

effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on them. We have analyzed this proposed rule under that Order and have determined that it does not have implications for federalism.

#### Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

#### Taking of Private Property

This proposed rule would not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

#### Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

#### Protection of Children

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

#### Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

#### Energy Effects

We have analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply,

Distribution, or Use. We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

#### Technical Standards

The National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through the Office of Management and Budget, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

#### Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023–01, and Commandant Instruction M16475.1D which guides the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action is one of a category of actions which do not individually or cumulatively have a significant effect on the human environment because it simply promulgates the operating regulations or procedures for drawbridges. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

#### List of Subjects in 33 CFR Part 117

Bridges.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 117 as follows:

#### PART 117—DRAWBRIDGE OPERATION REGULATIONS

1. The authority citation for part 117 continues to read as follows:

**Authority:** 33 U.S.C. 499; 33 CFR 1.05–1; Department of Homeland Security Delegation No. 0170.1.

2. Revise § 117.253(b)(1) to read as follows:

#### § 117.253 Anacostia River.

\* \* \* \* \*

(b)(1) \* \* \*

(iv) At all other times, if at least 48 hours of notice is given to the controller at the Benning Yard Office.

\* \* \* \* \*

Dated: July 22, 2011.

**William D. Lee,**

*Rear Admiral, U.S. Coast Guard, Commander, Fifth Coast Guard District.*

[FR Doc. 2011–21457 Filed 8–22–11; 8:45 am]

**BILLING CODE 9110–04–P**

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 52

[EPA–R07–OAR–2011–0675, FRL–9455–7]

#### Approval and Promulgation of Implementation Plans; State of Kansas Regional Haze State Implementation Plan

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to approve a State Implementation Plan (SIP) revision submitted by the State of Kansas on November 9, 2009, that addresses Regional Haze for the first implementation period. In so doing, EPA is proposing to determine that the plan submitted by Kansas satisfies the requirements of the Clean Air Act (CAA or Act), for states to prevent any future and remedy any existing anthropogenic impairment of visibility in mandatory Class I areas caused by emissions of air pollutants located over a wide geographic area (also referred to as the “regional haze program”). States are required to assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas. EPA is taking this action pursuant to those provisions of the CAA that obligate the Agency to take action on submittals of SIPs. You may submit written comments on this proposed rule as per the instructions given under the section Instructions for Comment Submittal.

**DATES:** Written comments must be received via the methods given in the Instructions for Comment section on or before September 22, 2011.

**ADDRESSES: Instructions for Comment Submittal:** Submit your comments, which must be identified by Docket ID No. EPA-R07-OAR-2011-0675, by one of the following methods:

1. *Federal eRulemaking portal:* <http://www.regulations.gov>. Follow the on-line instructions for submitting comments.

2. *E-mail:* [Wolfersberger.Chris@epa.gov](mailto:Wolfersberger.Chris@epa.gov).

3. *Fax:* (913) 551-7844 (please alert the individual listed in the **FOR FURTHER INFORMATION CONTACT** if you are faxing comments).

4. *Mail:* Chrissy Wolfersberger, Air Planning and Development Branch, U.S. Environmental Protection Agency, Region 7, 901 N 5th Street, Kansas City, Kansas 66101.

5. *Hand Delivery:* U.S. Environmental Protection Agency, Region 7, 901 N. 5th Street, Kansas City, Kansas 66101; attention: Chrissy Wolfersberger. Such deliveries are only accepted Monday through Friday, from 8 a.m. to 5 p.m. excluding Federal holidays. Special arrangements should be made for deliveries of boxed information.

EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA, without going through <http://www.regulations.gov>, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information

about EPA's public docket visit the EPA

Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

*Docket:* All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically at <http://www.regulations.gov> or in hard copy at the Air Planning and Development Branch, U.S. Environmental Protection Agency, Region 7 Office, 901 N. 5th Street, Kansas City, Kansas 66101. EPA requests that if at all possible, you contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8 a.m. to 5 p.m. excluding Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Chrissy Wolfersberger, Air Planning and Development Branch, U.S. Environmental Protection Agency, Region 7, 901 N. 5th Street, Kansas City, Kansas 66101 or by telephone at (913) 551-7864.

**SUPPLEMENTARY INFORMATION:** Throughout this document, wherever "we," "us," or "our" is used, we mean EPA.

### Table of Contents

- I. What is the background for EPA's proposed action?
  - A. The Regional Haze Problem
  - B. Requirements of the CAA and EPA's Regional Haze Rule
  - C. Roles of Agencies in Addressing Regional Haze
- II. What are the requirements for regional haze SIPs?
  - A. CAA Provisions and the Regional Haze Rule
  - B. Consultation With States and Federal Land Managers (FLMs)
  - C. Determination of Baseline, Natural and Current Visibility Conditions
  - D. Monitoring Strategy and Other Implementation Plan Requirements
  - E. Reasonable Progress Goals
  - F. Best Available Retrofit Technology (BART)
  - G. Long Term Strategy (LTS)
- III. What is the relationship of the Clean Air Interstate Rule (CAIR) to the regional haze requirements?
  - A. Overview of EPA's CAIR
  - B. Remand of the CAIR
  - C. CAIR in Relation to the State of Kansas's Submittal
- IV. What is EPA's analysis of the State of Kansas' submittal?
  - A. CAA Provisions and the Regional Haze Rule
  - B. Affected Class I Areas
  - C. Consultation With States and FLMs

- D. Determination of Baseline, Natural and Current Visibility Conditions
- E. Monitoring Strategy and Other Implementation Plan Requirements
  - 1. Monitoring Strategy
  - 2. Emissions Inventory
  - 3. Reporting Requirements
  - 4. SIP Revision Schedule
- F. Determination of Reasonable Progress Goals
  - G. Best Available Retrofit Technology
    - 1. BART Eligible Sources
    - 2. BART Subject Sources
    - 3. BART Determinations
  - H. Long Term Strategy
    - 1. Emissions Reductions Due to Ongoing Air Pollution Programs
    - 2. Measures to Mitigate Construction Activities
    - 3. Emissions Limitations and Schedules for Compliance to Achieve the Reasonable Progress Goal
    - 4. Source Retirement and Replacement Schedules
    - 5. Smoke Management
    - 6. Anticipated Net Effect on Visibility Resulting From Projected Changes to Emissions
  - V. What action is EPA proposing?
  - VI. Statutory and Executive Order Reviews
    - A. Executive Order 12866, Regulatory Planning and Review
    - B. Paperwork Reduction Act
    - C. Regulatory Flexibility Act (RFA)
    - D. Unfunded Mandates Reform Act
    - E. Executive Order 13132, Federalism
    - F. Executive Order 13175, Coordination With Indian Tribal Governments
    - G. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks
    - H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use
    - I. National Technology Transfer and Advancement Act (NTTAA)

### I. What is the background for EPA's proposed action?

#### A. The Regional Haze Problem

Regional Haze is visibility impairment that is produced by a multitude of sources and activities which are located across a wide geographic area and emit fine particles (PM<sub>2.5</sub>) (e.g., sulfates, nitrates, organic carbon, elemental carbon, and soil dust), and their precursors (e.g., sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and in some cases, ammonia (NH<sub>3</sub>) and volatile organic compounds (VOC)). Fine particle precursors react in the atmosphere to form fine particulate matter which impairs visibility by scattering and absorbing light. PM<sub>2.5</sub> can also cause serious health effects and mortality in humans, and contributes to environmental effects such as acid deposition and eutrophication.<sup>1</sup>

<sup>1</sup> Eutrophication is defined as excessive richness of nutrients in a lake or other body of water,

Data from the existing visibility monitoring network, the “Interagency Monitoring of Protected Visual Environments”, or IMPROVE monitoring network, show that visibility impairment caused by air pollution occurs virtually all the time at most national park and wilderness areas. The average visual range in many Class I areas (e.g., national parks and memorial parks, wilderness areas, and international parks meeting certain size criteria) in the Western United States is 100–150 kilometers (13.6–9.6 deciviews (dv))<sup>2,3</sup>, or about one-half to two-thirds of the visual range that would exist without anthropogenic air pollution. In most of the eastern Class I areas of the United States, the average visual range is less than 30 kilometers (25 dv or more), or about one-fifth of the visual range that would exist under estimated natural conditions. See 64 FR 35715 (July 1, 1999).

#### *B. Requirements of the CAA and EPA’s Regional Haze Rule*

In section 169A of the 1977 Amendments CAA, Congress created a program for protecting visibility in the nation’s national parks and wilderness areas. This section of the CAA establishes as a national goal the “prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas<sup>4</sup> which impairment

frequently due to runoff from the land, which causes a dense growth of plant life and death of animal life from lack of oxygen.

<sup>2</sup> Visibility refers to the clarity with which distant objects can be viewed. Visual range is the distance at which an object is just discernible from the background. This could be considered how far one can see in a given direction. Visual range is primarily affected by the scattering and absorption of light by particles in the atmosphere. Scattering by gaseous molecules also reduces the transmission of light. The diminished intensity of light caused by this scattering and absorption is called light extinction.

<sup>3</sup> Deciview means a measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired.

<sup>4</sup> Areas designated as mandatory Class I Federal areas are those national parks exceeding 6000 acres, wilderness areas and national memorial parks exceeding 5000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). Section 169A of the CAA requires EPA to promulgate a list of such areas where visibility is an important value. 42 U.S.C. 7491. In 1979, EPA identified visibility as an important value in 156 of these areas. 44 FR 69122 (November 30, 1979); see 40 CFR part 81, subpart D. The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although States and tribes may designate additional areas as Class I, the requirements of the visibility program under section 169A of the CAA apply only to “mandatory Class I Federal areas.”

results from manmade air pollution.” On December 2, 1980, EPA promulgated regulations to address visibility impairment in Class I areas that is “reasonably attributable” to a single source or small group of sources, i.e. “reasonably attributable visibility impairment” (45 FR 80084). These regulations represented the first phase in addressing visibility impairment. EPA deferred action on regional haze that emanates from a variety of sources until monitoring, modeling and scientific knowledge about the relationships between pollutants and visibility impairment improved.

Congress added section 169B to the CAA in 1990 to address Regional Haze issues. EPA promulgated a rule to address regional haze on July 1, 1999 (64 FR 35713) (Regional Haze Rule or Rule). The Regional Haze Rule revised the existing visibility regulations to integrate into the regulation provisions addressing regional haze impairment and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 51.309, are included in the Federal visibility protection regulations at 40 CFR 51.300–309. Some of the main elements of the regional haze requirements are summarized below in section II. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia and the Virgin Islands. States are required by 40 CFR 51.308(b) to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.

#### *C. Roles Agencies in Addressing Regional Haze*

Successful implementation of the Regional Haze program will require long-term regional coordination among states, tribal governments and various Federal agencies. As noted above, pollution affecting the air quality in Class I areas can be transported over long distances, even hundreds of kilometers. Therefore, to effectively address the problem of visibility impairment in Class I areas, states need to develop strategies in coordination with one another, taking into account the effect of emissions from one jurisdiction on air quality in another.

Because the pollutants that lead to regional haze can originate from sources located across broad geographic areas,

Each mandatory Class I Federal area is the responsibility of a “Federal land manager” (FLM), the Secretary of the department with authority over such lands. 42 U.S.C. 7602(i). When we use the term “Class I area” in this notice, we mean a “mandatory Class I Federal area.”

EPA has encouraged the states and tribes across the United States to address visibility impairment from a regional perspective. Five regional planning organizations (RPOs) were developed to address regional haze and related issues. The RPOs first evaluated technical information to better understand how their states and tribes impact Class I areas across the country, and then pursued the development of regional strategies to reduce emissions of particulate matter and other pollutants leading to regional haze. The State of Kansas participated in the planning efforts of the Central Regional Air Planning Association (CENRAP) which is affiliated with the Central States Air Resource Agencies (CENSARA). This RPO includes nine states—Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas, and Louisiana.

States were also required (40 CFR 51.308(i)) to coordinate with FLMs during the development of the state’s strategies to address Regional Haze. FLMs include the US Fish and Wildlife Service, the U.S. Forest Service, and the National Park Service.

## **II. What are the requirements for regional haze SIPs?**

### *A. CAA Provisions and the Regional Haze Rule*

CAA sections 110(l) and 110(a)(2) require revisions to a SIP to be adopted by a state after reasonable notice and public hearing. EPA has promulgated specific procedural requirements for SIP revisions in 40 CFR Part 51, subpart F. These requirements include publication of notices by prominent advertisement in the relevant geographic area of a public hearing on proposed revisions, at least a 30-day public comment period, and the opportunity for a public hearing, and that the state, in accordance with its laws, submit the revision to the EPA for approval. Specific information on Kansas’ rulemaking, Regional Haze SIP development and public information process is included in Chapter 2, and Appendix 2.1, of the State of Kansas Regional Haze SIP, which is included in the docket of this proposed rulemaking.

