of this element and an equivalent set of statutory, regulatory, and/or non-regulatory provisions, as appropriate, that are part of the existing SIP. When an air agency's infrastructure submission more clearly identifies each CAA element being met by the SIP submission and explains how the element is met, the EPA can more easily determine whether the submission is complete and approvable with respect to that element.

Element F – Section 110(a)(2)(F): Stationary Source Monitoring and Reporting

Each such plan shall –

(F) require, as may be prescribed by the Administrator –

(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,

(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and

(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this Chapter, which reports shall be available at reasonable times for public inspection.

Subelement (i): The EPA’s rules regarding how SIPs would need to address requirements for source monitoring are contained in [40 CFR 51.212](#) (“Testing, inspection, enforcement, and compliance”). This EPA regulation requires SIPs to provide for a program of periodic testing and inspection of stationary sources, to provide for the identification of allowable test methods, and to exclude any provision that would prevent the use of any credible evidence of noncompliance. The infrastructure SIP submission should describe the air agency’s program for source testing, reference the statutory authority for the air agency’s program, and certify the absence of any provision preventing the use of any credible evidence.

Subelement (ii): To address periodic reporting requirements, the infrastructure SIP submission should include air agency requirements providing for periodic reporting of emissions and emissions-related data by sources to the air agency, as required by the following emissions reporting requirements: [40 CFR 51.211](#) (“Emissions reports and recordkeeping”); 40 CFR sections 51.321 through 51.323 (“Source Emissions and State Action Reporting”); and the EPA’s Air Emissions Reporting Rule, 40 CFR part 51, subpart A (“Air Emissions Reporting Requirements”).⁵⁶ We note that the section 51.321 requirement that emissions reports from states be made through the appropriate EPA Regional Office has been superseded in practice, as these data are now to be reported electronically through a centralized data portal pursuant to [40 CFR](#)

⁵⁶ 40 CFR sections 51.321 through 51.323 nominally address emission reporting but merely cross-reference to subpart A.

51.45(b), which refers to the website <http://www.epa.gov/ttn/chief> for the latest information on data reporting procedures. However, states should consult with the appropriate EPA Regional Office as they prepare and submit these data. All states have existing periodic source reporting of emissions and emission inventory reporting practices. Thus for any new or revised NAAQS, the infrastructure SIP may be able to certify existing authority and commitments and provide any additional assurance needed to meet changes in reporting and inventory requirements associated with the new or revised NAAQS.

Subelement (iii): The infrastructure SIP submission should reference and describe existing air agency requirements that have been approved into the SIP by the EPA, or include air agency requirements being newly submitted, that provide for the following: (1) correlation⁵⁷ by the air agency of emissions reports by sources with applicable emission limitations or standards; and (2) the public availability of emission reports by sources. Under 40 CFR part 51 subpart G, [40 CFR 51.116 \("Data availability"\)](#), contains the requirements for correlating data. Correlation with applicable emissions limitations or standards is relevant only for those reports of source emissions that reflect the test method(s) and averaging period(s) specified in applicable emission limitations or standards. Thus, source reports of annual, ozone season, or summer day emissions used by the air agency to create the annual and triennial emission inventory submission to the EPA under [40 CFR part 51 subpart A](#) in general would not need to be correlated with specific emission limitations or standards, as many sources do not have applicable emission limitations defined for those averaging periods. However, if the sources have applicable emissions limitations that are defined for these averaging periods, then they would need to be correlated.

⁵⁷ As defined in [40 CFR 51.116\(c\)](#), the term "correlated" means "presented in such a manner as to show the relationship between measured or estimated amounts of emissions and the amounts of such emissions allowable under the applicable emission limitations or other measures."

Element G – Section 110(a)(2)(G): Emergency Powers

Each such plan shall –

(G) provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority.

