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*Regional Administrator, Region 5.*

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## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA-R10-OAR-2012-0344, FRL-9676-1]

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

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

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to approve portions of a State Implementation Plan (SIP) revision submitted by the State of Oregon on December 10, 2010 and supplemented on February 1, 2011, as meeting the requirements of Clean Air Act (CAA or the Act) section 169A and B and Federal Regulations in 40 CFR 51.308. In a previous action on July 5, 2011, EPA approved portions of the December 10, 2010, SIP submittal as meeting the requirements for interstate transport for visibility of CAA section 110(a)(2)(D)(II) and certain requirements of the regional haze program including the requirements for best available retrofit technology (BART). 76 FR 38997. The action in this **Federal Register** notice addresses the remaining requirements of the CAA and EPA's rules that require states to prevent any future and remedy any existing anthropogenic impairment of visibility in mandatory Class I areas caused by emissions of air pollutants from numerous sources located over a wide geographic area (also referred to as the "regional haze program"). In this action, EPA proposes to approve the remaining regional haze SIP elements for which EPA previously took no action in the July 5, 2011 notice.

**DATES:** Written comments must be received at the address below on or before June 22, 2012.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R10-OAR-2012-0344 by one of the following methods:

- [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.

- **Email:** R10-

[Public.Comments@epa.gov](mailto:Public.Comments@epa.gov).

- **Mail:** Keith Rose, EPA Region 10, Suite 900, Office of Air, Waste and Toxics, 1200 Sixth Avenue, Seattle, WA 98101.

- **Hand Delivery:** EPA Region 10, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101. Attention: Keith Rose, Office of Air, Waste and Toxics, AWT-107. Such deliveries are only accepted during normal hours of operation, and special arrangements should be made for deliveries of boxed information.

**Instructions:** Direct your comments to Docket ID No. EPA-R10-OAR-2012-0344. EPA's policy is that all comments received 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 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 [www.regulations.gov](http://www.regulations.gov) or email. The [www.regulations.gov](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 email comment directly to EPA, without going through [www.regulations.gov](http://www.regulations.gov), your email 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.

**Docket:** All documents in the docket are listed in the [www.regulations.gov](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 [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Office of Air, Waste and Toxics, EPA Region 10, 1200 Sixth Avenue, Seattle, WA 98101. EPA requests that if at all

possible, you contact the individual listed below to view a hard copy of the docket.

**FOR FURTHER INFORMATION CONTACT:**

Keith Rose at telephone number (206) 553-1949, [rose.keith@epa.gov](mailto:rose.keith@epa.gov), or the above EPA, Region 10 address.

**SUPPLEMENTARY INFORMATION:**

Throughout this document whenever "we," "us," or "our" is used, we mean the EPA. Information is organized as follows:

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### I. Background for EPA's Proposed Action

In the CAA Amendments of 1977, Congress established a program to protect and improve visibility in the national parks and wilderness areas. See CAA section 169A. Congress amended the visibility provisions in the CAA in 1990 to focus attention on the problem of regional haze. See CAA section 169B. EPA promulgated regulations in 1999 to implement sections 169A and 169B of the Act. These regulations require states to develop and implement plans to ensure reasonable progress toward improving visibility in mandatory Class I Federal areas<sup>1</sup> (Class I areas). 64 FR 35714 (July 1, 1999); see also 70 FR 39104 (July 6, 2005) and 71 FR 60612 (October 13, 2006).

On behalf of the State of Oregon, the Oregon Department of Environmental Quality (ODEQ) submitted its Regional Haze State Implementation Plan (Regional Haze SIP submission or SIP submittal) to EPA on December 10, 2010 and supplemented on February 1, 2011. In a previous action EPA approved certain provisions in Oregon's Regional Haze SIP submission. 76 FR 38997. This previous action approved the provisions BART (40 CFR 51.308(e), calculation of baseline and natural conditions (40 CFR 51.308(d)(2)), and state wide emission inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any mandatory Class I area. EPA also approved Oregon Administrative Rules OAR 340-223-0010 through 340-223-0080 (Regional Haze Rules). In that same action, EPA also approved portions of the SIP submittal as meeting the requirements of CAA section

<sup>1</sup> Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1979). 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 as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager." 42 U.S.C. 7602(i). When we use the term "Class I area" in this action, we mean a "mandatory Class I Federal area."

110(a)(2)(D)(i)(II) with respect to the visibility prong for the 1997 8-hour ozone and 1997 PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS).