Regional Haze SIPs must assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas. Section 169A, and EPA’s implementing regulations (40 CFR 51.300–51.309), require states to establish long-term strategies for making reasonable progress toward meeting this goal. Implementation plans also must give specific attention to certain stationary

sources that were in existence on August 7, 1977 but were not in operation before August 7, 1962 and require, where appropriate, that these sources install BART for the purpose of eliminating or reducing visibility impairment. The specific regional haze SIP requirements are discussed in further detail below.

#### *B. Consultation With States and Federal Land Managers (FLMs)*

The Regional Haze Rule requires that states consult with other states and FLMs before adopting and submitting their SIPs (40 CFR 51.308(i)). States must provide FLMs an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the SIP. This consultation must include the opportunity for the FLMs to discuss their assessment of impairment of visibility in any Class I area and to offer recommendations on the development of reasonable progress goals (RPGs)<sup>5</sup> and on the development and implementation of strategies to address visibility impairment. Further, a state must include in its SIP a description of how it addressed any comments provided by the FLMs. Finally, a SIP must provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas.

#### *C. Determination of Baseline, Natural and Current Visibility Conditions*

The Regional Haze Rule establishes the deciview as the principle metric or unit for expressing visibility. This visibility metric expresses uniform changes in haziness in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy conditions. Visibility expressed in deciviews is determined by using air quality measurements to estimate light extinction and then transforming the value of light extinction using a logarithm function. The deciview is a more useful measure for tracking progress in improving visibility than light extinction itself because each deciview change is an equal incremental change in visibility perceived by the human eye. Most

people can detect a change in visibility at one deciview.<sup>6</sup>

The deciview is used in expressing reasonable progress goals (which are interim visibility goals toward meeting the national visibility goal), defining baseline, current, and natural conditions, and tracking changes in visibility. The Regional Haze SIPs must contain measures that make "reasonable progress" toward the national goal of preventing and remedying visibility impairment in Class I areas caused by anthropogenic air pollution by reducing anthropogenic emissions that cause regional haze. The national goal is a return to natural conditions, *i.e.*, anthropogenic sources of air pollution would no longer impair visibility in Class I areas.

To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program, and as part of the process for determining reasonable progress, states must calculate the degree of existing visibility impairment at each Class I area at the time of each Regional Haze SIP submittal and periodically review progress every five years midway through each 10-year implementation period. To do this, the Regional Haze Rule requires states to determine the degree of impairment (in deciviews) for the average of the 20 percent least impaired ("best") and 20 percent most impaired ("worst") visibility days over a specified time period at each of their Class I areas. In addition, states must develop an estimate of natural visibility conditions for purpose of comparing progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. EPA has provided guidance to states regarding how to calculate baseline, natural and current visibility conditions in documents titled, EPA's *Guidance for Estimating Natural Visibility conditions under the Regional Haze Rule*, September 2003, (EPA-454/B-03-005 located at [http://www.epa.gov/ttncaaa1/t1/memoranda/rh\\_envcurhr\\_gd.pdf](http://www.epa.gov/ttncaaa1/t1/memoranda/rh_envcurhr_gd.pdf)), (hereinafter referred to as "EPA's 2003 Natural Visibility Guidance"), and *Guidance for Tracking Progress Under the Regional Haze Rule* (EPA-454/B-03-004 September 2003, located at [http://www.epa.gov/ttncaaa1/t1/memoranda/rh\\_tpurhr\\_gd.pdf](http://www.epa.gov/ttncaaa1/t1/memoranda/rh_tpurhr_gd.pdf)), (hereinafter referred

to as "EPA's 2003 Tracking Progress Guidance").

For the first regional haze SIPs that were due by December 17, 2007, "baseline visibility conditions" were the starting point for assessing current visibility impairment. Baseline visibility conditions represent the degree of visibility impairment for the 20 percent least impaired days and 20 percent most impaired days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states are required to calculate the average degree of visibility impairment for each Class I area, based on the average of annual values over the five year period. The comparison of initial baseline visibility conditions to natural visibility conditions indicates the amount of improvement necessary to attain natural visibility, while the future comparison of baseline conditions to then current conditions will indicate the amount of progress made. In general, the 2000–2004 baseline period is considered the time from which improvement in visibility is measured.

#### *D. Monitoring Strategy and Other Implementation Plan Requirements*

40 CFR 51.308(d)(4) of the Regional Haze Rule includes the requirement for a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the state. Compliance with this requirement may be met through participation in the Interagency Monitoring of Protected Vital Environments (IMPROVE) network, *i.e.* review and use of monitoring data from the network. The monitoring strategy is due with the first regional haze SIP, and it must be reviewed every five years.

The monitoring strategy must also provide for additional monitoring sites if the IMPROVE network is not sufficient to determine whether reasonable progress goals will be met. The SIP must also provide for the following:

- Procedures for using monitoring data and other information in a state with mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas both within and outside the state;
- For a state with no mandatory Class I areas, procedures for using monitoring data and other information to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas in other states;

<sup>5</sup> 40 CFR 51.308(d)(1)—for each mandatory Class I area located within the State, the State must establish goals (expressed in deciviews) that provide for reasonable progress towards achieving natural visibility conditions.

<sup>6</sup> The preamble to the Regional Haze Rule provides additional details about the deciview. See 64 FR 35714, 35725 (July 1, 1999).

- Reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state, and where possible, in electronic format;

- Developing a statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area. The inventory must include emissions for a baseline year, the most recent year for which data are available, and estimates of future projected emissions, along with a commitment to update the inventory periodically; and

- Other elements, including reporting, recordkeeping, and other measures necessary to assess and report on visibility.

The Regional Haze Rule requires control strategies to cover an initial implementation period extending to the year 2018, with a comprehensive reassessment and revision of those strategies, as appropriate, every 10 years thereafter. Periodic SIP revisions must meet the core requirements of section 51.308(d) with the exception of BART. The requirement to evaluate BART applies only to the first Regional Haze SIP. Facilities subject to BART must continue to comply with the BART provisions of section 51.308(e), as noted above. Periodic SIP revisions will assure that the statutory requirement of reasonable progress will be continue to be met.

#### E. Reasonable Progress Goals

The vehicle for ensuring continuing progress toward achieving the national visibility goal is the submission of a series of regional haze SIPs that establish two reasonable progress goals (*i.e.*, two distinct goals, one for the “best” and one for the “worst” days) for every Class I area for each (approximately) 10-year implementation period. The Regional Haze Rule does not mandate specific milestones or rates of progress, but instead calls for states to establish goals that provide for “reasonable progress” toward achieving natural (*i.e.*, “background”) visibility conditions. In setting reasonable progress goals, states must provide for an improvement in visibility for the most impaired days over the (approximately) 10-year period of the SIP, and ensure no degradation in visibility for the least impaired days over the same period.

States have significant discretion in establishing reasonable progress goals, but are required to consider the following factors established in section 169A of the CAA and in EPA’s Regional Haze Rule at 40 CFR 51.308(d)(1)(i)(A):

(1) the costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources. States must demonstrate in their SIPs how these factors are considered when selecting the reasonable progress goal for the best and worst days for each applicable Class I area in the state (40 CFR 51.308(d)(1)(i)(A)). States have considerable flexibility in how they take these factors into consideration, as noted in EPA’s *Guidance for Setting Reasonable Progress Goals under the Regional Haze Program*, (“EPA’s Reasonable Progress Guidance”), July 1, 2007, memorandum from William L. Wehrum, Acting Assistant Administrator for Air and Radiation, to EPA Regional Administrators, EPA Regions 1–10 (pp. 4–2, 5–1). In setting the reasonable progress goals, states must also consider the rate of progress needed to reach natural visibility conditions by 2064 (referred to as the “uniform rate of progress” or the “glidepath”) and the emission reduction measures needed to achieve that rate of progress over the ten year period of the SIP. Uniform progress toward achievement of natural visibility conditions by 2064 represents a rate of progress which states are to use for analytical comparison to the amount of progress they expect to achieve. In setting reasonable progress goals, each state with one or more Class I areas (“Class I state”) must also consult with potentially “contributing states”, *i.e.* other nearby states with emission sources that may be affecting visibility impairment at the Class I state’s areas (51.308(d)(1)(iv)).

States without Class I areas are required to submit Regional Haze SIPs to address their contribution to visibility impairment. As per the previous discussion in this proposed rulemaking, the ability of the long range transport of pollutants to affect visibility conditions areas makes it imperative that each state evaluate how emissions from within its borders affect visibility impairment in Class I areas in other states. However, states without Class I areas, such as Kansas, are not required to (a) establish reasonable progress goals, (b) calculate baseline and natural visibility conditions at Class I areas, or (c) monitor and report visibility data for each Class I area within the state.

#### F. Best Available Retrofit Technology (BART)

Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain larger, often

uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires that certain categories of existing stationary sources built between 1962 and 1977 procure, install, and operate the “best available retrofit technology” as determined by the state.<sup>7</sup> Under the Regional Haze Rule, states are directed to conduct BART determinations for such “BART-eligible” sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area. Rather than requiring source specific BART controls, states also have the flexibility to adopt an emissions trading program or other alternative program as long as the alternative provides greater reasonable progress toward improving visibility than BART. This is discussed in more detail in section III. of this proposal.

On July 6, 2005, EPA published the *Guidelines for BART Determinations Under the Regional Haze Rule*<sup>8</sup> at Appendix Y to 40 CFR part 51 (hereinafter referred to as the “BART Guidelines”) to assist states in determining which of their sources should be subject to the BART requirements and in determining appropriate emissions limits for each applicable source. In making a BART determination for a fossil fuel-fired generating plant with a total generating capacity in excess of 750 megawatts (MW), a state must use the approach set forth in the BART Guidelines. A state is

<sup>7</sup> The set of “major stationary sources” potentially subject to BART are listed in CAA section 169A(g)(7). The 26 source categories are: (1) Fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, (2) Coal cleaning plants (thermal dryers), (3) Kraft pulp mills, (4) Portland cement plants, (5) Primary zinc smelters, (6) Iron and steel mill plants, (7) Primary aluminum ore reduction plants, (8) Primary copper smelters, (9) Municipal incinerators capable of charging more than 250 tons of refuse per day, (10) Hydrofluoric, sulfuric, and nitric acid plants, (11) Petroleum refineries, (12) Lime plants, (13) Phosphate rock processing plants, (14) Coke oven batteries, (15) Sulfur recovery plants, (16) Carbon black plants (furnace process), (17) Primary lead smelters, (18) Fuel conversion plants, (19) Sintering plants, (20) Secondary metal production facilities, (21) Chemical process plants, (22) Fossil-fuel boilers of more than 250 million British thermal units per hour heat input, (23) Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels, (24) Taconite ore processing facilities, (25) Glass fiber processing plants, and (26) Charcoal production facilities.

<sup>8</sup> Appendix Y to part 51—F.1. The guidelines provide a process for making BART determinations that states can use in implementing the regional haze BART requirements on a source-by-source basis, as provided in 40 CFR 51.308(e)(1). States must follow the guidelines in making BART determinations on a source-by-source basis for 750 megawatt (MW) power plants but are not required to use the process in the guidelines when making BART determinations for other types of sources.

encouraged, but not required to follow the BART Guidelines in making BART determinations for other types of sources.

States must address all visibility impairing pollutants emitted by a source in the BART determination process. The most significant visibility impairing pollutants are SO<sub>2</sub>, NO<sub>x</sub>, and PM. EPA has stated that states should use their best judgment in determining whether VOCs or ammonia compounds impair visibility in Class I areas.

Under the BART Guidelines, states may select an exemption threshold value for their BART modeling, below which a BART-eligible source would not be expected to cause or contribute to visibility impairment in any Class I area. The state must document this exemption threshold value in the SIP and must state the basis for its selection of that value. Any source with emissions that model above the threshold value would be subject to a BART determination review. The BART Guidelines acknowledge varying circumstances affecting different Class I areas. States should consider the number of emissions sources affecting the Class I areas at issue and the magnitude of the individual sources' impacts. As a general matter, any exemption threshold set by the state should not be higher than 0.5 deciviews (70 FR 39161).

In their SIPs, states must identify potential BART sources, described as "BART-eligible sources" in the Regional Haze Rule and document their BART control determination analyses. In making BART determinations, section 169A(g)(2) of the CAA requires that states consider the following five factors: (1) The costs of compliance, (2) the energy and non-air quality environmental impacts of compliance, (3) any existing pollution control technology in use at the source, (4) the remaining useful life of the source, and (5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. States are free to determine the weight and significance to be assigned to each factor.

A Regional Haze SIP must include source-specific BART emission limits and compliance schedules for each source subject to BART. Once a state has made its BART determination, controls must be installed and in operation as expeditiously as practicable, but no later than 5 years after EPA's approval of the regional haze SIP. See CAA section 169(g)(4); 40 CFR 51.308(e)(1)(iv). In addition to what is required by the Regional Haze Rule, general SIP requirements mandate that the SIP must

also include all regulatory requirements related to monitoring, recordkeeping, and reporting for the BART controls on the source.