Section 303 of the CAA provides authority to the EPA Administrator to seek a court order to restrain any source from causing or contributing to emissions that present an "imminent and substantial endangerment to public health or welfare, or the environment." The EPA has interpreted section 110(a)(2)(G) as imposing two basic requirements for purposes of an infrastructure SIP submission.

To meet Element G requirements, the best practice for an air agency submitting an infrastructure SIP would be to submit, for inclusion into the SIP (if not already part of the SIP), the statutory or regulatory provisions that provide the air agency or official with authority comparable to that of the EPA Administrator under section 303 (*see, e.g., 40 CFR 51.230(c)*), along with a narrative explanation of how they meet the requirements of this element.⁵⁸ If an air agency chooses not to include the relevant statute or regulation in its SIP, then the air agency should provide a reference or citation to the authority provisions, along with a narrative explanation of how the provisions meet the requirements of this element, as well as a copy of the relevant authority to accompany the SIP as required by 40 CFR 51.231.

The air agency is also required to submit, for approval into the SIP (if not already part of the SIP), an adequate contingency plan to implement the air agency's emergency episode authority. This can be met by submitting a plan that meets the applicable requirements of [40 CFR part 51, subpart H \(40 CFR 51.150 through 51.153\)](#) ("Prevention of Air Pollution Emergency Episodes") for the relevant NAAQS if the NAAQS is covered by those regulations.

The EPA's subpart H regulations provide specific ambient levels for contingency plan purposes for most NAAQS. In the case of the 2006 PM_{2.5} NAAQS, for which the EPA has not

⁵⁸ The EPA recognizes that some air agencies may have general authorizing provisions that do not specifically enumerate specific activities but do implicitly authorize the air agency to perform such activities, in which case inclusion of those provisions would meet the intent of this best practice.

yet promulgated regulations that provide the ambient levels to classify different priority levels, the EPA has recommended these levels through guidance.⁵⁹

Subpart H includes criteria for classification of areas into priority regions, based on ambient air concentrations of the particular pollutant being addressed. The currently applicable priority classifications for regions for each state can be found in 40 CFR part 52 subparts B through DDD (*see* sections titled “Classification of Regions”). As noted above, the air agency’s infrastructure SIP submission would need to include the contingency plan, if one is required and has not yet been approved by the EPA. If an area is classified as a Priority I, IA, or II region for a specified pollutant, then the infrastructure SIP should contain an emergency contingency plan meeting the specific requirements of 40 CFR 51.151 and 51.152, as appropriate, with respect to that pollutant. For such areas, the infrastructure submission should demonstrate that the air agency’s existing EPA-approved SIP already contains an adequate contingency plan, if that is the case; otherwise, the submission should include the substantive SIP revisions necessary to meet the emergency contingency plan requirements with respect to that pollutant.

Specifically, if an area is classified as a Priority I region for a specified pollutant, the area’s contingency plan (with respect to that pollutant) would need to include provisions that trigger actions to prevent air quality concentrations from reaching a “significant harm level” (SHL), which represents an imminent and substantial endangerment to public health. *See* [40 CFR 51.151](#) and the more detailed explanation below. Each implementation plan for a Priority I, IA, or II region would need to include a contingency plan that provides for taking certain specified actions. Specifically, 40 CFR sections 51.152(b) and (c) state that:

(b) Each contingency plan for a Priority I region must provide for the following:

(1) Prompt acquisition of forecasts of atmospheric stagnation conditions and of updates of such forecasts as frequently as they are issued by the National Weather Service.

(2) Inspection of sources to ascertain compliance with applicable emission control action requirements.

⁵⁹ *See* a memorandum from William T. Harnett, Director, Air Quality Policy Division, OAQPS, to Regional Air Division Directors, Regions I through X, “Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 Fine Particle (PM_{2.5}) National Ambient Air Quality Standards (NAAQS).” (September 25, 2009).

(3) Communications procedures for transmitting status reports and orders as to emission control actions to be taken during an episode stage, including procedures for contact with public officials, major emission sources, public health, safety, and emergency agencies and news media.

