UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MEMORANDUM

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

SUBJECT: Guidance on Infrastructure State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)

FROM: Stephen D. Page, Director
Office of Air Quality Planning and Standards

TO: Regional Air Division Directors, Regions 1 – 10

This guidance addresses the "infrastructure" elements for SIPs to meet the requirements of sections 110(a)(1) and 110(a)(2) of the Clean Air Act (CAA) for the 2008 Pb NAAQS. On October 15, 2008, the U. S. Environmental Protection Agency (EPA) revised the primary and secondary Pb NAAQS from 1.5 micrograms per cubic meter ($\mu g/m^3$) to 0.15 $\mu g/m^3$. Pursuant to sections 110(a)(1) and 110(a)(2) of the CAA, each state is required to develop and submit a plan to provide for the implementation, maintenance, and enforcement of a newly promulgated or revised NAAQS.

The CAA directs states to address basic air quality management infrastructure requirements to ensure attainment and maintenance of the NAAQS. The attachment to this memorandum summarizes each of these requirements. The CAA provides that states are to submit to EPA SIPs addressing the requirements of sections 110(a)(1) and 110(a)(2) within three years of promulgation of a new or revised standard.[1] The EPA recognizes that many of the required section 110(a)(2) elements relate to the general information and authorities that constitute the infrastructure of a state's air quality management program – elements that have been in place since the initial SIPs were submitted in response to the Clean Air Act of 1970 and some required elements may have been adopted to satisfy the infrastructure SIP requirements for the 1997 $PM_{2.5}$, 1997 8-hour ozone, and 2006 $PM_{2.5}$ NAAQS. It is the responsibility of each state to review its air quality management program's infrastructure SIP provisions in light of each new or revised NAAQS.

Determining Completeness of State Submittals

Pursuant to section 110(a)(1), states will have to review and revise, as appropriate, their existing Pb NAAQS SIPs to ensure that the SIPs are adequate to address the 2008 Pb NAAQS. States

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[1] Although the effective date of the Federal Register notice for the final rule was January 12, 2009, the rule was signed by the Administrator and publicly disseminated on October 15, 2008. Therefore, the deadline for submittal of infrastructure SIPs for the 2008 Pb NAAQS is October 15, 2011.

should, in consultation with the EPA Regional Offices, refer to applicable EPA regulations governing SIP submittals per 40 CFR Part 51.

These regulations include, but are not limited to:

- 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.

If a state determines that its existing SIP is adequate, then the state's SIP submittal may be a certification that the existing SIP contains provisions addressing all requirements of the section 110(a)(2) infrastructure elements as applicable for the 2008 Pb NAAQS. Such certification (*e.g.*, in the form of a letter to the EPA from the Governor or her/his designee) should cite the applicable provisions in the existing SIP. As for all SIP submittals, section 110(l) directs the state to provide reasonable public notice and opportunity for public hearing on a certification letter prior to submission to the EPA.

- Section 110(a)(2) specifies the elements and sub-elements that are required in order for the EPA to determine that an infrastructure SIP submittal is complete. Specifically, each state should include documentation demonstrating a correlation between each infrastructure element and an equivalent state statutory or regulatory authority in the existing or submitted SIP. At a minimum, a complete submittal is a letter from an appropriate state official (*e.g.*, Governor or designee) certifying compliance with each element which has gone through state notice and hearing procedures. To meet the requirements of sections 110(a)(1) and 110(a)(2), a SIP submittal should include a detailed explanation of how the state's SIP meets each applicable requirement of section 110(a)(2). Where a SIP submittal does not meet the requirements of those CAA provisions, a letter should be sent to the state notifying it of the finding of incompleteness. EPA's criteria for determining the completeness of a SIP submittal are set out in EPA's regulations at 40 CFR Part 51, Appendix V. A state's obligation to make an infrastructure SIP submittal that addresses one or more infrastructure SIP elements cannot be fulfilled through a letter from the state that merely promises a future submittal.

EPA has determined that the elements and sub-elements of section 110(a)(2) with respect to the 2008 Pb NAAQS are, for the most part, severable. For example:

- SIP submittals that address some but not all elements or sub-elements of section 110(a)(2) should be found incomplete for the unaddressed elements or sub-elements.