As noted above, the Regional Haze Rule allows states to implement an alternative program in lieu of BART so long as the alternative program can be demonstrated to achieve greater reasonable progress toward the national visibility goal than would BART. Under regulations issued in 2005 revising the regional haze program, EPA made just such a demonstration for CAIR. 70 FR 39104 (July 6, 2005). EPA's regulations provide that states participating in the CAIR cap-and-trade program under 40 CFR part 96 or which remain subject to the CAIR Federal Implementation Plan (FIP) in 40 CFR part 97 need not require affected BART-eligible electricity generating units (EGUs) to install, operate, and maintain BART for emissions of SO<sub>2</sub> and NO<sub>x</sub>. 40 CFR 51.308(e)(4). Since CAIR is not applicable to emissions of PM, states were still required to conduct a BART analysis for PM emissions from EGUs subject to BART for that pollutant.

#### G. Long Term Strategy (LTS)

Consistent with the requirement in section 169A of the CAA that states include in their regional haze SIP a 10- to 15-year strategy for making reasonable progress, 40 CFR 51.308(d)(3) of the Regional Haze Rule requires that states include a LTS in their SIPs. The LTS is the compilation of all control measures a state will use during the implementation period of the specific SIP submittal to meet reasonable progress goals. The LTS must include "enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals" for all Class I areas within, or affected by emissions from, the state. See 40 CFR 51.308(d)(3).

When a state's emissions are reasonably anticipated to cause or contribute to impairment in a Class I area located in another state, the Regional Haze Rule requires the impacted state to coordinate with the contributing states in order to develop coordinated emission management strategies (40 CFR 51.308(d)(3)(i)). In such cases, the contributing state must demonstrate that it has included in its SIP all measures necessary to obtain its share of the emission reductions needed to meet the reasonable progress goal for the Class I area. The RPOs have provided forums for significant interstate consultation, but additional consultations between states may be required to sufficiently address

interstate visibility issues. This is especially true where two states belong to different RPOs.

States should consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources. At a minimum, states must describe how each of the following seven factors are taken into account in developing their LTS (40 CFR 51.308(d)(3)(v)):

- Emission reductions due to ongoing air pollution control programs,
- Measures to mitigate the impacts of construction activities;
- Emissions limitations and schedules for compliance to achieve the reasonable progress goal;
- Source retirement and replacement schedules;
- Smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes;
- Enforceability of emissions limitations and control measures; and
- The anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS.

### III. What is the relationship of the Clean Air Interstate Rule (CAIR) to the regional haze requirements?

#### A. Overview of EPA's CAIR

CAIR, as originally promulgated, requires 28 states and the District of Columbia to reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> that significantly contribute to, or interfere with maintenance of, the NAAQS for fine particulates and/or ozone in any downwind state. See 70 FR 25162 (May 12, 2005). CAIR establishes emission budgets or caps for SO<sub>2</sub> and NO<sub>x</sub> for states that contribute significantly to nonattainment in downwind states and requires the significantly contributing states to submit SIP revisions that implement these budgets. States have the flexibility to choose which control measures to adopt to achieve the budgets, including participation in EPA-administered cap-and-trade programs addressing SO<sub>2</sub>, NO<sub>x</sub>-annual, and NO<sub>x</sub>-ozone season emissions.

#### B. Remand of the CAIR

On July 11, 2008, the DC Circuit issued its decision to vacate and remand both CAIR and the associated CAIR FIPs in their entirety. See *North Carolina v. EPA*, 531 F.3d 836 (DC Cir. 2008). However, in response to EPA's petition for rehearing, the Court issued an order remanding CAIR to EPA without

vacating either CAIR or the CAIR FIPs. The Court thereby left CAIR in place in order to “temporarily preserve the environmental values covered by CAIR” until EPA could replace it with a rule consistent with the court’s opinion. 550 F.3d at 1178. The Court directed EPA to “remedy CAIR’s flaws” consistent with its July 11, 2008, opinion but declined to impose a schedule on EPA for completing that action. Because CAIR accordingly has been remanded to the Agency without vacatur, CAIR and the CAIR FIPs are currently in effect in subject states.

Many states relied on CAIR as an alternative to BART for SO<sub>2</sub> and NO<sub>x</sub> for subject EGUs, as allowed under the BART provisions at 40 CFR 51.308(e)(4). Additionally, several states established RPGs that reflect the improvement in visibility expected to result from controls planned for or already installed on sources within the state to meet the CAIR provisions for this implementation period for specified pollutants. Many states relied upon their own CAIR SIPs or the CAIR FIPs for their states to provide the legal requirements which leads to these planned controls, and did not include enforceable measures in the LTS in the regional haze SIP submission to ensure these reductions. States also submitted demonstrations showing that no additional controls on EGUs beyond CAIR would be reasonable for this implementation period.

On July 6, 2011, EPA finalized the Cross-State Air Pollution Rule (CSAPR).<sup>9</sup> This rule responds to the court ruling remanding the 2005 CAIR, and achieves emission reductions beyond those originally required by CAIR through additional air pollution reductions from power plants beginning in 2012. On July 11, 2011, in conjunction with EPA’s finalization of CSAPR, EPA issued a supplemental proposal requesting comment on inclusion of additional states in the CSAPR ozone season program. (76 FR 40662) EPA intends to finalize the supplemental proposal by October 31, 2011.

#### *C. CAIR in Relation to the State of Kansas’ Submittal*

The State of Kansas is not in the CAIR program and did not rely on CAIR for reductions of SO<sub>2</sub> or NO<sub>x</sub> in place of BART at its BART-subject EGUs. EPA acknowledges that the CAIR program was a major component in the underlying assumptions used by the State to determine source apportionment based on the modeled

reduction expected in neighboring states that participate in the CAIR program. Modeling used by the CENRAP states included assumptions based on reductions from CENRAP states that relied on CAIR. As more fully discussed in section IV. F. of this proposal, and page 30 of the SIP, the State committed to report on its progress towards meeting the reasonable progress goals established for the Class I areas in other states within five years of submittal of the SIP, and if the State determines that the implementation plan is inadequate to ensure the reasonable progress goals are met, to submit necessary revisions to EPA. Kansas has committed to review emissions changes and potential new technology developments that may apply to the sources identified above as part of the five-year progress report. As described on page 74 of the SIP, if a determination is made that controls are feasible, cost-effective, and needed for visibility improvements, the State will explore additional controls at that time.

#### **IV. What is EPA’s analysis of the State of Kansas’ submittal?**

##### *A. CAA Provisions and the Regional Haze Rule*

EPA is proposing to find that the State of Kansas has met the requirements of the CAA which require that the State adopt a SIP after reasonable notice and public hearing. EPA also believes that the State has met the requirements of the specific procedural requirements for SIP revisions promulgated at 40 CFR part 51, subpart F and appendix V. These requirements include publication of notices by prominent advertisement in the relevant geographic area of a public hearing on proposed revisions, at least a 30-day public comment period, and the opportunity for a public hearing, and that the State, in accordance with its laws, submit the revision to EPA for approval. Specific information on Kansas’ rulemaking, Regional Haze SIP development and public information process is included in Chapter 2, and Appendix 2.1, of the State of Kansas Regional Haze SIP, which is included in the docket of this proposed rule making.

##### *B. Affected Class I Areas*

EPA is proposing to find that the State of Kansas has adequately established which Class I areas are impacted by emissions from the State, as required by 40 CFR 51.308(d) and as described in the Agency’s “Visibility Monitoring Guidance”<sup>10</sup>. There are no Class I areas

hosted by the State of Kansas. States, such as Kansas, that do not host Class I areas are not required to identify reasonable progress goals or calculate baseline and natural visibility conditions at Class I areas. However, states without Class I areas are still required to submit SIPs that address the apportionment of visibility impact from the emissions generated by sources within the state’s borders at Class I areas hosted by other states. The following are the Class I areas nearest to the State of Kansas in all directions around the State’s border:

- Caney Creek Wilderness Area, Arkansas (CACR)
- Upper Buffalo Wilderness Area, Arkansas (UPBU)
- Great Sands Dunes Wilderness Area, Colorado (GRSA)
- Rocky Mountain National Park, Colorado (ROMO)
- Hercules Glades Wilderness Area, Missouri (HEGL)
- Mingo Wilderness Area, Missouri (MING)
- Wichita Mountains Wilderness Area, Oklahoma (WIMO)
- Badlands National Park, South Dakota (BADL)
- Wind Cave National Park, Texas (WICA)
- Big Bend National Park, Texas (BIBE)
- Guadalupe Mountains National Park, Texas (GUMO)

The 20 percent worst day estimated percent light extinction (for the base year 2002 and projection year 2018), at these eleven Class I areas, attributed to emissions from sources in Kansas (shown by pollutant species and source category), are provided in the Technical Support Document (TSD) to this proposed rulemaking. The CENRAP computed these data using IMPROVE data for 2000 to 2004 to define baseline, natural and 2018 conditions for each of the affected Class I areas. All CENRAP states relied upon the regional modeling work performed by CENRAP<sup>11</sup> (and its contractors) for determining the impact that sources within a state might have on Class I areas in the region. The modeling was based on PM Source Apportionment Technology (PSAT) with the Comprehensive Air Quality Model with extensions (CAMx) photochemical model. For Kansas, the CENRAP modeling indicated that Kansas sources were most likely to have

<sup>11</sup> A contractor to CENRAP, ENVIRON, completed the data analysis. This analysis can be reviewed in Chapter 4 of the Technical Support Document developed by ENVIRON and can be found at <http://www.kdheks.gov/bar/index.html>.

<sup>10</sup> Visibility Monitoring Guidance: <http://www.epa.gov/ttn/amtic/files/ambient/visible/r-99-003.pdf>.

<sup>9</sup> 76 FR 48208, August 8, 2011.

the highest visibility impact at the WIMO.

EPA is proposing to find that the State of Kansas adequately identified the Class I areas impacted by sources of air pollution within the State and the State adequately determined the apportionment of those pollutants from sources located within the State and as such has met the requirements of 40 CFR 51.308(d)(3)(iii).

### C. Consultation With States and FLMs

EPA is proposing to find that that the State of Kansas participated in sufficient consultation with other states where emissions from sources in Kansas are reasonably anticipated to cause or contribute to visibility impairment in Class I areas hosted by other states and to coordinate emission management strategies for such Class I areas, as required by 40 CFR 51.308(d)(1)(iv) and (d)(3)(i). The State of Kansas was an active member of the CENRAP. The governing body (voting members) of CENRAP was considered the Policy Oversight Group (POG). The POG was made up of 18 voting members representing states and tribes in the CENRAP region and nonvoting member representing local air agencies, the FLMs and other stakeholders. CENRAP members also developed a workgroup structure to address technical and non-technical issues related to regional haze. There were five workgroups: Monitoring; Emissions Inventory; Modeling; Communications; and Implementation and Control Strategies. Any interested party to CENRAP was invited to participate on any or all of the workgroups. Policy issues were decided by the POG. The Kansas Regional Haze SIP was developed utilizing data analysis, modeling results and other technical support documents prepared for CENRAP members by the workgroups, or parties contracted by CENRAP.<sup>12</sup> The Kansas SIP (at page 85) indicates that in addition to participation in the regional planning process, Kansas consulted directly with the States of Missouri, Texas, Oklahoma and Arkansas to determine if controls beyond presumptive BART (presumptive BART is discussed in greater detail below) would be required of emission sources in Kansas.

EPA is proposing to find that the State of Kansas engaged in adequate consultation with the FLMs as required by 40 CFR 51.308(i). The State provided the FLMs with state contacts for submission of recommendations in accordance with 40 CFR 51.308(i)(1), as

provided on page 14 of the Kansas Regional Haze SIP. In addition to the FLMs having the opportunity to participate in or comment on (as non-voting members of CENRAP) the development of technical and non-technical documents used by the State to develop its Regional Haze SIP, the FLMs were given the opportunity to comment on the State's draft SIP dated November 1, 2007 as required by 40 CFR 51.308(i)(2), participate in a public hearing held on August 20, 2008, the opportunity to comment on a revised draft SIP dated July 16, 2009, and participate in a second public hearing held on August 27, 2009. The FLMs submitted comments to the State of Kansas on December 14, 2007. The State addressed comments received from the FLMs as shown in Appendix 4.1 of the State's Regional Haze SIP in accordance with 40 CFR 51.308(i)(3). To address the requirement for continuing consultation with the FLMs under 40 CFR 51.308(i)(4), the State of Kansas has committed in its SIP to ongoing consultation with the FLMs on Regional Haze issues throughout the implementation period by coordinating and consulting with the FLMs during development of five-year progress reports and plan revisions.

EPA is proposing to find the State of Kansas provided sufficient evidence that it engaged in adequate consultation with other states and the FLMs and therefore has met the requirements of 40 CFR 51.308(i) and (d)(3)(i) and of the Regional Haze Rule.