In this action, EPA is proposing to approve the remaining provisions of Oregon's Regional Haze SIP submission including the portions that address the regional haze requirements for establishing Reasonable Progress Goals (RPGs) and the Long Term Strategy (LTS).

#### A. Definition of Regional Haze

Regional haze is impairment of visual range or colorization caused by emission of air pollution produced by numerous sources and activities, located across a broad regional area. The sources include but are not limited to, major and minor stationary sources, mobile sources, and area sources including non-anthropogenic sources. These sources and activities may 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)). Atmospheric fine particulate reduces clarity, color, and visual range of visual scenes. Visibility reducing fine particulate is primarily composed of sulfate, nitrate, organic carbon compounds, elemental carbon, and soil dust, and impairs visibility by scattering and absorbing light. Fine particulate can also cause serious health effects and mortality in humans, and contributes to environmental effects such as acid deposition and eutrophication. See 64 FR at 35715.

Data from the existing visibility monitoring network, the "Interagency Monitoring of Protected Visual Environments" (IMPROVE) monitoring network, show that visibility impairment caused by air pollution occurs virtually all the time at most national parks and wilderness areas. The average visual range in many Class I areas in the Western United States is 100-150 kilometers, or about one-half to two-thirds the visual range that would exist without manmade air pollution. *Id.* Visibility impairment also varies day-to-day and by season depending on variation in meteorology and emission rates.

#### B. Regional Haze Rules and Regulations

In section 169A of the 1977 CAA Amendments, 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 Class I areas which impairment results from manmade air pollution." CAA section 169A(a)(1). 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" (RAVI). 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 were 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) (the regional haze rule or RHR). The RHR 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 EPA's visibility protection regulations at 40 CFR 51.300-309. Some of the main elements of the regional haze requirements are summarized in section III of this rulemaking. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia and the Virgin Islands.<sup>2</sup> 40 CFR 51.308(b) requires states to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.

#### C. Roles of 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

<sup>2</sup> Albuquerque/Bernalillo County in New Mexico must also submit a regional haze SIP to completely satisfy the requirements of section 110(a)(2)(D) of the CAA for the entire State of New Mexico under the New Mexico Air Quality Control Act (section 74-2-4).

the effect of emissions from one jurisdiction on the air quality in another.

Because the pollutants that lead to regional haze impairment can originate from across state lines, even across international boundaries, EPA has encouraged the States and Tribes to address visibility impairment from a regional perspective. Five regional planning organizations<sup>3</sup> (RPOs) were created nationally to address regional haze and related issues. One of the main objectives of the RPOs is to develop and analyze data and conduct pollutant transport modeling to assist the States or Tribes in developing their regional haze plans.

The Western Regional Air Partnership (WRAP),<sup>4</sup> one of the five RPOs nationally, is a voluntary partnership of State, Tribal, Federal, and local air agencies dealing with air quality in the West. WRAP member States include: Alaska, Arizona, California, Colorado, Oregon, Montana, New Mexico, North Dakota, Idaho, South Dakota, Utah, Washington, and Wyoming. WRAP Tribal members include Campo Band of Kumeyaay Indians, Confederated Salish and Kootenai Tribes, Cortina Indian Rancheria, Hopi Tribe, Hualapai Nation of the Grand Canyon, Native Village of Shungnak, Nez Perce Tribe, Northern Cheyenne Tribe, Pueblo of Acoma, Pueblo of San Felipe, and Shoshone-Bannock Tribes of Fort Hall.

As a result of the regional planning efforts in the West, all states in the WRAP region contributed information to a Technical Support System (TSS) which provides an analysis of the causes of haze, and the levels of contribution from all sources within each state to the visibility degradation of each Class I area. The WRAP States consulted in the development of reasonable progress goals, using the products of this technical consultation process to co-develop their reasonable progress goals for the Western Class I areas. The modeling done by the WRAP relied on assumptions regarding emissions over the relevant planning period and embedded in these assumptions were anticipated emissions reductions in each of the States in the WRAP, including reductions from BART and other measures to be adopted as part of the State's long term strategy for addressing regional haze. The reasonable progress goals in the draft and final regional haze SIPs that have

now been prepared by States in the West accordingly are based, in part, on the emissions reductions from nearby States that were agreed on through the WRAP process.