- If EPA makes a finding of failure to submit an infrastructure SIP, that finding will only apply to the elements or sub-elements that were not addressed by the state's

infrastructure SIP revision. In order for EPA to make a determination as to whether a subsequent infrastructure SIP submittal is complete, the state only needs to submit those elements that were earlier found not to have been submitted.

A finding that an infrastructure SIP submittal is complete does not necessarily mean that the submittal is approvable, because the completeness review only addresses whether the state has provided information sufficient to warrant formal EPA review for approvability. Section 110(k) directs EPA to take final action on a SIP submittal within one year after the SIP is determined to be complete. If EPA makes an affirmative finding that a SIP submittal is complete, the date of the finding establishes the "completeness date" for the submittal; if EPA makes no finding the submittal is deemed complete, by operation of law, on the date six months after the submittal date. Actions on a SIP submittal may include approval (full, partial, or conditional) and disapproval (full or partial).

The obligations of EPA to promulgate a federal implementation plan (FIP) are set out in section 110(c) of the CAA. EPA's obligation to promulgate a FIP for a state is triggered if EPA takes any of the following actions associated with the required SIP: 1) EPA makes a finding that a state has failed to make a SIP submittal; 2) EPA makes a finding that a state has made an incomplete submittal; or 3) EPA disapproves a SIP submittal. If EPA takes one of these actions, section 110(c) directs EPA to take further action within two years, under what is commonly referred to as the "FIP clock." In order to remove EPA from the FIP obligation, a state SIP submittal must meet the applicable requirements and be approved by EPA.

We acknowledge that there have been significant delays in issuing this guidance. This is due in part to legal and other issues raised by outside parties over the past two years regarding actions on a range of infrastructure SIP issues for other pollutants. It was our desire to address as many of those issues as possible in this memorandum. We recognize that many states have been moving forward to develop these infrastructure plans, and this guidance is intended to help them complete this process. We will work to assist states in the development and completion of these plans so they may be submitted as soon as possible.

Please ensure that the appropriate air agency officials for states in your Region are made aware of this guidance.

For Further Information

If you have any questions concerning this guidance, please contact Mia South at (919) 541-5550 or by email at south.mia@epa.gov, or Lisa Sutton at (919) 541-3450 or by email at sutton.lisa@epa.gov.

Attachment

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Guidance on Section 110 Infrastructure SIPs for the 2008 Pb NAAQS

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Required Section 110 Infrastructure SIP Elements

The Clean Air Act (CAA) directs states to address basic State Implementation Plan (SIP) requirements to implement, maintain and enforce the national ambient air quality standards (NAAQS). Under CAA sections 110(a)(1) and 110(a)(2), states are to submit these SIPs within three years after promulgation of a new or revised standard. Many of the section 110(a)(2) SIP elements relate to the general information and authorities that constitute the "infrastructure" of a state's air quality management program, and these have been in place since the initial SIPs were submitted in response to the 1970 CAA. It is the responsibility of each state to review its air quality management program's infrastructure SIP provisions in light of each new or revised NAAQS.

States should review and revise, as appropriate, their existing infrastructure SIPs to ensure that they are adequate to address the 2008 Pb NAAQS. States should, in consultation with U. S. Environmental Protection Agency (EPA) Regional Offices, follow applicable EPA regulations governing infrastructure SIP submittals in 40 CFR Part 51 - e.g., 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"), and Subpart Q ("Reports").

For many infrastructure SIP elements, a SIP submittal should refer to and include citations to relevant state regulations. See guidance below regarding elements (F), (H), (J), and (M). For EPA's general criteria for infrastructure SIP submittals, refer to 40 CFR Part 51, Appendix V, "Criteria for Determining the Completeness of Plan Submissions."

For example, in accordance with Appendix V, paragraph 2.1(d), an infrastructure SIP submittal would include a copy of the actual regulation that the state is submitting for approval and incorporation by reference into its SIP, if a copy of that regulation has not already been provided by the state.