### D. Determination of Baseline, Natural and Current Visibility Conditions

States that host Class I areas are required to estimate the baseline, natural and current visibility conditions of those Class I areas. As Kansas does not host a Class I area, it is not required to estimate these metrics. However, as previously discussed in section IV. B. of this document, the State must still develop a SIP that estimates the apportionment of visibility impact related to pollutant emissions from sources within the State on Class I areas hosted by other States.

### E. Monitoring Strategy and Other Implementation Plan Requirements

As it does not host a Class I area, Kansas is not required to develop a monitoring strategy for measuring, characterizing, and reporting regional haze impairment that is representative of Class I areas within the State. However, Kansas is required to establish procedures by which monitoring data and other information is used to determine the contribution of emissions

from within the State to regional haze impairment at Class I areas outside of the State and to document the technical basis on which it is relying to determine its apportionment of emission reductions necessary for achieving reasonable progress in each Class I area it affects, as required by 40 CFR 51.308(d)(3)(iii), (d)(4)(ii) and (iii). Kansas is also required to develop a statewide emissions inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area, as required by 40 CFR 51.308(d)(3)(iii) and (d)(4)(v). This inventory must include baseline year emissions, emissions for the most recent year that data is available, and estimates of future year emissions. A commitment to update the inventory as well as a commitment to maintain reporting, recording keeping and other measures necessary to assess and report on visibility improvements are required by 40 CFR 51.308(d)(4)(v) and (vi). EPA is proposing to find that the State has met these requirements, as explained below.

#### 1. Monitoring Strategy

There are three IMPROVE protocol sites (sites that are not managed directly by IMPROVE (a Federal program) but by the operating agency) which are operated in the State of Kansas. One is located at Cedar Bluff State Park in Trego County in the western part of the State, a second at the Tallgrass Prairie National Preserve in the eastern part of the State (each operated by the State of Kansas), and the third is located in Reserve, Kansas in the northeastern part of the State and it is operated by the Sac and Fox Nation of Missouri in Kansas and Nebraska. Descriptions of these monitoring sites and methods for data validation can be found in Chapter 6 of the State's Regional Haze SIP. The State has provided a commitment in Chapter 6, section 6.3, of the State's Regional Haze SIP to maintain the three IMPROVE protocol monitoring sites, or any other EPA approved network configuration, contingent upon continued national funding.

The filter samples from the three IMPROVE-protocol sites are sent for analysis to the Crocker Nuclear Laboratory at the University of California in Davis, and the resultant data are subjected to preliminary review and quality assurance/quality control (QA/QC) procedures. Nephelometer data from the Cedar Bluff site are validated by the CENRAP contractor. Other visibility-related data collected by the State of Kansas (PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, and NH<sub>3</sub>) are subjected to review and QA/QC procedures prior to reporting.

<sup>12</sup> This information was provided on the CENRAP Web site, <http://cenrap.org> or CENRAP's FTP site.

After validation, data from the three IMPROVE-protocol sites are sent by the Crocker Nuclear Laboratory at the University of California in Davis for posting to the IMPROVE Web site and the Visibility Information Exchange Web System (VIEWS) Web site <http://vista.cira.colostate.edu/views/>. Nephelometer data from the Cedar Bluff site are reported to the VIEWS database by the CENRAP contractor. Other visibility-related data collected by the State of Kansas are reported to EPA's Air Quality System (AQS) database on a quarterly basis.

EPA is proposing to find that the State's commitment to provide and utilize data from these sites, or any other EPA approved monitoring network location, to characterize and monitor model conditions within the State and to compare visibility conditions in the State to visibility impairment at Class I areas hosted by other states meets the requirements of 40 CFR 51.308(d)(4)(ii) and (iii) of the Regional Haze Rule.

2. Emissions Inventory

EPA has reviewed the emissions inventory provided by the State of Kansas and believes that it is sufficient

and follows the guidance provided by the Agency in its "Emissions Inventory Guidance for the Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations"<sup>13</sup> and its "2002 Base Year Emissions Inventory SIP Planning: 8-hour Ozone, PM<sub>2.5</sub> and Regional Haze Programs" memo.<sup>14</sup> Kansas is required to develop a statewide emissions inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area. This inventory must include baseline year emissions, emissions for the most recent year that data is available, and estimates of future year emissions. The State provided an inventory of emissions of pollutants that may reasonably be anticipated to cause or contribute to visibility impairment in any Class I area: VOCs, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and NH<sub>3</sub>. As required, the inventory includes emissions for a baseline year (2002), the most recent year for which data are available, and estimates of future year (2018) projected emissions along with a commitment to update the inventory periodically.

The 2002 emissions inventory and its improvements were developed by

CENRAP and its contractors as part of the development of a baseline inventory for the 2002 modeling inventory.<sup>15</sup> The TSD to this proposal discusses the improvements to the inventory that were prepared by the contractor retained to develop and improve three inventory categories of the baseline 2002 inventory: planned burning, ammonia, mobile source and fugitive dust. The complete 2002 baseline emissions inventory can be found in Appendix 7.1 of the SIP. Methodologies for the development of the 2002 emissions inventories can be found in Appendix 7.3 of the SIP.

To estimate the 2018 future year emissions the State grew the 2002 emissions using the Economic Growth Analysis System (EGAS), MOBILE 6.2 vehicle emissions software, and the Integrated Planning Model (IPM) version 2.93 for EGUs.

EPA is proposing to find that the 2002 and 2018 statewide emissions inventories and the State's method for developing the 2018 emissions inventory meets the requirements of 40 CFR 51.308(d)(4)(v) of the Regional Haze Rule.

TABLE 1—2002 KANSAS EMISSIONS SUMMARY, BY SOURCE CATEGORY AND POLLUTANT

Source category	Tons/yr					
	VOC	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	NH <sub>3</sub>	SO <sub>2</sub>
Point .....	40,278	165,224	16,321	38,366	59,750	143,367
Nonpoint (except fires) .....	87,327	13,851	10,024	10,533	796	3,100
On-road mobile .....	74,519	100,152	1,607	2,179	2,816	3,097
Nonroad mobile .....	28,138	82,697	5,993	6,549	115	8,101
Nonpoint fire .....	35,046	29,322	117,597	129,187	19	11,051
Biogenic .....	575,073	49,616	N/A	N/A	N/A	N/A
Totals .....	840,381	440,862	151,542	186,814	63,496	168,716

TABLE 2—2018 KANSAS PROJECTED EMISSIONS SUMMARY, BY SOURCE CATEGORY AND POLLUTANT

Source category	Tons/yr					
	VOC	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	NH <sub>3</sub>	SO <sub>2</sub>
Point .....	54,007	145,647	23,669	50,165	71,623	81,664
Nonpoint (except fires) .....	104,983	15,822	9,143	9,534	1,247	3,860
On-road mobile .....	32,724	28,779	655	655	3,892	369
Nonroad mobile .....	15,156	38,044	2,696	2,954	52	126
Nonpoint fire .....	35,046	29,322	117,597	129,187	19	11,051
Biogenic .....	575,073	49,616	N/A	N/A	N/A	N/A
Totals .....	816,989	307,230	153,760	192,495	76,833	97,070

<sup>13</sup> Emissions Inventory Guidance for the Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations: [http://www.epa.gov/ttn/chief/eidocs/eiguid/eiguidfinal\\_nov2005.pdf](http://www.epa.gov/ttn/chief/eidocs/eiguid/eiguidfinal_nov2005.pdf).

<sup>14</sup> 2002 Base Year Emissions Inventory SIP Planning: 8-hour Ozone, PM<sub>2.5</sub> and Regional Haze

Programs memo-[http://www.epa.gov/ttnchie1/eidocs/2002baseinven\\_102502new.pdf](http://www.epa.gov/ttnchie1/eidocs/2002baseinven_102502new.pdf).

<sup>15</sup> <http://www.cenrap.org/html/projects.php>.

### 3. Reporting Requirements

EPA has reviewed and believes the State's reporting strategy meets the requirements of the Regional Haze Rule. The State is required to maintain reporting, recordkeeping and other measures necessary to assess and report on visibility improvements. In its Regional Haze SIP, Kansas asserts that by complying with EPA's Air Emissions Reporting Rule, in addition to the State's commitment (as given in Chapter 7, section 7.7, of the State's Regional Haze SIP) to periodically update the emissions inventory through use of the latest available emissions data (expected to be the 2011 National Emissions Inventory, source inventory data such as Continuous Emissions Monitoring Systems (CEMS) data for EGUs, or EGAS growth rates for other sources in comparison to actual emissions) when completing the State's mandatory five-year progress reports, it has met the requirement of the Rule. EPA is proposing to find that the State's methods of reporting and recordkeeping of emissions meets the requirement of 40 CFR 51.308(d)(4)(v) and (vi) of the Regional Haze Rule.

### 4. SIP Revision Schedule

Section 51.308(f) of the Regional Haze Rule requires control strategies to cover an initial implementation period extending to the year 2018, with a comprehensive reassessment and revision of those strategies and the SIP, as appropriate, by July 31, 2018, and every ten years thereafter. EPA is proposing to find that the State of Kansas met this requirement by committing to reassess and revise the Regional Haze SIP on this schedule, as necessary, in Chapter 7, section 7.7 of the SIP. In addition, the State committed to submit its five-year SIP report by November 9, 2014, and along with the five-year report, submit a determination of the adequacy of its existing Regional Haze SIP revisions. EPA is proposing to find that the State's commitment to meet these schedules meets the requirements of 40 CFR 51.308(f), (g), and (h) of the Regional Haze Rule.

### F. Determination of Reasonable Progress Goals

Since the State of Kansas does not host Class I areas, it is not required to establish RPGs for a Class I area. However, as discussed in sections IV.B. and IV.D. of this proposed rulemaking, the State must still develop a SIP that estimates the apportionment of visibility impact, related to pollutant emissions from sources within the State of Kansas,

on Class I areas hosted by other states. As discussed in section IV.G. of this proposal the State is required to develop a control strategy to reduce those impacts.<sup>16</sup> A discussion of the State's control strategy to reduce visibility impacts at Class I areas around the State is included in section IV.H. of this proposal.

### G. Best Available Retrofit Technology

EPA has reviewed and proposes that the State's process to identify BART-eligible sources, BART-subject sources and the emission rates it has determined to be BART for five BART-subject units at three sources in Kansas meets the requirements of the Regional Haze Rule at 40 CFR 51.308(e) and is consistent with the *Guidelines for BART Determinations under the Regional Haze Rule*. The TSD to this proposal provides a detailed analysis of the State's BART determinations.

As previously mentioned in this proposal, on July 6, 2005, EPA published the *Guidelines for BART Determinations Under the Regional Haze Rule* at Appendix Y to 40 CFR part 51 (hereinafter referred to as the "BART Guidelines") to assist states in determining which of their sources should be subject to the BART requirements and determining appropriate emissions limits for each BART-subject source. The BART evaluation process consists of three components: (a) Identification of all the BART-eligible sources; (b) assessment of whether the BART-eligible sources are subject to BART; and (c) determination of the BART controls. The components, as addressed by the State's findings, are discussed below, and further discussed in the TSD for this proposed rulemaking.

In making a BART determination for a fossil fuel-fired generating plant with a total generating capacity in excess of 750 megawatts, a state must use the approach set forth in the BART Guidelines. A state is not required to follow the BART Guidelines in making BART determinations for other types of sources. The BART Guidelines provide five steps toward identifying BART control for these very large EGUs. Step 1: Identify all available retrofit control technologies; Step 2: Eliminate technically infeasible control technologies; Step 3: Evaluate the control effectiveness of remaining

<sup>16</sup> 40 CFR 51.308(d)(3)(ii)—Where other States cause or contribute to impairment of visibility in a mandatory Class 1 Federal area, the State must demonstrate that it has included in its implementation plan all measures necessary to obtain reductions needed to meet the progress goal for the area.

control technologies; Step 4: Evaluate impacts and document the results; Step 5: Evaluate visibility impact.

### 1. BART Eligible Sources

The first phase of a BART evaluation is to identify all the BART-eligible sources within the State's boundaries. The State utilized the methodology in the BART Guidelines and EPA's regulations at 40 CFR 51.301, for determining which sources were BART-eligible. For an emission source to be identified as BART-eligible, the State used these criteria from the BART Guidelines:

- One or more emissions units at the facility fit within one of the 26 categories listed in the BART Guidelines;
- The emission unit was in existence on August 7, 1977 and began operation at some point on or after August 7, 1962; and
- The limited potential emissions from all emission units identified in the previous two bullets were 250 tons or more per year of any of these visibility-impairing pollutants: SO<sub>2</sub>, NO<sub>x</sub>, or PM<sub>10</sub>.

In the BART determination process, states must address all significant visibility impairing pollutants. The most significant visibility impairing pollutants are SO<sub>2</sub>, NO<sub>x</sub>, and PM. As indicated by the BART Guidelines, a state should use its best judgment in determining whether VOCs, ammonia or ammonia compounds impair visibility in particular Class I areas. Kansas determined that it did not need to evaluate VOC or ammonia emissions as part of its BART analyses.<sup>17</sup> The TSD to this proposal includes EPA's analysis and confirmation of the state's conclusion that neither VOC nor ammonia needed to be evaluated as part of the State's BART determinations.