(c) Each plan for a Priority IA and II region must include a contingency plan that meets, as a minimum, the requirements of paragraphs (b)(1) and (b)(2) of this section. Areas classified as Priority III do not need to develop episode plans.

To satisfy a Priority I, IA, or II region's contingency plan requirements under [40 CFR 51.152\(b\)\(1\)](#) regarding forecasts of atmospheric stagnation conditions, an infrastructure SIP submission may cite existing ambient monitoring and forecasting networks (such as *AIRNow*).⁶⁰

Areas that maintain air quality at ambient levels lower than the concentrations listed in sections 51.150(b), (c), and (d), with respect to the pollutants listed, are classified as Priority III regions. These areas are subject to the requirements of CAA Element G. However, according to 40 CFR 51.152(c), areas classified as Priority III regions are not required to develop emergency episode plans, which the EPA has interpreted to mean the contingency plans otherwise required under Element G.

In a final rulemaking signed on December 14, 2012, to revise the PM_{2.5} NAAQS, the EPA retained the pre-existing level of 500 µg/m³, 24-hour average, for the Air Quality Index (AQI) value of 500 and did not establish an SHL for PM_{2.5}.⁶¹ In addition, there is currently no established SHL for Pb. For those pollutants for which there is an SHL, the SHL is an important part of air pollution Emergency Episode Plans. Even in the absence of an SHL, the EPA believes that the central components of a contingency plan would be to reduce emissions from the source(s) at issue (if necessary by curtailing operations of Pb or PM_{2.5} sources) and public communication as needed. In addition, if an air agency believes, based on its inventory of Pb or

⁶⁰ The EPA, in partnership with National Oceanic and Atmospheric Administration (NOAA), National Park Service (NPS), and tribal, state, and local agencies, developed the *AIRNow* website (*see* <http://www.airnow.gov>) to provide easy public access to national air quality information. The website offers daily AQI forecasts as well as real-time AQI conditions for over 300 cities across the U.S. and provides links to more detailed state and local air quality websites.

⁶¹ *See* 78 FR 3086 (January 15, 2013), “National Ambient Air Quality Standards for Particulate Matter.” The published version is posted at <http://www.gpo.gov/fdsys/pkg/FR-2013-01-15/pdf/2012-30946.pdf>.

PM_{2.5} sources and historic ambient monitoring data, that it does not need a more specific contingency plan beyond having authority to restrain any source from causing or contributing to an imminent and substantial endangerment, then the air agency could provide such a detailed rationale as part of its SIP submission. Additionally, because smoke from fires has the potential to be the cause of extremely high levels of PM_{2.5}, the EPA recommends that air quality-triggered responses incorporated into an Emergency Episode Plan for PM_{2.5} be developed through a collaborative process working with state and tribal air quality, forestry, and agricultural agencies, federal land management agencies, private land managers, and the public.

An episode in which concentrations of NO₂ or SO₂ approach the SHL is likely to be due to a single facility's equipment malfunction. Accordingly, as part of a SIP to satisfy a Priority I region's contingency plan requirements, an infrastructure SIP submission for an NO₂ NAAQS or an SO₂ NAAQS may specify the facility-specific or equipment-specific measures to be taken in the event of an air pollution emergency.

In accordance with [40 CFR 51.152\(d\)\(1\) and \(2\)](#), the Administrator may either: (i) exempt portions of a Priority I, IA, or II region that have been designated as attainment or unclassifiable under section 107 of the CAA from the requirements of 40 CFR 51.152 to develop an emergency episode contingency plans, or (ii) limit the requirements pertaining to emission control actions in Priority I regions to certain areas or to certain major sources. Air agencies interested in such an exemption or limitation in appropriate circumstances should contact their respective EPA Regional Offices.