Pursuant to section 110(a), states must provide reasonable notice and opportunity for public hearing for all infrastructure SIP submittals. Pursuant to EPA's regulations at 40 CFR Part 51, an infrastructure SIP submittal will include a certification by the state that the public hearing was held in accordance with EPA's procedural requirements for public hearings. See 40 CFR Part 51 Appendix V 2.1(g) and 40 CFR 51.102. If a state believes that its existing approved infrastructure SIP is adequate with regard to specific elements, then the state's SIP submission may be a certification that the existing SIP contains provisions addressing the relevant section 110(a)(2) infrastructure elements as applicable for

the 2008 Pb NAAQS. Such certification (*e.g.*, in the form of a letter to EPA from the Governor or her/his designee) should cite the applicable provisions in the existing infrastructure SIP and provide a specific description of how compliance with each element is achieved. A state's certification made in connection with the 2008 Pb NAAQS should be included in a SIP submittal only after the state has provided public notice and opportunity for public hearing on its certification.

Section 110(a)(2) of the CAA directs all states to develop and maintain an air quality management infrastructure that includes enforceable emission limitations, an ambient monitoring program, an enforcement program, air quality modeling capabilities, and adequate personnel, resources, and legal authority. Section 110(a)(2)(D) also directs SIPs to prevent emissions from within the state that contribute significantly to nonattainment in any other state, or that interfere with maintenance in any other state, or that interfere with programs under part C of the CAA to prevent significant deterioration of air quality or to protect visibility in any other state.

Two elements identified in section 110(a)(2) are not governed by the 3-year submission deadline of section 110(a)(1). The elements pertain to part D, in Title I of the CAA, which addresses plan requirements for nonattainment areas. Therefore, the following section 110(a)(2) elements are considered by EPA to be outside the scope of infrastructure SIP actions: (1) section 110(a)(2)(C) to the extent it refers to permit programs (known as "nonattainment new source review") under part D; and (2) section 110(a)(2)(I) in its entirety. EPA does not expect infrastructure SIP submittals to include regulations or emission limits developed specifically for attaining the relevant standard. Those submittals are due at the time the nonattainment area planning elements are due (18 months following designation).

Except as described above, subsections (A) through (M) of section 110(a)(2) set forth the infrastructure elements that a SIP should address, in order to be approved by EPA. The elements are presented below in context of the 2008 Pb NAAQS.

Section 110(a)(2)(A): Emission limits and other control measures

"Each such plan shall [. . .] 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."

EPA would not expect infrastructure SIP submission to identify nonattainment area emission controls. Emissions limitations and other control measures to attain the 2008 NAAQS in areas designated nonattainment for the 2008 Pb NAAQS are due on a different schedule from the section 110 infrastructure elements and will be reviewed and acted upon through a separate process. However, the infrastructure SIP submission may include a list or table referencing any Pb emission reduction measures adopted and relied on by the state to meet other CAA requirements, such as maintenance of the 2008 NAAQS.

There are two other issues that generally fall under this particular element of section 110(a)(2)(A) for which we provide general guidance at this time. They are: (1) how states would need to address previously approved emissions limitations that may treat startup, shutdown and malfunction (SSM) events inconsistently with our longstanding guidance on excess emissions; and (2) how states would need to address previously approved variance provisions and "director's discretion" provisions that do not comport with EPA policy. We are discussing options for resolving next steps to be taken on these issues, taking into consideration several actions on state provisions relating to SSM and director's discretion in which EPA is currently engaged.[1]

Nevertheless, in the meantime EPA wishes to provide infrastructure SIP guidance to the extent possible. Therefore, as general guidance, EPA can advise that states not make infrastructure SIP submissions that rely on previously approved but potentially flawed provisions. Further, we wish to make clear that for infrastructure SIP submissions such as for the 2008 Pb NAAQS, any "new" (*i.e.*, not already SIP-approved) provisions should be consistent with EPA's longstanding policies on SSM and director's discretion, which are briefly summarized as follows.[2] Because excess emissions might aggravate air quality so as to prevent attainment and maintenance of the NAAQS and compliance with other CAA requirements, EPA would view all periods of excess emissions as violations of the applicable emission limitation. Therefore, new provisions as part of an approvable SIP submittal could not exempt from enforcement excess emissions that may occur at a facility during a period of startup or shutdown. Further,

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[1] See, *e.g.*, SIPs for Utah and North Dakota. EPA has also proposed to enter into a settlement agreement that would obligate EPA to respond by August 31, 2012, to a petition for rulemaking filed by the Sierra Club that concerns SSM provisions in 39 states' SIPs. (See notice published in the Federal Register on September 1, 2011, at 76 FR 54465.)