<sup>17</sup> Appendix Y of Part 51—States should exercise judgment in deciding whether the following pollutants impair visibility in an area: (4) VOCs and (5) Ammonia and ammonia compounds. A State should use its best judgment in deciding whether VOC or ammonia emissions from a source are likely to have an impact on visibility in an area. Certain types of VOC emissions, for example, are more likely to form secondary organic aerosols than others. Similarly, controlling ammonia emissions in some areas may not have a significant impact on visibility. A State need not provide a formal showing of an individual decision that a source of VOC or ammonia emissions is not subject to BART review. Because air quality modeling may not be feasible for individual sources of VOC or ammonia, a state should also exercise its judgment in assessing the degree of visibility impacts due to emissions of VOC and emissions of ammonia or ammonia compounds. A state should fully document the basis for judging that a VOC or ammonia source merits BART review, including its assessment of the source's contribution to visibility impairment.

EPA is proposing to find that the State's use of air quality data provided by CENRAP, in evaluating whether potential BART sources could be reasonably expected to cause or contribute to visibility impairment in a Class I area is in accordance with the

BART guidelines and in accordance with 40 CFR 51.308(e)(1)(ii).

To identify the sources that met the criteria above, Kansas performed a multi-step search and analysis including a database query of the permitted air sources in its point source emissions inventory database, and a more detailed

survey of the limited number of facilities in the database that met the source category criteria. This process is outlined in detail in Appendix 9.1 of the SIP and is discussed in the TSD to this proposal. The nineteen facilities identified are listed in Table 3.

TABLE 3—FACILITIES WITH BART-ELIGIBLE UNITS IN THE STATE OF KANSAS

BART Source category name	Facility ID	Facility name	BART-Eligible emission units
Fossil-Fuel Fired Electric Generating Units.	0090002	Aquila (now Sunflower Electric)—Arthur Mullergren.	Unit 3 (Stacks 1 and 2).
	1750001	Aquila (now Sunflower Electric)—Cimarron River.	Unit 1.
	0570001	Aquila (now Sunflower Electric)—Judson Large.	Unit 4.
	2090008	Kansas City BPU—Nearman.	Unit 1.
	2090048	Kansas City BPU—Quindaro.	Unit 1 Unit 2.
	1070005	KCP&L—La Cygne .....	Unit 1 Unit 2.
	1130014	McPherson Municipal Power Plan #2.	Unit 1.
	0550026	Sunflower Electric—Garden City.	Unit S2.
	1730012	Westar Energy—Gordon Evans.	Unit 2 (Stacks 2 and 3).
	1550033	Westar Energy—Hutchinson.	Unit 4 (Stacks A and B).
	1490001	Westar Energy—Jeffrey	Unit 1 Unit 2.
	0450014	Westar Energy—Lawrence.	Unit 5.
	0350012	Winfield Municipal Power Plant #2.	Unit 4.
	Portland Cement Plants	0010009	Monarch Cement Co .....
Petroleum Refineries .....	0150004	Frontier El Dorado Refining Co.	Boiler B-105, Boiler B-107, Plant Process Heaters, Refinery Flare System B-1303, Plant Cooling Towers, Storage Tanks, Gas Oil Hydrotreater.
	1130003	National Cooperative Refinery Assoc. (NCRA).	Alky Heater HA-002, No. 9 Boiler SB-009, No.12 Boiler SB-012, Coker IR Comp. CR-003, Plat Stab Boil Htr HP-003, Plat Charge Htr HP-006, Fugitive Emissions.
Chemical Processing Plants.	1730070	Basic Chemicals (now OxyChem—Wichita).	Boiler 1; Boiler 2; Boiler 3; Chloromethanes.
	0570003	Koch Nitrogen .....	Ammonia plant—primary reformer; Ammonia plant—other; Nitric acid plant—absorber tail gas; Ammonium nitrate plant—neutralizer.
Glass Fiber Processing Plants.	2090010	Owens Corning .....	70 furnace—N exhaust; 70 furnace—S exhaust; 70 riser/channel/forehearth; 70 A forming; 70 B forming; 70 C forming; 70 D forming; 70 curing oven charge end; 70 curing oven discharge end; J5 furnace; J5 riser/channel/forehearth; J6 A forming; J6 B forming; J6 C forming; J6 curing oven charge end; J6 curing oven discharge end; J6 smoke stripper; J6 north cooling (A); J6 south cooling (B); J6 asphalt coating; Raw material processing.

EPA is proposing to find that the State of Kansas appropriately identified its BART-eligible sources in accordance with 40 CFR 51.308(e)(1)(i) of the Regional Haze Rule and the BART Guidelines.

2. BART Subject Sources

The second phase of the BART evaluation is to identify those BART-eligible sources that may reasonably be anticipated to cause or contribute to visibility impairment at any Class I area, *i.e.* those sources that are “subject to BART.” The BART Guidelines allow

states to consider exempting some BART-eligible sources from further BART review because they may not reasonably be anticipated to cause or contribute to any visibility impairment in a Class I area. Consistent with the BART Guidelines, and using air quality data provided by CENRAP, Kansas

completed a modeling analysis of all nineteen sources determined to be BART-eligible, using CALPUFF.<sup>18</sup> The BART guidelines indicate that CALPUFF, or other appropriate models, can be used to determine if an individual source is anticipated to cause or contribute to impairment of visibility in Class I areas.

To assess contribution to visibility impairment at a Class I area, the states must establish a contribution threshold. The BART Guidelines state that a single source that is responsible for a 1.0 dv change or more should be considered to ‘cause’ visibility impairment at a Class I area and that a source that is responsible for a 0.5 dv change should be considered to ‘contribute’ to visibility impairment at a Class I area. The Guidelines state that a lower threshold can be chosen under certain circumstances (e.g., many contributing emission sources close to a Class I area).

As set forth in Appendix 9.2 of the SIP, the State utilized a contribution threshold of 0.5 dv. The State selected this contribution threshold in accordance with the BART Guidelines, section III.A.1., based upon the relatively large distances between the State’s BART-eligible sources, and the Class I areas outside the State. Use of the screening threshold of 0.5 dv is further justified because the visibility impacts of sources excluded at this screening stage of the analysis are well below 0.5 dv. If the modeling results showed that a source had at least a 0.5 dv or greater visibility impact on at least one day in a three year period (2001–2003), then further BART-subject analysis was required. The nine Class I areas that were determined to be significant for determining impacts from potential BART-subject sources were:

- Caney Creek Wilderness Area, Arkansas (CACR)

- Upper Buffalo Wilderness Area, Arkansas (UPBU)
- Great Sand Dunes Wilderness Area, Colorado (GRSA)
- Rocky Mountain National Park, Colorado (ROMO)
- Hercules-Glades Wilderness Area, Missouri (HEGL)
- Mingo Wilderness Area, Missouri (MING)
- Wichita Mountains Wilderness Area, Oklahoma (WIMO)
- Badlands National Park, South Dakota (BADL)
- Wind Cave National Park, South Dakota (WICA)

This preliminary modeling was completed using general assumptions made by the State. The modeling showed that eight of the nineteen BART-eligible sources exceeded the contribution screening threshold of 0.5 dv or greater visibility impact on at least one day in a three year period. Those sources are identified in Table 4.

TABLE 4—KANSAS BART-ELIGIBLE EMISSION UNITS WITH AT LEAST ONE > 0.5 DV VISIBILITY IMPACT DAY ON SELECTED CLASS I AREAS DURING 2001–2003

Source	Number of days during 2001–2003 with visibility impact > 0.5 dv								
	CACR	UPBU	GRSA	ROMO	HEGL	MING	WIMO	BADL	WICA
Kansas City BPU—Nearman Unit 1 .....	23	21	3	1	30	16	15	3	2
Kansas City BPU—Quindaro Units 1 & 2 .....	13	13	1	1	18	6	9	0	0
KCP&L—La Cygne Units 1 & 2 .....	204	249	17	21	278	233	142	46	38
Monarch Cement Kilns 4 & 5 .....	0	0	0	0	0	0	1	0	0
Westar Energy—Gordon Evans Unit 2 .....	33	30	11	13	28	17	102	32	24
Westar Energy—Hutchinson Unit 4 .....	14	7	6	5	6	3	17	9	4
Westar Energy—Jeffrey Units 1 & 2 .....	150	161	27	28	182	158	165	82	55
Westar Energy—Lawrence Unit 5 .....	14	14	1	1	17	7	9	2	1

The State required each of those eight sources to submit refined modeling for further review. The refined modeling analysis for each source is given in Appendix 9.8 of the State’s Regional Haze SIP and was used by the State to assess each of the eight sources’ potential visibility impacts in more accurate detail (e.g. revised emission rates, stack parameters, etc., as provided by each source). Based on the refined modeling results, the State determined that five units at three sources were BART-subject and required BART determinations as outlined in CAA section 169A(g)(2) for each of those units. Those five units are given below:

- Unit 1 at Kansas City Power and Light, La Cygne, Facility ID 1070005
- Unit 2 at Kansas City Power and Light, La Cygne, Facility ID 1070005

- Unit 1 at Westar Energy, Jeffrey Energy Center, Facility ID 1490001
- Unit 2 at Westar Energy, Jeffrey Energy Center, Facility ID 1490001
- Unit 2 at Westar Energy, Gordon Evans Energy Center, Facility ID 1730012

After review of the State’s method for determining BART-subject sources and the refined analysis of those sources, the EPA is proposing to find that the State appropriately identified all of the units in the State that are BART-subject in accordance with 40 CFR 51.308(e)(1)(ii) the Regional Haze Rule and the BART Guidelines.

3. BART Determinations

In making BART determinations, CAA section 169A(g)(2) and 40 CFR 51.308(e)(1)(ii)(A) require that states

consider the following factors: (1) The costs of compliance, (2) the energy and non-air quality environmental impacts of compliance, (3) any existing pollution control technology in use at the source, (4) the remaining useful life of the source, and (5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. This five step analysis is commonly referred to as a ‘five factor analysis’.

As discussed in the TSD to this notice, Kansas found the most significant visibility impairment attributable to the units identified as subject to BART is dominated by contributions from NO<sub>x</sub> and SO<sub>2</sub> emissions. PM visibility impairment attribution from these units is not significant. Because visibility

<sup>18</sup>CALPUFF is a multi-layer, multi-species non-steady-state puff dispersion model that simulates the effects of time- and space-varying meteorological conditions on pollution transport, transformation and removal. CALPUFF can be

applied on scales of tens to hundreds of kilometers. It includes algorithms for subgrid scale effects (such as terrain impingement), as well as longer range effects (such as pollutant removal due to wet scavenging and dry deposition, chemical

transformation, and visibility effects of particulate matter concentrations). [http://www.epa.gov/ttn/scram/dispersion\\_prefrec.htm#calpuff](http://www.epa.gov/ttn/scram/dispersion_prefrec.htm#calpuff).

impairment from PM is insignificant, the remainder of this notice will focus the State's NO<sub>x</sub> and SO<sub>2</sub> BART determinations.

Each of the five units listed above is a "presumptive unit"<sup>19,20</sup>. For EGUs greater than 200 MW in capacity and located at power plants with a total capacity greater than 750 MW, EPA established presumptive BART emission limits.<sup>21</sup> Each of the units that Kansas concluded was subject to BART falls within this category of sources. As presumptive units, each of the five units must as a general matter at least meet the presumptive emission limits as described in the BART Guidelines. As explained in the BART Guidelines, regardless of fuel type, for SO<sub>2</sub> control, each unit must at least meet a specific control level of 95 percent or an emission rate of 0.15 lbs/MMBtu unless an alternative control was determined to be justified through the five factor analysis. The presumptive control for NO<sub>x</sub> is expressed as either an emission limit, or the installation of current combustion control technology. The decision to assign either a presumptive NO<sub>x</sub> emission limit or a combustion control strategy is determined by the type of fuel combusted at the EGU.

The State's BART determination resulted in a limit which is more restrictive than the presumptive BART NO<sub>x</sub> emission rates for Kansas City Power and Light's Units 1 and 2 of 0.10 lb/MMBtu and 0.23 lb/MMBtu, respectively (and 0.16 lb/MMBtu weighted average), to 0.13 lb/MMBtu on a 30-day rolling weighted average using the already permitted selective catalytic reduction (SCR) control for Unit 1 and combustion control for Unit 2

<sup>19</sup> Appendix Y to Part 51-E.1.2.3.4.—States must require 750 MW power plants to meet specific control levels for SO<sub>2</sub> of either 95 percent control or 0.15 lbs/MMBtu, for each EGU greater than 200 MW that is currently uncontrolled unless the State determines that an alternative control level is justified based on a careful consideration of the statutory factors.