[Appendix L to 40 CFR part 51](#) provides example regulations that air agencies could use to develop contingency plans and inform decisions concerning air pollution emergency episodes. The example regulations provided in appendix L reflect generally recognized ways of preventing air pollution from reaching levels that would cause imminent and substantial endangerment to the health of persons located within affected areas. States with Priority I, IA, or II areas are directed by subpart H to have emergency episode contingency plans that contain alert levels for SO₂, PM₁₀, carbon monoxide, NO₂, and ozone, but air agencies are not required to adopt the appendix L example regulations.

Element H – Section 110(a)(2)(H): SIP Revisions

Each such plan shall –

(H) provide for revision of such plan –

(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and

(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this chapter.

To demonstrate that the requirements under Element H are met, the best practice for an air agency submitting an infrastructure SIP would be to submit, for inclusion into the SIP (if not already part of the SIP), the statutory or regulatory provisions that provide the air agency or official with the authority to perform the following actions along with a narrative explanation of how they meet the requirements of this element: (1) revise its section 110 plan from time to time as may be necessary to take into account revisions of such primary or secondary NAAQS or the availability of improved or more expeditious methods of attaining such standards; and (2) revise the plan in the event the Administrator finds the plan to be substantially inadequate to attain the NAAQS or otherwise meet all applicable CAA requirements.⁶²

If an air agency chooses not to include the relevant statute or regulation in its SIP, then the air agency should provide a reference or citation to the authority provisions, along with a narrative explanation of how the provisions meet the requirements of this element, as well as a copy of the relevant authority to accompany the SIP as required by 40 CFR 51.231. More information may be found under [40 CFR part 51, subpart F \("Procedural Requirements"\)](#), specifically, [40 CFR 51.104 \("Revisions"\)](#).

⁶² The EPA recognize that some air agencies may have general authorizing provisions that do not specifically enumerate specific activities but do implicitly authorize the air agency to perform such activities, in which case inclusion of those provisions would meet the intent of this best practice.

Element I – Section 110(a)(2)(I): Plan Revisions for Nonattainment Areas

Each such plan shall –

(I) in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D of this subchapter (relating to nonattainment areas).

As noted earlier in this document, the EPA does not expect infrastructure SIP submissions to address subsection 110(a)(2)(I). The specific SIP submissions for designated nonattainment areas, as required under CAA title I part D, are subject to a different submission schedule⁶³ than those for section 110 infrastructure elements and will be reviewed and acted upon through a separate process. Air agencies do not need to address Element I in an infrastructure SIP submission. For clarity's sake, to better inform the public comment process on the SIP submission, the air agency may wish to clearly state that Element I is not being addressed and reiterate in the infrastructure SIP submission that, according to the EPA's interpretation of the CAA this element does not need to be addressed in the context of an infrastructure SIP submission.

Element J – Section 110(a)(2)(J): Consultation with Government Officials, Public Notification, and PSD and Visibility Protection

Each such plan shall –

(J) meet the applicable requirements of section 121 (relating to consultation), section 127 (relating to public notification), and part C (relating to prevention of significant deterioration of air quality and visibility protection)....

This element contains four separable sub-elements: consultation with identified officials on certain air agency actions; public notification; prevention of significant deterioration; and visibility protection.

Consultation with identified officials on certain actions:

⁶³ These elements are typically referred to as nonattainment SIP or attainment plan elements and are due by the dates prescribed under subparts 2 through 5 of part D, extending as far as 10 years following designation for some elements.