[2] For further description of EPA's policy on SSM and director's discretion, see, *e.g.*, a memorandum dated September 20, 1999, entitled, "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.

new provisions as part of an approvable SIP submittal could not automatically exempt from enforcement excess emissions claimed to result from an equipment malfunction. In addition, new provisions as part of an approvable SIP submittal could not allow a state 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 EPA and citizens from enforcing applicable requirements.

Section 110(a)(2)(B): Ambient air quality monitoring/data system

"Each such plan shall [. . .] 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 section 110(a)(2)(B) requirements for this NAAQS, the state's monitoring system should:

- Monitor air quality for Pb at appropriate locations throughout the state using EPA approved Federal Reference Method or equivalent monitors, in accordance with recent revisions to the Pb monitoring network requirements. See the Lead Ambient Air Monitoring Requirements, December 14, 2010.
- Submit data to EPA's Air Quality System (AQS) in a timely manner in accordance with EPA's Air Quality data reporting regulations. See 40 CFR 51.320.
- Submit approvable annual monitoring plans to EPA that describe how the state has complied with monitoring requirements and explain any proposed changes to the network.
- Provide the EPA Regional Office prior notification of any planned changes to monitoring sites or to the network plan.

Section 110(a)(2)(C): Programs for enforcement, PSD, and NSR

"Each such plan shall [. . .] 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."

The Prevention of Significant Deterioration (PSD) and nonattainment New Source Review (NNSR) programs contained in parts C and D of Title I of the CAA, and collectively referred to as the major New Source Review (NSR) 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 that pollutant when identified for regulation by the Administrator.[3] The EPA rules addressing these programs can be found generally at 40 CFR 51.166 and 40 CFR 52.21 (for PSD), and 40 CFR 51.165, 40 CFR 52.24, and Part 51, Appendix S (for NNSR).

Essential to the approvability of infrastructure SIP elements (C) and (J) is the approvability of a state's PSD program in its entirety. To meet section 110(a)(2)(C) requirements for the Pb NAAQS, the infrastructure SIP submittal should:

- Reference relevant state and federal regulations that provide for enforcement of Pb emission limits and control measures.
- Identify the various state regulations that govern permitting of new and modified stationary sources (minor and major) of Pb in the state.
- Incorporate its PSD program regulations to address any applicable EPA amendments to Pb PSD rules within 3 years from the date of such amendments.

For areas subject to a state's SIP-approved PSD program, the state should demonstrate that it is authorized to implement its existing PSD permit program to ensure that the construction and modification of major stationary sources does not cause or contribute to a violation of the Pb NAAQS. The state's PSD program should ensure that new or modified sources will apply the Best Available Control Technology to reduce Pb emissions in accordance with CAA sections 165 (a)(3) and (4).

[3] The terms "major" and "minor" categorize a stationary source, for NSR applicability purposes, in terms of an annual emissions rate (tons per year, tpy) for a pollutant. Generally, a minor source is any source that is not "major." "Major" is defined in the applicable NSR regulations—PSD or nonattainment NSR.

States need to have in place a PSD program that applies to all regulated NSR pollutants, including GHG. The state's PSD program should apply to sources that emit greenhouse gases (GHG) in accordance with EPA's Tailoring Rule.[4] Among other things, the state's PSD program must either: (i) limit PSD applicability to GHG-emitting sources by adopting the applicability thresholds included in the Tailoring Rule; or (ii) adopt lower GHG thresholds and show that the state has adequate personnel and funding to administer and implement those lower thresholds. Otherwise, the state is directed to remove from EPA's consideration for approval that portion of the SIP (or SIP submission) for which EPA rescinded our previous approval of the PSD program (in a rulemaking referred to as the "GHG PSD SIP Narrowing Rule").[5] To request such removal, a state may choose to follow the example of the letter request submitted by South Carolina.[6]

Until a state has adopted a comprehensive program, its infrastructure SIP would not be approvable with respect to CAA Section 110(a)(2)(C) or (J). If a state lacks a SIP-approved PSD program, it is subject to a federal implementation plan (FIP), and major stationary sources within its jurisdiction are subject to the federal PSD requirements in 40 CFR 52.21. Some states are subject to a FIP for PSD permitting of all regulated NSR pollutants, and fewer states are subject to a FIP for PSD permitting that is limited to GHG. For sources subject to a FIP for PSD permitting, either the EPA Regional Office or the state acting as EPA's delegate is the permitting authority. EPA recognizes that many states have been implementing a PSD FIP program for some time. When a state is already subject to a FIP for PSD permitting (whether or not the state has been delegated authority to implement the PSD FIP), and EPA disapproves this element of the state's infrastructure SIP submittal, we expect the permitting authority would simply continue implementation of the PSD FIP, and EPA would have no additional FIP obligations. In addition, the state would not be subject to any potential mandatory sanctions in connection with such disapproval, as such sanctions do not apply to infrastructure SIP deficiencies.