<sup>20</sup> Appendix Y to Part 51-E.1.2.3.5.—For power plants with a generating capacity in excess of 750 MW currently using selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) for part of the year, the State should presume that use of those same controls year-round is BART. For other sources currently using SCR or SNCR to reduce NO<sub>x</sub> emissions during part of the year, the State should carefully consider requiring the use of these controls year-round as the additional costs of operating the equipment throughout the year would be relatively modest. For coal-fired EGUs greater than 200 MW located at greater than 750 MW power plants and operating without post-combustion controls (i.e. SCR or SNCR), the EPA has provided presumptive NO<sub>x</sub> limits, differentiated by boiler design and type of coal burned. The State may determine that an alternative control level is appropriate based on a careful consideration of the statutory factors.

<sup>21</sup> Appendix Y to Part 51-E.4. and 5.

(described in more detail below and beginning on page 47 of the TSD to this rulemaking). The average must remain below 0.13 lb/MMBtu. In the event Unit 2 suffers an outage in excess of 10 weeks, the State has determined that the facility shall meet the 0.10 lb/MMBtu limit for NO<sub>x</sub> at Unit 1.

EPA has previously stated that most EGUs can meet the presumptive NO<sub>x</sub> limits through the use of current combustion control technology, i.e. low NO<sub>x</sub> burners (LNB).<sup>22</sup> States must also consider advanced combustion control technology (SCR) in their BART analyses. Even though the presumptive NO<sub>x</sub> emission rate could be met through use of LNB, through its five factor analysis, the State considered the costs and benefits of SCR deployment on Kansas City Power and Light's Unit 2.

The State determined that the NO<sub>x</sub> BART presumptive emission rates of 0.10 lb/MMBtu and 0.23 lb/MMBtu for Unit 1 and Unit 2, respectively (or 0.16 lb/MMBtu as a weighted average), resulted in a combined (SO<sub>2</sub> and NO<sub>x</sub>) modeled visibility improvement of 78–81% at Class I areas (98th percentile visibility impact) and a reduction of the number of days with a visibility impact greater than 0.5 dv from a range of 57–138 days to 3–14 days at Class I areas. During the course of negotiating an enforceable BART agreement, Kansas City Power and Light proposed limits that were more restrictive than the presumptive BART limits. As provided above, these limits consist of an emission rate of 0.13 lb/MMBtu on a 30-day rolling weighted average between the two units.<sup>23</sup> At the 0.13 lb/MMBtu weighted average rate for both units, which is beyond the presumptive NO<sub>x</sub> rate of 0.23 lb/MMBtu, EPA would not anticipate additional significant visibility improvement for the additional significant cost of installing SCR on Unit 2.

The State's BART determination for Kansas City Power and Light's Units 1 and 2 also resulted in a more restrictive limit than the presumptive BART SO<sub>2</sub> emission rates. The State has determined that an emission rate of 0.10 lb/MMBtu on a 30-day rolling weighted

<sup>22</sup> Appendix Y to Part 51-E.5.—Most EGUs can meet these presumptive NO<sub>x</sub> limits through the use of current combustion control technology, i.e. the careful control of combustion air and low-NO<sub>x</sub> burners. For units that cannot meet these limits using such technologies, you should consider whether advanced combustion control technologies such as rotating opposed fire air should be used to meet these limits.

<sup>23</sup> The weighted average limit is to be met by utilizing the already permitted SCR control for Unit 1 and pre- or post-combustion control (e.g., low NO<sub>x</sub> burner, low NO<sub>x</sub> burner with overfire air, or SCR) for Unit 2.

average (through the use of scrubbing technology) is SO<sub>2</sub> BART for these units.

The State has determined that Westar Energy must meet the presumptive BART NO<sub>x</sub> emission rates for the Jeffrey Energy Center's Units 1 and 2 of 0.15 lb/MMBtu. As determined through its five factor analysis, and explained in greater detail in the TSD to this rulemaking, these emission rates will be met through the use of LNB systems for each unit. As part of the five factor analysis, the State considered the costs and benefits of deployment of SCR at Jeffrey Units 1 and 2. Given the high cost and relatively low visibility improvements resulting from use of SCR as compared to LNB at Jeffrey, the State determined, and EPA agrees, that LNB operated at the presumptive rate satisfy NO<sub>x</sub> BART for Jeffrey Units 1 and 2. For Gordon Evans Unit 2, which is an oil-burning unit (that can burn natural gas) that meets the presumptive plant and unit size threshold, there is no prescribed presumptive limit for NO<sub>x</sub> but reductions should be gained through the deployment of "current combustion control technology"<sup>24</sup> which has already been defined by EPA as the implementation of LNB or LNB with overfire air. A five factor analysis resulted in identification of a low NO<sub>x</sub> burner system as BART for the unit. However, since the concurrent analysis for SO<sub>2</sub> reduction (discussed below) demonstrated that control through fuel switching to natural gas resulted in both SO<sub>2</sub> and NO<sub>x</sub> emission reductions, and in visibility improvements beyond those gained by presumptive BART, Kansas has determined and EPA agrees that the fuel switch to natural gas meets the NO<sub>x</sub> BART requirements.

The State has determined that Westar Energy must meet the presumptive SO<sub>2</sub> BART emission rate at the Jeffrey Energy Center's Units 1 and 2 of 0.15 lb/MMBtu. These emission rates will be met by rebuilding the wet scrubber on each unit. For Gordon Evans, use of low sulfur fuel was originally determined to be BART, however, analysis of fuel switching to natural gas revealed greater, cost effective emission reductions, and greater visibility improvement. Therefore, the State determined that switching fuel to natural gas, with 1 percent sulfur fuel oil available for emergency backup use only, meets the SO<sub>2</sub> BART. Westar currently has an existing supply of No.6 fuel oil on site and will be allowed to exhaust this emergency backup supply, with any future fuel oil purchases being 1 percent sulfur content or less by weight. Kansas has determined that this

<sup>24</sup> Appendix Y to Part 51 section IV.E.5.

“alternative BART control for SO<sub>2</sub>” would virtually eliminate SO<sub>2</sub> emissions from Gordon Evans Energy Center’s Unit 2, the exception being an emergency when fuel oil would be allowed only for the duration of the emergency. The State has demonstrated, and EPA agrees, as shown in Table 5, that a switch to natural gas provides less visibility impairment than presumptive BART for Unit 2 for both SO<sub>2</sub> and NO<sub>x</sub>.

TABLE 5—COMPARISON OF PRESUMPTIVE BART VISIBILITY IMPACT AND FUEL SWITCH VISIBILITY IMPACT

	Presumptive case 1 percent S oil, LNB at 0.8 lb/MMBtu (deciview)	Presumptive case 1 percent S oil, LNB at 0.2 lb/MMBtu (deciview)	Alternative BART case natural gas (deciview)
Maximum visibility impact .....	1.575	1.02	0.774
98 percent visibility impact .....	0.804	0.474	0.334
NO <sub>x</sub> (lb/hr) .....	3,288	822	2136
SO <sub>2</sub> (lb/hr) .....	3,844	3,844	1.7
PM <sub>10</sub> (lb/hr) .....	325	326	30.6

Based on the above analysis, in which the State carefully considered the five factors, and which is fully detailed in the TSD to this proposed rulemaking, EPA is proposing to find that the State of Kansas appropriately determined BART for each BART-subject unit in accordance with the CAA section 169A, 40 CFR 51.308(e)(ii)(A) and (B) and (iii) of the Regional Haze Rule, and the BART Guidelines.

TABLE 6—TOTAL 2018 REDUCTIONS IN NO<sub>x</sub> AND SO<sub>2</sub> FROM KANSAS BART-SUBJECT UNITS

Subject-to-BART unit	tons/yr					
	2002 NO <sub>x</sub> <sup>1</sup>	2002 SO <sub>2</sub> <sup>1</sup>	2018 NO <sub>x</sub> <sup>2</sup>	2018 SO <sub>2</sub> <sup>2</sup>	NO <sub>x</sub> reduction	SO <sub>2</sub> reduction
KCP&L—La Cygne 1 .....	30,058	6,648	2,576	3,948	27,482	2,700
KCP&L—La Cygne 2 .....	8,362	19,355	6,229	3,993	2,133	15,362
Westar—Gordon Evans 2 .....	2,023	3,211	138	0.0	1,886	3,211
Westar—Jeffrey 1 .....	9,602	20,459	4,268	3,532	5,334	16,927
Westar—Jeffrey 2 .....	10,892	23,715	4,040	3,465	6,852	20,251
Total BART reductions .....					43,687	58,451

To incorporate the emission rates, compliance schedule, monitoring, recordkeeping, reporting, and enforceability requirements, as defined by the CAA and Federal regulations promulgated at 40 CFR 51.308(e)(1)(iv) and (v) as well as the BART Guidelines, the State entered into Consent Agreements with Kansas City Power and Light and Westar Energy on November 19, 2007 (amended February 18, 2009) and August 30, 2007 (amended February 20, 2009) respectively. These Consent Agreements were submitted to EPA for SIP approval as part of the State’s RH SIP submittal, which we are proposing to approve in this notice. The Agreements are enforceable by the State, and upon approval into the State’s SIP, are enforceable by EPA as well. The emission rates, or work practices, included in those agreements are summarized below. The Agreements require the facilities to meet these rates, or work practices, within 3 to 5 years after EPA approves the State’s RH SIP):

1. The facilities must meet the emission rates on a 30-day rolling average

2. the facilities must monitor via the use of CEMS or stack test (with the exception of Unit 2 at Gordon Evans Energy Center)

3. the facilities must keep continuous record of monitoring data in accordance with 40 CFR Part 75, and

4. the facilities must report emissions data to the State in accordance with 40 CFR Parts 60 or 75. Westar Energy is required to report to the State fuel oil usage at Gordon Evans Unit 2 in accordance with K.A.R. 28–19–512.

Therefore, EPA is proposing to find that the State of Kansas has met the requirements for compliance schedules, monitoring, recordkeeping, reporting, and enforceability in accordance with 40 CFR 51.308(e)(1)(iv) and (v) and the BART Guidelines.

In its Consent Agreement, Kansas City Power and Light, is required to meet NO<sub>x</sub> and SO<sub>2</sub> rates based on a 30-day rolling average of both subject-to-BART La Cygne Units 1 and 2, except during periods of startup and shutdown. In the second Consent Agreement, Westar Energy is required to meet NO<sub>x</sub> and SO<sub>2</sub> rates based on a 30-day rolling average at subject-to-BART Jeffrey Energy Center

Units 1 and 2, except during periods of startup, shutdown and malfunction. In the Regional Haze SIP, the State also committed, on page 52, to assess the visibility impacts of emissions from these BART-subject units during periods of startup, shutdown, and malfunction as part of its five-year review. Should the actual emission rates, including during startup, shutdown, and malfunction periods, exceed the agreed upon emission limits, and be found to negatively impact visibility at a Class I area, the State commits to address these issues with a SIP revision.

In the preamble to the BART rule, EPA offered guidance suggesting that states should exclude emissions attributable to startup, shutdown, and malfunction periods in modeling to determine which sources should apply BART controls. EPA did not, however, suggest that emission limitations for sources subsequently determined to be subject to BART should be applicable only during steady-state operations. Our review of the Kansas submittal indicates that the startup, shutdown, malfunction language in the Agreements appears to be inconsistent with EPA’s September

20, 1999, guidance, “State Implementation Plans: Policy Regarding Excess Emissions during Malfunctions, Startup and Shutdown,” because the Agreements provide an automatic exemption for startup, shutdown and malfunction emissions, and the exemptions for startup and shutdown are not narrowly defined.<sup>25</sup> Because the Consent Agreements exempt periods of startup and shutdown for both facilities from compliance with applicable emission limits and exempt periods of malfunction at Westar Energy, they raise approvability issues. In this action, EPA is proposing to approve the NO<sub>x</sub> and SO<sub>2</sub> BART emission rates, compliance schedules, monitoring, recordkeeping, and reporting requirements for the Kansas City Power and Light and Westar Energy subject-to-BART units, and to disapprove the startup, shutdown, and malfunction provisions in the respective Consent Agreements and the State’s Regional Haze SIP.<sup>26</sup>

Based on the above, EPA is proposing to find that the State of Kansas has met the requirements for establishing BART emission limitations and schedules for compliance with those emission limitations for each BART-eligible source that may reasonably be anticipated to cause or contribute to any impairment of visibility in any Class I area, in accordance with 40 CFR 51.308(e) and the BART Guidelines. EPA’s disapproval of the startup, shutdown, and malfunction provisions from EPA’s approval of the SO<sub>2</sub> and NO<sub>x</sub> BART emission rates in the Kansas City Power and Light and Westar Energy Consent Agreements and Regional Haze SIP does not trigger an obligation on the part of EPA to issue a FIP pursuant to section 110(c) of the CAA, 42 U.S.C. 7410(c). Kansas’ inclusion of the startup, shutdown, and malfunction

provisions as exemptions from the BART emission rates are not required elements of the Regional Haze SIPs to be developed and submitted by States pursuant to section 169 of the CAA. EPA is proposing to approve all required elements of Kansas’ Regional Haze SIP, including, in particular, the BART emission rates, compliance schedules, monitoring, recordkeeping and reporting as required by 40 CFR 51.308(e) and the BART Guidelines, for Kansas City Power and Light and Westar Energy. Therefore, because EPA is proposing to find that all required Regional Haze SIP elements have been met, including BART for subject to BART units, and is proposing to approve those elements, EPA has met its obligation to take action on Kansas’s Regional Haze SIP.