Sec. 121. In carrying out the requirements of this Act requiring applicable implementation plans to contain –

(1) any transportation controls, air quality maintenance plan requirements or preconstruction review of direct sources of air pollution, or

(2) any measure referred to –

(A) in part D (pertaining to nonattainment requirements), or

(B) in part C (pertaining to prevention of significant deterioration),

and in carrying out the requirements of section 113(d) (relating to certain enforcement orders), the State shall provide a satisfactory process of consultation with general purpose local governments, designated organizations of elected officials of local governments and any Federal land manager having authority over Federal land to which the State plan applies, effective with respect to any such requirement which is adopted more than one year after the date of enactment of the Clean Air Act Amendments of 1977 as part of such plan. Such process shall be in accordance with regulations promulgated by the Administrator to assure adequate consultation. The Administrator shall update as necessary the original regulations required and promulgated under this section (as in effect immediately before the date of the enactment of the Clean Air Act Amendments of 1990) to ensure adequate consultation. Only a general purpose unit of local government, regional agency, or council of governments adversely affected by action of the Administrator approving any portion of a plan referred to in this subsection may petition for judicial review of such action on the basis of a violation of the requirements of this section.

The infrastructure SIP submission would need to show that there is an established process for consultation with general-purpose local governments, designated organizations of elected officials of local governments, and any federal land manager having authority over federal land to which the plan applies, consistent with CAA section 121, which lists the specific types of actions for which such consultation is required. If the relevant statute is self-executing such that there is no associated regulation or other documents such as a memorandum of understanding, then the statute would need to be included in the SIP. If a regulation or other document meeting the CAA requirements exists, then the regulation or other document would need to be included in the SIP submission, and the authorizing statute should be referenced but the statute is not required to be part of the EPA-approved SIP. Under the requirements of [40 CFR 51.240](#), the SIP would need to identify organizations “that will participate in developing, implementing, and enforcing the plan and the responsibilities of such organizations.” The plan should also include

any related agreements or memoranda of understanding among the organizations. See [subpart M \("Intergovernmental Consultation"\)](#).

Public Notification:

Section 127. (a) Each State plan shall contain measures which will be effective to notify the public during any calendar [year] on a regular basis of instances or areas in which any national primary ambient air quality standard is exceeded or was exceeded during any portion of the preceding calendar year to advise the public of the health hazards associated with such pollution, and to enhance public awareness of the measures which can be taken to prevent such standards from being exceeded and the ways in which the public can participate in regulatory and other efforts to improve air quality. Such measures may include the posting of warning signs on interstate highway access points to metropolitan areas or television, radio, or press notices or information.

(b) The Administrator is authorized to make grants to States to assist in carrying out the requirements of subsection (a).

The infrastructure SIP submission would need to show that the air agency does the following: regularly notifies the public of instances or areas in which the new or revised primary NAAQS was exceeded; advises the public of the health hazards associated with such exceedances; and enhances public awareness of measures that can prevent such exceedances and of ways in which the public can participate in regulatory and other efforts to improve air quality. [40 CFR 51.285 \("Public notification"\)](#), repeats the language of CAA section 127.

Prevention of significant deterioration: The approvability of an air agency's PSD program is essential to the approvability of an infrastructure SIP submission with respect to CAA section 110(a)(2)(J). The requirements for Element J in relation to a comprehensive PSD permitting program are the same as described earlier in this document with respect to Element C. Generally, every PSD-related requirement of Element C applies, including the requirement that the PSD permitting program address all regulated pollutants. Please refer to that section.

Visibility protection: Under 40 CFR part 51 subpart P, implementing the visibility requirements of CAA title I, part C, states are subject to requirements for RAVI, new source review for possible impacts on air quality related values in Class I areas, and regional haze planning. Specific requirements stemming from these CAA sections are codified at 40 CFR

part 51 subpart P. However, when the EPA establishes or revises a NAAQS, these requirements under part C do not change. The EPA believes that there are no new visibility protection requirements under part C as a result of a revised NAAQS. Therefore, there are no newly applicable visibility protection obligations pursuant to Element J after the promulgation of a new or revised NAAQS. Air agencies do not need to address the visibility subelement of Element J in an infrastructure SIP submission. For clarity's sake, to better inform the public comment process on the SIP submission, the air agency may wish to clearly state that the visibility subelement of Element J is not being addressed, and reiterate in the submission that according to EPA's interpretation of the CAA this element does not need to be addressed.