Minor NSR programs are subject to the statutory requirements in section 110(a)(2)(C) of the CAA which requires "…regulation of the modification and construction of any stationary source …as

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[4] Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule; Final Rule. 75 FR 31514 (June 3, 2010).
[5] Limitation of Approval of Prevention of Significant Deterioration Provisions Concerning Greenhouse Gas-Emitting Sources in State Implementation Plans; Final Rule, 75 FR 82536 (December 30, 2010).
[6] South Carolina's letter request can be found at http://www.regulations.gov, at EPA-R04-OAR-2010-0721-0006.

necessary to assure that the [NAAQS] are achieved." These programs should be established in each state within three years of the promulgation of a new or revised NAAQS, and may be particularly important because virtually all sources of lead are minor sources.

To date, EPA has not proposed to amend the PSD regulations with regard to the Pb NAAQS. EPA does recognize that certain provisions of these regulations still may need to be evaluated and potentially revised in light of the 2008 Pb NAAQS. See for example, provisions 40 CFR Part 51.166(i)(5)(i)(g) ("the emissions increase of the pollutant from a new stationary source or the net emissions increase of the pollutant from a modification would cause, in any area, air quality impacts less than the following amounts: … Lead—0.1 µg/m_3, 3-month average);" 40 CFR 166 (b)(23)(i)

("Significant means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates: … Lead: 0.6 tpy"). EPA also is planning to issue Pb modeling guidance to supplement the guidance contained in EPA's Guideline on Air Quality Models (40 CFR Part 51, Appendix S), which will assist states and prospective sources in carrying out the analyses necessary to satisfy the PSD requirements for Pb.

Section 110(a)(2)(D)(i): Interstate transport provisions

"Each such plan shall […] 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-*
>
> *(ii) contribute significantly to nonattainment in, or*
>
> *(iii) interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard, or 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 to protect visibility."*

Section 110(a)(2)(D)(i) provides for infrastructure SIPs to include provisions prohibiting any source or other type of emissions activity in one state from contributing significantly to nonattainment, or interfering with maintenance, of the NAAQS in another state. (The preceding requirements, from subsection (2)(D)(i)(I), respectively refer to what may be called prongs 1 and 2.) Further, this section

directs infrastructure SIPs to include provisions prohibiting any source or other type of emissions activity in one state from interfering with measures required to prevent significant deterioration of air quality, or from interfering with measures required to protect visibility (*i.e.*, measures to address regional haze) in any state. (The preceding requirements, from subsection (2)(D)(i)(II), respectively refer to what may be called prongs 3 and 4.)

The physical properties of Pb prevent Pb emissions from experiencing the same travel or formation phenomena as $PM_{2.5}$ or ozone. More specifically, there is a sharp decrease in Pb concentrations, at least in the coarse fraction, as the distance from a Pb source increases. Accordingly, while it may be possible for a source in a state to emit Pb in a location and in quantities that may contribute significantly to nonattainment in, or interfere with maintenance by, any other state, EPA anticipates that this would be a rare situation, e.g., where large sources are in close proximity to state boundaries.

EPA believes that requirements of subsection (2)(D)(i)(I) (prongs 1 and 2) could be satisfied through a state's assessment as to whether or not emissions from Pb sources located in close proximity to their state borders have emissions that impact the neighboring state such that they contribute significantly to nonattainment or interfere with maintenance in that state.[7] The states' conclusions could be supported by the technical information or data used to support the initial area designations for Pb. Therefore, to address prongs 1 and 2 of section 110(a)(2)(D)(i)(I) the state's submission should include an explanation in support of the state's conclusion and, if applicable, should address the impact in their submittal.