## II. Requirements for Regional Haze SIPs

### A. The CAA and the Regional Haze Rule

Regional haze SIPs must assure reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas. Section 169A of the CAA and EPA's implementing regulations require states to establish long-term strategies for making reasonable progress toward meeting this goal. Implementation plans must also 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 these sources, where appropriate, to install BART controls for the purpose of eliminating or reducing visibility impairment. The specific regional haze SIP requirements are discussed in further detail below.

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

The RHR establishes the deciview (dv) as the principal metric for measuring 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 is determined by measuring the visual range (or deciview), which is the greatest distance, in kilometers or miles, at which a dark object can be viewed against the sky. The deciview is a useful measure for tracking progress in improving visibility, 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>5</sup>

The deciview is used in expressing reasonable progress goals (which are interim visibility goals towards meeting the national visibility goal), defining baseline, current, and natural conditions, and tracking changes in visibility. The regional haze SIPs must contain measures that ensure "reasonable progress" toward the national goal of preventing and remedying visibility impairment in Class I areas caused by manmade air pollution by reducing anthropogenic emissions that cause regional haze. The national goal is a return to natural

conditions, i.e., manmade 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 (40 CFR 81.401–437), 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 RHR requires states to determine the degree of impairment (in deciviews) for the average of the 20% least impaired ("best") and 20% most impaired ("worst") visibility days over a specified time period at each of their Class I areas. In addition, states must also develop an estimate of natural visibility conditions for the 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 points for assessing "current" visibility impairment. Baseline visibility conditions represent the degree of visibility impairment for the 20% least impaired days and 20% 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 the then current

<sup>3</sup> See <http://www.epa.gov/air/visibility/regional.html> for description of the regional planning organizations.

<sup>4</sup> The WRAP Web site can be found at <http://www.wrapair.org>.

<sup>5</sup> The preamble to the RHR provides additional details about the deciview. 64 FR 35714, 35725 (July 1, 1999).

conditions will indicate the amount of progress made. In general, the 2000–2004 baseline time period is considered the time from which improvement in visibility is measured.

#### C. Consultation With States and Federal Land Managers

The RHR requires that states consult with Federal Land Managers (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 visibility impairment in any Class I area and to offer recommendations on the development of the reasonable progress goals 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.

#### D. Best Available Retrofit Technology

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 States to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources<sup>6</sup> built between 1962 and 1977, to procure, install, and operate the “Best Available Retrofit Technology” (BART) as determined by the state. States are directed to conduct BART determinations for such sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area. The 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, the BART controls must be installed and in operation as

expeditiously as practicable, but no later than five years after the date EPA approves the regional haze SIP. See CAA section 169A(g)(4); 40 CFR 51.308(e)(1)(iv).

EPA previously approved Oregon's BART determination for the sources subject to BART in its jurisdiction. See 76 FR 38997. Please refer to that action for details of the BART requirements and EPA's rationale for approval of the BART provisions in the Oregon Regional Haze SIP submission.

#### E. Determination of Reasonable Progress Goals

The vehicle for ensuring continuing progress towards achieving the natural visibility goal is the submission of a series of regional haze SIPs from the states that establish two reasonable progress goals (RPGs) (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 RHR 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 RPGs, 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 RPGs, but are required to consider the following factors established in section 169A of the CAA and in EPA's RHR 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 RPGs for the best and worst days for each applicable Class I area. 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*, 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) (“EPA's Reasonable Progress Guidance”). In setting the RPGs, states must also consider the rate of progress needed to reach natural visibility conditions by 2064 (referred to as the “uniform rate of progress” (URP)

or the “glidepath”) and the emission reduction measures needed to achieve that rate of progress over the 10-year period of the SIP. Uniform progress towards achievement of natural conditions by the year 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 RPGs, 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 state's Class I areas. See 40 CFR 51.308(d)(1)(iv).

#### F. Long Term Strategy

Consistent with the requirement in section 169A(b) 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 RHR requires that states include an LTS in their regional haze 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 applicable RPGs. 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 visibility impairment in a Class I area located in another state, the RHR requires the impacted state to coordinate with the contributing states in order to develop coordinated emissions management strategies. See 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 emissions reductions needed to meet the RPGs 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 listed below are taken into account in developing their LTS: (1) Emissions reductions due to ongoing air pollution control programs, including measures to address RAVI; (2) measures

<sup>6</sup> The set of “major stationary sources” potentially subject to BART is listed in CAA section 169A(g)(7).

to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance to achieve the RPG; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) enforceability of emissions limitations and control measures; and (7) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS. See 40 CFR 51.308(d)(3)(v).