Element K – Section 110(a)(2)(K): Air Quality Modeling and Submission of Modeling Data

Each such plan shall –

(K) provide for –

(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and

(ii) the submission, upon request, of data related to such air quality modeling to the Administrator.

To meet Element K, the best practice would be for an air agency to submit, for inclusion into the SIP (if not already part of the SIP), the statutory or regulatory provisions that provide the air agency or official with the authority to perform the following actions along with a narrative explanation of how the provisions meet the requirements of this element⁶⁴: (1) conduct air quality modeling to predict the effect on ambient air quality of any emissions of any air pollutant for which a NAAQS has been promulgated, and (2) provide such modeling data to the EPA Administrator upon request.

⁶⁴ The EPA recognizes that some air agencies may have general authorizing provisions that do not specifically enumerate specific activities but do implicitly authorize the air agency to perform such activities, in which case inclusion of those provisions would meet the intent of this best practice.

If an air agency chooses not to include the relevant statute or regulations in its SIP, then the air agency should provide a reference or citation to the authority provisions, along with a narrative explanation of how they meet the requirements of this element, as well as a copy of the relevant authority to accompany the SIP as required by 40 CFR 51.231.

Element L – Section 110(a)(2)(L): Permitting Fees

Each such plan shall –

(L) require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this chapter, a fee sufficient to cover –

(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action),

until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter V of this chapter.

Currently, every state has an EPA-approved fee program under CAA title V. However, this fee program is not required to be part of the EPA-approved SIP. The infrastructure SIP should provide citations to the regulations providing for collection of permitting fees under the state's EPA-approved Title V permit program. These citations to the EPA-approved title V regulations will not cause the title V program to be treated as part of the EPA-approved SIP, and the EPA will not re-review the title V program itself in the context of reviewing infrastructure SIP submissions. *See* [40 CFR 70.9 \("Fee determination and certification"\)](#) and [40 CFR part 70, appendix A \("Approval Status of State and Local Operating Permits Programs"\)](#). If the state title V program fees cover all CAA permitting, implementation, and enforcement for new and modified major sources as well as existing major sources, this reference to the title V program will satisfy this element. If a state's approved title V permit program fees do not cover the reasonable costs of reviewing and acting upon applications for PSD and NNSR permits for major

sources⁶⁵ (along with the reasonable costs of implementing and enforcing the terms and conditions of PSD and NNSR permits), then the air agency should contact its Regional Office regarding what needs to be in the submission to fulfill this Element.

Element M – Section 110(a)(2)(M): Consultation and Participation by Affected Local Entities

Each such plan shall –

(M) provide for consultation and participation by local political subdivisions affected by the plan.

To satisfy Element M, the SIP should provide for consultation with affected local political subdivisions. As part of an infrastructure SIP submission, an air agency may simply identify its policies or procedures that allow and promote such consultation. For example, the infrastructure SIP submission may cite a policy wherein the air agency, before adopting or amending a plan, policy, or program, will consult with the regional planning coalition composed of local political subdivisions potentially affected by the action and explain how such information is used in the development of a SIP submission to the EPA for approval into the SIP. The normal public hearing process prior to adoption and submission of a SIP revision may also be cited as a component of the provisions for consultation, since leaders of political subdivisions have the opportunity to participate in that public process.

For Further Information

If you have any questions concerning this guidance, please contact Mr. H. Lynn Dail, by telephone at (919) 541-2363, or by email at dail.lynn@epa.gov, or Ms. Lisa Sutton, by telephone at (919) 541-3450 or by email at sutton.lisa@epa.gov.

⁶⁵ Substantive NNSR provisions will not be reviewed as part of the EPA's action on the infrastructure SIP submission. See discussion in Section II, "Which elements of CAA 110(a)(2) affect infrastructure SIPs?"