Under section 110(a)(2)(D)(i)(II), the PSD sub-element (prong 3) may be met by the state's confirmation in an infrastructure SIP submission that new major sources and major modifications in the state are subject to PSD and (if the state contains a nonattainment area for the relevant pollutant) NNSR programs that implement the 2008 Pb NAAQS.[8]

With regard to the requirement of prong 4, *i.e.*, visibility under subsection (2)(D)(i)(II), significant impacts from 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

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[7] For example, EPA's experience with initial lead designations suggests that sources that emit less than 0.5 tpy or that are located more than 2 miles from a state border generally appear unlikely to contribute significantly to nonattainment in another state.

[8] Memorandum issued by William T. Harnett, Director, OAQPS/AQPD, "Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS)," dated September 25, 2009.

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 that Pb could impact visibility, Pb-related visibility impacts were found to be insignificant (e.g., less than 0.10%) .[9] Although we anticipate that Pb emissions will contribute only negligibly to visibility impairment at Class I areas, the state's submission should include an explanation in support of the state's conclusion (and, if applicable, should address the impact in their submittal). Where a state's regional haze SIP has been approved as meeting all current obligations, a state may point to its approved plan to demonstrate that it meets the requirements of prong 4.

Section 110(a)(2)(D)(ii): Interstate and International transport provisions

"Each such plan shall [. . .] contain adequate provisions insuring compliance with the applicable requirements of sections 115 or 126 (b) that involve Pb emissions (relating to interstate and international pollution abatement)."

Section 126(a) of the CAA directs each SIP to include provisions requiring a new or modified source to notify neighboring states of potential impacts from the source. States with SIP-approved PSD programs should have a regulatory provision in place, consistent with 40 CFR 51.166(q)(2)(iv), that requires such notification of other state and local agencies. States relying on the federal program requirements of 40 CFR 52.21(q), which provide for notification of affected state and local air agencies, to satisfy this requirement have programs that are technically deficient and not approvable. Although these programs are deficient and these states have not "submitted" anything to EPA, EPA would not be required to take further action with respect to this element because the federal rules represent a FIP that fully addresses the notification issue. In addition, mandatory sanctions would not apply because the deficiencies are neither with regard to a required submittal under part D nor in response to an SIP call under CAA Section 110(k)(5). As described in this infrastructure SIP guidance for element (C), such states remain obligated to adopt and submit a PSD program for EPA approval that applies to all regulated NSR pollutants, including GHG. Until a state provides such a program, its infrastructure SIP would not be approvable with respect to section 110(a)(2)(D)(ii).

[9] Analysis by Mark Schmidt, OAQPS, "Ambient Pb's Contribution to Class 1 Area Visibility Impairment," June 17, 2011.

Sections 126(b) and 126(c) of the CAA affect a state only if the Administrator has been petitioned to make a finding of violation that is related to either interstate transport or international transport of emissions from sources in the state. Thus, unless a state has been the subject of such a petition, the state has no continuing obligation under sections 126(b) or 126(c).

Section 115 of the CAA authorizes the Administrator to require a state to revise its SIP under certain conditions to alleviate international transport. Because there are no pending actions pursuant to Section 115 of the CAA, EPA has no expectation that the state would need to submit anything in regards to Section 115 at this time.

Section 110(a)(2)(E): Adequate personnel, funding, and authority

"Each such plan shall [. . .] 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,

(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."

The infrastructure SIP should assure that the state has adequate *personnel and funding* to implement the Pb NAAQS. See EPA's regulations at 40 CFR Part 51, subpart M ("Intergovernmental Consultation") and subpart O ("Miscellaneous Plan Content Requirements"). For example:

- In accordance with EPA's regulations at subpart M, the infrastructure SIP should identify the organizations that will participate in developing, implementing, and enforcing the SIP as a whole. The infrastructure SIP should identify the responsibilities of such organizations and include related agreements among the organizations. See 40 CFR 51.240, "General plan requirements." In accordance with EPA's regulations at subpart O, the infrastructure SIP should describe resources for carrying out State programs and requirements. Resources to be

described include: (1) those available to the state (and local agencies, where appropriate) as of the date of infrastructure SIP submittal; (2) those considered necessary during the 5 years following infrastructure SIP submittal; and (3) projections regarding acquisition of the described resources. See 40 CFR 51.280, "Resources." Further, the infrastructure SIP should assure that the state has adequate *authority* under its rules and regulations to carry out the state's SIP obligations with respect to the 2008 Pb NAAQS and to revise the SIP as necessary. See EPA's regulations at 40 CFR Part 51, subpart L ("Legal Authority") and subpart O ("Miscellaneous Plan Content Requirements*").* For example:

- In accordance with EPA's regulations at subpart L, the infrastructure SIP should show that the state has the legal authority to carry out the plan; the provisions of the state's laws or regulations that provide that authority are to be specifically identified in the infrastructure SIP, and copies of the laws or regulations should be included in the infrastructure SIP submittal. See 40 CFR sections 51.230 through 51.231.
- In accordance with EPA's regulations at subpart O, the infrastructure SIP submittal should include copies of rules and regulations that show that the state has adopted the emission limitations and other measures necessary for attainment and maintenance of the 2008 Pb NAAQS. See 40 CFR 51.281, "Copies of rules and regulations."

In accordance with sub-element (ii), the infrastructure SIP should include requirements that the state comply with CAA 128, "State Boards."[10] Section 128 of the CAA states:

> *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.*

[10] EPA's operative guidance on these SIP requirements can be found in a memorandum dated March 2, 1978, from David Bickart, Deputy General Counsel, to Regional Air Directors, entitled "Guidance to State for Meeting Conflict of Interest Requirements of Section 128."

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.

Finally, the infrastructure SIP should assure that the state retains responsibility for ensuring adequate implementation of the state's SIP obligations with respect to the 2008 Pb NAAQS. A state may assign responsibility for carrying out a portion of its SIP to a state government agency other than the state air pollution control agency, if the SIP demonstrates that such other agency has the necessary legal authority. Similarly, the state may authorize a local agency to carry out the SIP or portion of the SIP within the local agency's jurisdiction, if the SIP demonstrates that the local agency has the necessary legal authority; however, the authorizing state is not relieved of responsibility for carrying out the SIP. See 40 CFR 51.232, "Assignment of legal authority to local agencies."

Section 110(a)(2)(F): Stationary source monitoring and reporting

"Each such plan shall [. . .] 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 source

(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."

The infrastructure SIP should provide citations to the state's regulations for source monitoring, recordkeeping, and reporting requirements applicable to Pb, such as the Air Emission Reporting Rule (AERR). In accordance with EPA regulations at 40 CFR Part 51, subpart K ("Source Surveillance"), the infrastructure SIP should identify State requirements that provide for monitoring the status of sources' compliance with the Pb NAAQS. For example, the SIP should include provisions for owners or operators of stationary sources to maintain records of emissions and other information as may be necessary to enable the state to determine whether the sources are in compliance, and the SIP should

further include provisions for the sources to periodically report that information to the state. See 40 CFR 51.211, "Emission reports and recordkeeping."

In accordance with EPA regulations at 40 CFR Part 51, subpart A ("Air Emissions Reporting Requirements") and subpart Q ("Reports"), the responsible state agency should analyze the Pb emissions data and correlate such data with applicable emission limitations or standards. The infrastructure SIP should identify state requirements providing for periodic reporting of emissions inventory data by the state to the Administrator (through the appropriate Regional Office). See 40 CFR 51.321. All reports should be made available to the public.

Section 110(a)(2)(G): Emergency episodes

"Each such plan shall provide for authority comparable to that in section 303 of this Title and adequate contingency plans to implement such authority."

Section 303 of the CAA provides authority to the EPA Administrator to restrain any source from causing or contributing to emissions which present an "imminent and substantial endangerment to public health or welfare, or the environment." As directed under section 110(a)(2)(G), each SIP submittal should specify authority, rested in an appropriate official, to restrain any source from causing or contributing to Pb emissions which present an imminent and substantial endangerment to public health or welfare, or the environment. Based on EPA's experience to date with the Pb NAAQS and designating Pb nonattainment areas, EPA expects that such an event would be unlikely and, if it were to occur, would be the result of a malfunction or other emergency situation at a relatively large source of lead. Accordingly, EPA believes that the central components of a contingency plan would be to reduce emissions from the source at issue (if necessary by curtailing operations) and public communication as needed. In addition, if a state believes, based on its inventory of lead 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 state could provide such a detailed rationale in place of a specific contingency plan. EPA notes that 40 CFR Part 51, subpart H (51.150-51.152) and 40 CFR, Part 51, Appendix L do not apply to Pb, but States may wish to consult subpart H and Appendix L as illustrative guidance of what constitutes appropriate contingency planning for other pollutants.