#### G. Coordinating Regional Haze and Reasonably Attributable Visibility Impairment

As part of the RHR, EPA revised 40 CFR 51.306(c) regarding the LTS for RAVI to require that the RAVI plan must provide for a periodic review and SIP revision not less frequently than every three years until the date of submission of the state's first plan addressing regional haze visibility impairment, which was due December 17, 2007, in accordance with 40 CFR 51.308(b) and (c). On or before this date, the state must revise its plan to provide for review and revision of a coordinated LTS for addressing RAVI and regional haze, and the state must submit the first such coordinated LTS with its first regional haze SIP. Future coordinated LTS's, and periodic progress reports evaluating progress towards RPGs, must be submitted consistent with the schedule for SIP submissions and periodic progress reports set forth in 40 CFR 51.308(f) and 51.308(g), respectively. The periodic review of a state's LTS must report on both regional haze and RAVI impairment and must be submitted to EPA as a SIP revision.

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

Section 51.308(d)(4) of the RHR 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. The strategy must be coordinated with the monitoring strategy required in section 51.305 for RAVI. Compliance with this requirement may be met through "participation" in the 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 RPGs 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;
- Procedures for using monitoring data and other information in a state with no mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas in other states;
- 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, emissions for the most recent year for which data are available, and estimates of future projected emissions. A state must also make a commitment to update the inventory periodically; and
- Other elements, including reporting, recordkeeping, and other measures necessary to assess and report on visibility.

The RHR 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 sources for 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 continue to be met. Each state also is required to submit a report to EPA every five years that evaluates progress toward achieving the RPG for each Class I area within the state and outside the state if affected by emissions from within the state. 40 CFR 51.308(g). The first progress report is due five years from submittal of the initial regional haze SIP revision. At the same time a 5-year progress report is submitted, a state must determine the adequacy of its existing SIP to achieve the established goals for visibility improvement. See 40 CFR 51.308(h).

### III. EPA's Analysis of Oregon Regional Haze SIP

#### A. Affected Class I Areas

There are twelve mandatory Class I areas, or portions of such areas, within Oregon: Mt. Hood Wilderness, Mt. Jefferson Wilderness, Mt. Washington Wilderness, Three Sisters Wilderness, Diamond Peak Wilderness, Crater Lake National Park, Mountain Lakes Wilderness, Gearhart Mountain Wilderness, Kalmiopsis Wilderness, Strawberry Mountain Wilderness, and Eagle Cap Wilderness, are all within Oregon State borders. Hells Canyon Wilderness Area is a shared Class I area with Idaho. See 40 CFR 81.410. Oregon is responsible for developing reasonable progress goals for the Class I areas in Oregon and, through agreement with Idaho, is also responsible for developing the reasonable progress goals for the Hells Canyon Class I area. Oregon reviewed interstate transport of haze pollutants with neighboring states, focusing on source apportionment information to identify visibility impacts in Oregon and neighboring state Class I areas. Oregon consulted with Washington, Idaho, California and Nevada. See the Oregon Regional Haze SIP submittal, chapter 13, section 13.2; see, also the WRAP Technical Support Document, February 28, 2011<sup>7</sup> (WRAP TSD) supporting this action and 76 FR 38997.

The Oregon SIP submittal addresses the eleven Class I areas that are completely within the State border, the Class I area with shared jurisdiction with Oregon and Idaho, and the visibility impacts of Oregon sources on Class I areas in neighboring states.

#### B. Baseline and Natural Conditions

EPA previously evaluated and approved Oregon's determination of baseline and natural conditions for all eleven Class I areas in Oregon. See 76 FR 12651 (March 8, 2011) and 76 FR 38997 (July 5, 2011) (proposed and final rule respectively). The discussion of baseline and natural conditions in those **Federal Register** notices is relevant when evaluating the State's Reasonable Progress Goals which we are proposing to approve today. Thus, the discussion below summarizes EPA's previous explanation of the baseline and natural conditions in Oregon's Class I areas.

Oregon established baseline and natural visibility conditions as well as the URP to achieve natural visibility

<sup>7</sup> EPA evaluated the technical work products of the WRAP used by Oregon in support of this Regional Haze SIP submittal. The results of that evaluation are included in the document "WRAP Technical Support Document" or WRAP TSD.

conditions in 2064 for all eleven of the Class I areas wholly within its borders. The SIP submittal also included these conditions for Hells Canyon Wilderness Area, as determined by WRAP and established by Oregon and Idaho.