#### *H. Long Term Strategy*

As described in section II.G. of this notice, the LTS is a compilation of state-specific control measures relied on by the state for achieving its reasonable progress goals. When a state’s emissions are reasonably anticipated to cause or contribute to impairment in a Class I area located in another state, the Regional Haze Rule requires the states to consult, state to state, in order to develop coordinated emission management strategies. This is addressed in section IV.C. above and in the TSD to this notice. In such cases, the State must demonstrate that it has included in its SIP all measures necessary to obtain its share of the emission reductions needed to meet the reasonable progress goal for the Class I area, as required by 40 CFR 51.308(d)(3)(ii). States must consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources, as required by 40 CFR 51.308(d)(3)(iv). For more discussion on the State’s evaluation of potential sources of visibility impairment please see the discussion regarding the State’s emissions inventory provided in section IV.E.2. and the TSD to this notice.

The State is also required to consider a number of emission reductions and sources listed in 40 CFR 51.308(d)(3)(v):

#### 1. Emissions Reductions Due to Ongoing Air Pollution Programs

EPA is proposing to find that the State considered emission reductions for ongoing air pollution control programs as required by 40 CFR 51.308(d)(3)(v)(A). In Chapter 10 (section 10.4.3.1) of the State’s SIP, the State outlines ongoing air pollution control programs that can be expected to

result in visibility impairing pollutant reductions as follows: On Board Vapor Recovery (a 1994 Federal standard); On-board Diagnostics (a 1988 Federal standard and revised with the 1990 CAA amendments); Federal on-road and nonroad emissions standards such as Tier 2 Vehicle and Gasoline Sulfur Program (a 1999 Federal standard), the Clean Air On-Road Diesel Rule (a 2007 Federal standard), the Clean Air Nonroad Diesel Rule (a 2004 Federal standard), the Locomotive Emission Standards (a 2007 Federal standard), the Large Spark-Ignition and Recreational Vehicle Rule (a 2002 Federal standard); the Kansas City Ozone Maintenance Plan (required under CAA section 110(a)(1) and Federal regulations promulgated at 40 CFR 51.905(a)(3) and (4)); CAIR (only as it relates to determination of source apportionment—please see discussion in section III. of this proposed rulemaking); National Emission Standards for Hazardous Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) standards (Federal standards); and Visibility Requirements under the New Source Performance Standards (NSPS) promulgated at 40 CFR 52.21(o).

#### 2. Measures To Mitigate Construction Activities

EPA is proposing to find that the State of Kansas has considered measures to mitigate construction activities as required by 40 CFR 51.308(d)(3)(v)(B). The State proposed that it already meets this requirement by meeting the Visibility Requirements under the NSPS promulgated at 40 CFR § 52.21(o). Emissions such as windblown dust and nonroad diesel emissions related to commercial and residential construction activities were also considered by the State. The SIP explains (on page 81) that rapid growth is not projected for the State. In fact only minor growth is expected for the State, from about 2,700 people to 2,950 people (given in thousands) from 2005–2020.

Additionally, emissions from diesel engines (used in construction equipment) are expected to decline with the Federal standards for both on-road and nonroad engines (please see the emission inventory section (IV.E.2.) of this proposed rulemaking). Because commercial and residential growth is not expected to grow significantly in the coming years, and reductions are expected in non-road diesel engines (commonly used equipment during commercial and residential construction) from Federal programs and because emissions from commercial and/or residential construction were not

<sup>25</sup> Steven Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Robert Perciasepe, Assistant Administrator for Air and Radiation, “State Implementation Plans (SIPs): Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown,” September 20, 1999; and 52 FR 45109 (November 24, 1987).

<sup>26</sup> The specific startup, shutdown, and malfunction provisions in the Kansas Regional Haze SIP that are being disapproved include: all references to “excluding periods of startup and shutdown” in Paragraph 23 of the Kansas City Power and Light Company Regional Haze Agreement; the reference to “excluding periods of startup, shutdown and malfunction” in footnote 1 of Appendix A to the Westar Energy, Inc. Regional Haze Agreement; all references to “excluding periods of startup and shutdown” in Chapter 9.3.1 of the Kansas Regional Haze SIP; and the sentence “The Agreements between KDHE and the affected BART sources currently exclude emissions associated with startup, shutdowns, and malfunctions (SSM) in the agreed upon emission limits.” in Chapter 9.5 of the Kansas Regional Haze SIP.

identified as major sources of visibility impairing pollutants, EPA does not expect emissions from commercial or residential construction activities taking place within the State to have a significant impact on visibility impairment in Class I areas hosted by other States.

3. Emissions Limitations and Schedules for Compliance To Achieve the Reasonable Progress Goal

EPA is proposing to find that the State of Kansas has completed an analysis of the emissions reductions needed from sources in the State to obtain its share of the emissions reductions needed to meet the RPGs for Class I areas impacted by those emissions as required by 40 CFR 51.308(d)(3)(ii). The EPA also believes the State has established enforceable emissions limitations and schedules for compliance to meet the RPGs for those Class I areas as required by 40 CFR 51.308(d)(3)(v)(C) and (F). EPA also believes the Consent Agreements, discussed in section IV.G.3. of this proposal, incorporate those emission limits and establish a schedule for compliance in order to meet the RPGs of impacted Class I areas as required by 40 CFR 51.308(d)(3)(v)(C) and (F).

The State conducted an analysis of emission reductions that could be required of sources not already identified as BART-subject. The analysis was conducted in 6 steps. The TSD to this proposed rulemaking provides a detailed analysis of the steps used to identify emission reductions needed from sources in Kansas to meet the RPGs of impacted Class I areas in other states. The process is also discussed briefly below. The results of each step of the process are described in detail on the TSD to this proposed rulemaking.

Step 1: Identify all emission units in the State that emitted equal to 500 tons per year (tpy) of NO<sub>x</sub> and/or SO<sub>2</sub> using the 2002 emissions inventory.

Step 2: Identify the most effective control technologies and screening for excessive costs.

Step 3: Model visibility impacts and screening of low-impact facilities.

Step 4: Screen and rank facilities based on cost per ton per deciviews improvement.

Step 5: Screen for non-cost regulatory factors, i.e. time necessary for compliance, energy and non-air quality environmental impacts of compliance, and remaining useful life.

Step 6: Sort and final list of facilities with the potential to need further emissions reductions.

Kansas identified a total of 30 units that emitted at least 500 tpy of NO<sub>x</sub> and 28 units that emitted at least 500 tpy of SO<sub>2</sub>. Of this set of units, 8 of the NO<sub>x</sub> units and 10 of the SO<sub>2</sub> units were removed from further review for the following reasons:

- 6 of the NO<sub>x</sub> units and 6 of the SO<sub>2</sub> units were already identified as BART-subject;
- 2 of the NO<sub>x</sub> units and 2 of the SO<sub>2</sub> units had installed controls since 2002 and emitted less than 500 tpy of either pollutant.
- 2 of the SO<sub>2</sub> units were determined to have no commercially available controls.

The remaining set of 22 NO<sub>x</sub> units included 11 EGUs, 6 cement kilns, 2 gas compressor engines, 1 refinery fluid-bed catalytic cracking unit (FCCU), 1 ammonia plant, and 1 glass furnace, all located at 15 separate facilities. The 18 SO<sub>2</sub> units were comprised of 13 EGUs, 4 cement kilns, and 1 refiner FCCU, all located at 12 facilities.

In the second step each of the remaining units, described above, were matched with the emission control technology selected for it by a CENRAP contractor utilizing the least marginal cost.<sup>27</sup> For units that were not identified by the contractor, the units were matched with control technologies, control efficiencies and control cost as determined by EPA's AirControlNET version 4.1.<sup>28</sup> Units whose cost of control was determined to be \$10,000/ton reduced or greater were screened out in this step.

In the third step the visibility impacts at the Class I areas (previously identified in section IV.B. of this proposal) were evaluated for the remaining units using the CALPUFF

protocol (previously described in section IV.G.2. of this proposal). Modeling was conducted on a facility-by-facility basis and NO<sub>x</sub> and SO<sub>2</sub> emissions impacts were calculated in combination. The modeling was conducted analyzing pre- and post-control's (controls identified in Step 2 of the analysis) 98th percentile visibility impacts. Facilities whose highest pre-control 98th percentile impact was less than 0.100 dv were screened out in this step.

As a refinement to Step 3, the State reran CALPUFF for the remaining sources considering the impacts of NO<sub>x</sub> and SO<sub>2</sub> separately. The State considered the pollutant emissions' visibility impacts separately because potential controls for a facility, to meet reasonable progress goals in a Class I area hosted by another State, could be pollutant dependent.

In the fourth step the State calculated the cost per ton per unit of dv improvement (\$/ton/dv). The State estimated that the single value of \$/ton/dv combined the cost and visibility improvement in a way that its numerical value increases: (a) As the cost of controls increases and (b) as the visibility improvement decreases. The State determined that the facility with the lowest \$/ton/dv would be the first to be reviewed for possible controls to meet reasonable progress goals in Class I areas hosted by other States.

In the fifth step the State evaluated the energy and non-cost factors for each of the remaining facilities. Two units were screened out in this step due to the units' startup dates, 1950 and 1954, and the likelihood that they would be retired by 2018.

In the sixth step the State ranked all of the remaining facilities in increasing order of \$/ton/dv. The State used a cost of \$15,000/ton/dv as an exclusion threshold from further consideration.

Based on its six step analysis, the State determined that the implementation of controls or work practices, provided in Table 7, were required to meet RPGs in Class I areas hosted by other states.

TABLE 7—CONTROL OR WORK PRACTICE STRATEGIES FOR WESTAR UNITS TO MEET KANSAS LONG TERM STRATEGY REQUIREMENTS

Facility/unit	Emission rate or work practice
Gordon Evans Energy Center—Unit 1.	A fuel switch to natural gas at all times, with the exception of a gas curtailment order from the gas supplier, in which case the facility will be allowed to utilize backup #6 fuel oil.
Hutchinson—Unit 4 .....	A fuel switch to natural gas at all times, with the exception of a gas curtailment order from the gas supplier, in which case the facility will be allowed to utilize backup #6 fuel oil.

<sup>27</sup> "Final CENRAP Control Strategy Analysis Plan—9 May 2006" page 36. <http://www.cenrap.org/html/projects.php>.

<sup>28</sup> "Final CENRAP Control Strategy Analysis Plan—9 May 2006" page 36. <http://www.cenrap.org/html/projects.php>.

TABLE 7—CONTROL OR WORK PRACTICE STRATEGIES FOR WESTAR UNITS TO MEET KANSAS LONG TERM STRATEGY REQUIREMENTS—Continued

Facility/unit	Emission rate or work practice
Murray Gill—Units 1, 2, 3 and 4	A fuel switch to natural gas at all times, with the exception of a gas curtailment order from the gas supplier, in which case the facility will be allowed to utilize backup #6 fuel oil.
Neosho—Unit 7	A fuel switch to natural gas at all times, with the exception of a gas curtailment order from the gas supplier, in which case the facility will be allowed to utilize backup #6 fuel oil.
Jeffery Energy Center—Unit 3	An emission limit of 0.15 lbs/MMBtu for both SO <sub>2</sub> and NO <sub>x</sub> .
Lawrence—Unit 3	An emission limit of 0.18 lbs/MMBtu for SO <sub>2</sub> .
Lawrence—Unit 4	An emission limit of 0.18 lbs/MMBtu for SO <sub>2</sub> ; an emission limit of 0.15 lbs/MMBtu for NO <sub>x</sub> .
Lawrence—Unit 5	An emission limit of 0.15 lbs/MMBtu for both SO <sub>2</sub> and NO <sub>x</sub> .
Tecumseh—Unit 7/9	An emission limit of 0.18 lbs/MMBtu for SO <sub>2</sub> .
Tecumseh—Units 8/10	An emission limit of 0.18 lbs/MMBtu for SO <sub>2</sub> .

As previously discussed in this section of this proposal, Consent Agreements (given in Appendix 9.7 of the SIP) provide a mechanism to enforce

these determinations and set the compliance schedules for these measures. The controls detailed above are expected to achieve approximately

10,409 tpy of NO<sub>x</sub> and 22,812 tpy of SO<sub>2</sub> reductions.