Section 110(a)(2)(H): Future SIP revisions

"Each such plan shall [. . .] 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 (CAA)."

The infrastructure SIP should provide citations to the state regulatory provisions requiring the state to 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 its section 110 plan in the event the Administrator finds the plan to be substantially inadequate to attain the NAAQS. See 40 CFR 51.104, "Revisions".

Section 110(a)(2)(I): Nonattainment area plan or plan revision Under Part D

"Each such plan shall [. . .] 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 above, EPA would not expect infrastructure SIP submissions to address subsection 110(a)(2)(I). Nonattainment area plans required under part D are required on a different schedule from the section 110 infrastructure elements and will be reviewed and acted upon through a separate process.

Section 110(a)(2)(J): Consultation with government officials, public notification, PSD and visibility protection

"Each such plan shall [. . .] meet the applicable requirements of section 121 of this Title (relating to consultation), section 127 of this Title (relating to public notification), and part C of this subchapter (relating to prevention of significant deterioration of air quality and visibility protection)."

The infrastructure SIP should reference the state rules that provide a 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 plan applies, consistent with the requirements of CAA § 121.

The infrastructure SIP should provide citations to regulations requiring the state to regularly notify the public of: instances or areas in which any primary NAAQS was exceeded; the associated health hazards; and ways in which the public can participate in regulatory and other efforts to improve air quality. See 40 CFR 51.285, "Public notification".

Pursuant to the CAA, an infrastructure SIP should identify state requirements that allow a state to implement any new PSD requirements that are triggered upon the effective date of any new NAAQS. However, sources in a state may be subject to the federal PSD requirements pursuant to 40 CFR 52.21, if a state does not have a SIP-approved PSD program. As described in this infrastructure SIP guidance for element (C), such states remain obligated to adopt and submit a PSD program for EPA approval that applies to all regulated NSR pollutants, including GHG. Until a state provides such a program, its infrastructure SIP would not be approvable with respect to CAA Section 110(a)(2)(J).

With regard to the requirement of the plan to meet the applicable requirements for visibility protection, EPA would not expect to treat this provision as applicable for purposes of the infrastructure SIP approval process. EPA recognizes that states are subject to visibility protection and regional haze program requirements under Part C of the Act (which includes sections 169A and 169B). However, in the event of the establishment of a new primary NAAQS, the visibility protection and regional haze program requirements under part C do not change. Thus, EPA concludes there are no new applicable visibility protection obligations under section 110(a)(2)(J) as a result of the 2008 Pb NAAQS.

Section 110(a)(2)(K): Air quality modeling/data

"Each such plan shall [. . .] 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."

The infrastructure SIP should demonstrate that the state has the authority and technical capability to conduct air quality modeling in order to assess the effect on ambient air quality of relevant pollutant emissions; and that the state can provide relevant data as part of the permitting and NAAQS implementation processes. The infrastructure SIP should also identify state regulations providing that, upon request, the state will submit current and future data relating to such air quality modeling to the Administrator. EPA anticipates that the predominant type of air quality modeling to be conducted with respect to implementing the Pb NAAQS will be source-oriented dispersion modeling with models such as AERMOD.

Section 110(a)(2)(L): Permitting fees

"Each such plan shall 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 Title) V of this chapter."

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. 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".

Section 110(a)(2)(M): Consultation/participation by affected local entities

"Each such plan shall [. . .] provide for consultation and participation by local political subdivisions affected by the plan."

To satisfy this element (M), and in accordance with EPA's regulations at 40 CFR Part 51, subpart M ("Intergovernmental Consultation"), the infrastructure SIP should identify the organizations that will participate in developing, implementing, and enforcing the state air quality program. Further, the infrastructure SIP should identify the responsibilities of such organizations and include related agreements among the organizations. See 40 CFR 51.240, "General plan requirements." The infrastructure SIP should identify policies or procedures requiring consultation and participation by local political subdivisions affected by the infrastructure SIP. For example, the infrastructure SIP should provide a citation to the state regulations that provide notice and opportunity for public hearing in accordance with EPA regulations at 40 CFR Part 51, subpart F ("Procedural Requirements").

Prior to submitting an infrastructure SIP revision or a compliance schedule, a state must provide notice, provide the opportunity to submit written comments, and allow the public the opportunity to request a public hearing. See 40 CFR 51.102, "Public hearings."