TABLE 8—ESTIMATED NO<sub>x</sub> AND SO<sub>2</sub> EMISSION REDUCTIONS FOR IMPLEMENTATION OF CONTROLS OR WORK PRACTICES REQUIRED BY KANSAS' LONG TERM STRATEGY

Facility	Unit	2002 NO <sub>x</sub> Emissions (tpy)	2002 SO <sub>2</sub> Emissions (tpy)	Post control NO <sub>x</sub> (tpy)	Post control SO <sub>2</sub> (tpy)	NO <sub>x</sub> Reductions (tpy)	SO <sub>2</sub> Reductions (tpy)
Gordon Evans	1	258.7	617.7	211.9	0.5	46.8	617.2
Hutchinson	4	267.1	734.3	158.5	0.6	108.5	733.7
Jeffrey	3	10,807.4	23,206.0	4,913.1	4,913.1	5,894.3	18,292.9
Lawrence	3	728.4	1,965.4	0.0	1,965.4	728.4	0.0
Lawrence	4	1,986.5	1,430.0	835.4	835.4	984.1	594.7
Lawrence	5	3,546.3	4,546.3	2,564.7	2,564.7	981.6	1,789.0
Gill	1	0.0	0.0	0.0	0.0	0.0	0.0
Gill	2	4.5	0.0	4.0	0.0	0.5	0.0
Gill	3	181.6	452.1	148.6	0.3	33.0	451.8
Gill	4	103.8	333.3	85.2	0.2	18.7	333.1
Neosho	7	0.0	0.0	0.0	0.0	0.0	0.0
Tecumseh	7	1,530.6	2,692.7	691.6	2,692.7	839.0	0.0
Tecumseh	8	1,876.9	4,514.9	1,103.1	4,514.9	773.8	0.0
Total						10,408.7	22,812.4

In summary and as further detailed beginning on page 48 of the TSD, the State utilized a six-step process to determine emission reductions needed from sources within the State that are necessary to meet PRGs of Class I areas hosted by other states. In doing so, the State carefully considered and eliminated further controls based upon the factors. Balancing these factors, and elimination of controls based particularly on high cost of control coupled with minimal contribution to visibility impacts at Class I areas hosted by other states, and remaining useful life, resulted in the list controls required to meet RPGs in Class I areas hosted by other states, as set forth above. The State found in particular that for BPU Nearman Unit 1, although additional controls were found to be cost effective, in light of the source's relatively minor contribution to visibility impacts at Class I areas, no further controls would

be required. In addition, as previously discussed in section IV.C. of this proposed rule, the State of Kansas consulted with the States of Missouri, Texas, Oklahoma, and Arkansas, and determined that these states were not relying on additional Kansas controls beyond BART and "on the books" controls to meet the RPGs for the Class I areas in those states. In addition, as described in section IV.E.4. of this proposed rule, the State will again consider whether further controls are necessary as part of the State's five year review of the SIP.

Based on the analysis above, EPA is proposing to find that the State of Kansas has completed an analysis of the emissions reductions needed for source in the State in order to obtain its share of the emissions reductions needed to meet the RPGs for Class I areas impacted by emissions from the State, and has established enforceable emissions

limitations and schedules for compliance necessary to meet the RPGs for those Class I areas as required by 40 CFR 51.308(d)(3)(ii) and (d)(3)(v)(C) and (F).

4. Source Retirement and Replacement Schedules

EPA is proposing to find that the State of Kansas has considered source retirement and replacement schedules as required by 40 CFR 51.308(d)(3)(v)(D). The IPM runs (previously discussed in section IV.E.4. of this proposal) projected closure of several gas-fired boilers in the State. However, when the State communicated directly with those facilities they found that this assumption was incorrect. The State is aware of only two coal-fired EGUs that may be retired within the next 10 years: Kansas City BPU-KAW, units 1 and 3; and Empire District Electric-Riverton, units 7 and 8. Kansas

City BPU-KAW units 1 and 3 have been on cold stand-by since 2001 and 2003 respectively. Units 1 and 3 would be subject to Prevention of Significant Deterioration (PSD) permitting requirements if the facility were to restart them. Empire District Electric-Riverton units 7 and 8 have start-up dates of 1950 and 1954 respectively, and will likely be retired by 2018. The State

has included a commitment, on page 83 of the State's Regional Haze SIP, to address any other sources that are retired or are replaced in conformance with existing State SIP requirements pertaining to PSD and NSR permitting, in the next SIP planning period.

5. Smoke Management

EPA is proposing to find that the State of Kansas has considered smoke

management techniques for agricultural and forestry management as required by 40 CFR 51.308(d)(3)(v)(E) and that it has considered emissions control strategies as outlined in the Agency's "Interim Air Quality Policy on Wildland and Prescribed Fires".<sup>29</sup> Emissions from area source fires, by burn type and pollutant are provided in Table 9.

TABLE 9—2002 KANSAS EMISSIONS BY BURN TYPE AND POLLUTANT

Burn type	Acres burned	2002 tons						
		PM <sub>10</sub>	PM <sub>2.5</sub>	CO	NO <sub>x</sub>	SO <sub>2</sub>	NH <sub>3</sub>	VOC
Rangeland .....	3,625,270	75,943	52,901	652,250	23,185	10,160	7,487	43,483
Cropland .....	1,390,520	23,227	22,156	153,313	5,909	777	3,950	11,401
Prescribed .....	38,106	1,450	1,226	14,424	228	114	143	881
Totals .....	5,053,896	100,620	76,283	819,987	29,322	11,052	11,579	55,765

The impact of planned burning to visibility at Class I areas was evaluated by a contractor during the development of both the planned burning emissions inventory and the "Causes of Haze Assessment" for the CENRAP region.<sup>30</sup> The July 30, 2004<sup>31</sup> study conducted as part of the planned burning inventory analyzed ambient speciated PM<sub>2.5</sub> data from the IMPROVE network at two Class I areas (Caney Creek and Upper Buffalo Wilderness Areas) to determine which chemical compositions characterize prescribed burning activity. The study found that levels of elemental carbon and non-soil potassium were elevated on days during or after agricultural burning in the area. However, the contribution of elemental carbon, the

primary marker of smoke, is a small part of the PM<sub>2.5</sub> mass. While elemental carbon has relatively high extinction efficiency, the mass concentrations are small and do not contribute significantly to light extinction. The State has committed to continue support of the Kansas Smoke Management Plan initiative.

6. Anticipated Net Effect on Visibility Resulting From Projected Changes to Emissions

EPA is proposing to find that the States evaluation of the net effects on visibility resulting from projected emission reduction from Kansas sources meets the requirements of 40 CFR 51.308(d)(3)(v)(G). The 2002 to 2018

projected visibility improvement at the nine Class I areas, from emission reductions in Kansas, result mostly from the implementation of NO<sub>x</sub> and SO<sub>2</sub> controls on the five BART-subject EGUs. The projected visibility improvements from these reductions are shown in Table 10 and are shown in terms of light extinction.

The impact on the WIMO is expected to be reduced by 1.03715 Mm<sup>-1</sup>, which represents a 23 percent change in Kansas' impact on the WIMO between 2002 and 2018. Further improvement will come from the control of sources identified in Table 7 above. Discussion of any potential emission increases by the year 2018 is discussed in detail in the TSD to this notice.

TABLE 10—NET 2002 TO 2018 IMPROVEMENT IN VISIBILITY AT SELECTED CLASS I AREAS DUE TO BART CONTROLS IN KANSAS

Class I area	Net 2002–2018 light extinction difference (improvement) from Kansas sources (Mm <sup>-1</sup> )
Caney Creek (Arkansas) .....	0.63493
Upper Buffalo (Arkansas) .....	0.44533
Great Sand Dunes (Colorado) .....	0.03322
Rocky Mountain (Colorado) .....	0.06051
Hercules-Glades (Missouri) .....	0.56911
Mingo (Missouri) .....	0.58719
Wichita Mountains (Oklahoma) .....	1.03715
Badlands (South Dakota) .....	0.12856
Wind Cave (South Dakota) .....	0.16741

V. What action is EPA proposing?

EPA is proposing to approve the State of Kansas' Regional Haze SIP, submitted

on November 9, 2009, with the exception of certain provisions related to startup, shutdown, and malfunction,

as explained in section IV.G.3. of this notice. EPA is proposing to find that the submittal meets all of the applicable

<sup>29</sup> Interim Air Quality Policy on Wildland and Prescribed Fires—<http://www.epa.gov/ttncaaa1/t1/memoranda/firefnl.pdf>.

<sup>30</sup> <http://www.cenrap.org/html/projects.php>.

<sup>31</sup> "Sonoma Technology, Inc. Research and Development of Planned Burning Emission

Inventories for the Central States Regional Air Planning Association—July 30, 2004".

Regional Haze requirements set forth in section 169A and 169B of the Act and in the Federal regulations codified at 40 CFR § 51.300–308, and the requirements of 40 CFR Part 51, Subpart F and Appendix V.

## VI. Statutory and Executive Order Reviews

### A. Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled “Regulatory Planning and Review.”

### B. Paperwork Reduction Act

Under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., OMB must approve all “collections of information” by EPA. The Act defines “collection of information” as a requirement for answers to \* \* \* identical reporting or recordkeeping requirements imposed on ten or more persons \* \* \*. 44 U.S.C. 3502(3)(A). The Paperwork Reduction Act does not apply to this action.

### C. Regulatory Flexibility Act (RFA)

The RFA generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the CAA do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the Federal-State relationship under the CAA, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The CAA forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. U.S. EPA*, 427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2).

### D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 (“Unfunded Mandates Act”), signed

into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the approval action proposed does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action proposes to approve pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

### E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.” Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the

process of developing the proposed regulation.

This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the CAA. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

### F. Executive Order 13175, Coordination With Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This proposed rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule. EPA specifically solicits additional comment on this proposed rule from tribal officials.

### G. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks

Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

*H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use*

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

*I. National Technology Transfer and Advancement Act (NTTAA)*

Section 12 of the NTTAA of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical. EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

**List of Subjects in 40 CFR Part 52**

Air pollution control, Environmental protection, Intergovernmental relations, Nitrogen oxides, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: August 15, 2011.

**Karl Brooks,**

*Regional Administrator, Region 7.*

[FR Doc. 2011-21567 Filed 8-22-11; 8:45 am]

**BILLING CODE 6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

[EPA-R09-OAR-2011-0601; FRL-9453-1]

**Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to approve revisions to the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) portion of the California State Implementation Plan (SIP). These revisions concern volatile organic compound (VOC), oxides of nitrogen (NO<sub>x</sub>), and particulate matter (PM) emissions from flares. We are approving a local rule that regulates these emission sources under the Clean Air Act as amended in 1990 (CAA or the Act). We are taking comments on this proposal and plan to follow with a final action.

**DATES:** Any comments must arrive by September 22, 2011.

**ADDRESSES:** Submit comments, identified by docket number EPA-R09-OAR-2011-0601, by one of the following methods:

1. Federal eRulemaking Portal: [www.regulations.gov](http://www.regulations.gov). Follow the on-line instructions.
2. E-mail: [steckel.andrew@epa.gov](mailto:steckel.andrew@epa.gov).
3. Mail or deliver: Andrew Steckel (Air-4), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901.

**Instructions:** All comments will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through [www.regulations.gov](http://www.regulations.gov) or e-mail. [www.regulations.gov](http://www.regulations.gov) is an "anonymous

access" system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send e-mail directly to EPA, your e-mail address will be automatically captured and included as part of the public comment. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

**Docket:** Generally, documents in the docket for this action are available electronically at [www.regulations.gov](http://www.regulations.gov) and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed at [www.regulations.gov](http://www.regulations.gov), some information may be publicly available only at the hard copy location (e.g., copyrighted material, large maps), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

**FOR FURTHER INFORMATION CONTACT:** Nicole Law, EPA Region IX, (415) 947-4126, [Law.Nicole@epa.gov](mailto:Law.Nicole@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document, "we," "us" and "our" refer to EPA.

**Table of Contents**

- I. The State's Submittal
  - A. What rule did the State submit?
  - B. Are there other versions of this rule?
  - C. What is the purpose of the submitted rule revisions?
- II. EPA's Evaluation and Action
  - A. How is EPA evaluating the rule?
  - B. Does the rule meet the evaluation criteria?
  - C. EPA Recommendations To Further Improve the Rule
  - D. Public Comment and Final Action
- III. Statutory and Executive Order Reviews

**I. The State's Submittal**

*A. What rule did the State submit?*

Table 1 lists the rule addressed by this proposal with the date that it was amended by the local air agency and submitted by the California Air Resources Board.

**TABLE 1—SUBMITTED RULES**

Local agency	Rule No.	Rule title	Amended	Submitted
SJVUAPCD .....	4311	Flares .....	06/18/09	01/10/10

On February 4, 2010, EPA determined that the submittal for SJVUAPCD Rule 4311 met the completeness criteria in 40

CFR Part 51 Appendix V, which must be met before formal EPA review.

*B. Are there other versions of this rule?*

We approved an earlier version of Rule 4311 into the SIP on February 26,