Baseline visibility was calculated from monitoring data collected by IMPROVE monitors for the most-impaired (20% worst) days and the least-impaired (20% best) days. Oregon used the WRAP derived natural visibility conditions. In general, WRAP based their natural condition estimates on EPA guidance; *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Program (EPA-45/B-03-0005 September 2003)* but incorporated refinements which EPA believes provides results more appropriate for western states than the general EPA default approach. See WRAP TSD section 2.E.

Because individual monitors are used to represent visibility conditions for groups of Class I areas in Oregon, not every Class I area in Oregon has an IMPROVE monitor. Specifically, the Oregon Class I areas are segregated into six groups. These groups, and Class I areas they contain, are:

- North Cascades: Mt. Hood Wilderness Area.
- Central Cascades: Mt. Jefferson, Mt. Washington, and Three Sisters Wilderness Areas.
- Southern Cascades: Crater Lake National Park, Diamond Peak, Mountain Lakes, and Gearhart Wilderness Areas.
- Coast Range: Kalmiopsis Wilderness Area.
- Eastern Oregon: Strawberry Mountain and Eagle Cap Wilderness Areas.
- Eastern Oregon/Western Idaho: Hells Canyon Wilderness Area.

Visibility conditions on the 20% worst days during the 2000–04 baseline period for each group of Class I areas were determined to be:

- North Cascades—14.9 dv.
- Central Cascades—15.3 dv.
- Southern Cascades—13.7 dv.
- Coast Range—15.5 dv.
- Eastern Oregon—18.6 dv.
- Eastern Oregon/Western Idaho—18.6 dv.

Visibility conditions on the 20% best days during the 2000–04 baseline period for each group of Class I areas were determined to be:

- North Cascades—2.2 dv.
- Central Cascades—3.0 dv.
- Southern Cascades—1.7 dv.
- Coast Range—6.3 dv.
- Eastern Oregon—4.5 dv.
- Eastern Oregon/Western Idaho—5.5 dv.

Natural visibility conditions on the 20% worst days for each group of Class I areas were determined to be:

- Northern Cascades—8.4 dv.
- Central Cascades—8.8 dv.
- Southern Cascades—7.6 dv.
- Coast Range—9.4 dv.
- Eastern Oregon—8.9 dv.
- Eastern Oregon/Western Idaho—8.3 dv.

#### C. Oregon Emission Inventory

EPA previously evaluated and approved Oregon's emissions inventory of pollutants that impact the twelve Class I areas in Oregon, as well as the impacts of emissions from Oregon BART-eligible sources on nearby Class I in other states. See 76 FR 12651 and 76 FR 38997. Below is a summary of emission inventories of the most significant visibility impairing pollutants in Oregon, which are SO<sub>2</sub>, NO<sub>x</sub>, and organic carbon. These pollutants, and their visibility impacts, were explained in more detail in the notices for the previous rulemaking.

Point sources in Oregon account for 39% of total state-wide SO<sub>2</sub> emissions. The most significant point sources are coal-fired electrical generation units. Area sources (such as Pacific offshore shipping, wood combustion, and natural gas combustion) contribute about 21% to Oregon statewide SO<sub>2</sub> emissions. On-road mobile and off-road mobile sources contribute a combined total of 21% of the Oregon SO<sub>2</sub> emissions. On-road mobile sources account for 43% of the total NO<sub>x</sub> statewide emissions in Oregon, and off-road mobile sources account for 21% of the NO<sub>x</sub>. Natural fire accounts for 11% of the NO<sub>x</sub>, and point sources account for 10% of the NO<sub>x</sub> emissions. Most of the organic carbon emissions in Oregon are from natural fire, which fluctuate greatly from year to year. For 2002, about 68% of statewide organic carbon emissions in Oregon were due to natural fire. Anthropogenic fire (prescribed fire, agricultural field burning, and outdoor residential burning) accounts for 9% of the statewide organic carbon emissions.

#### D. Sources of Visibility Impairment in Oregon Class I Areas

Oregon used a two step process to identify the contribution of each source or source category to existing visibility impairment. First, ambient pollutant concentrations by species (sulfate, nitrate, organic carbon, fine particulate, etc) were determined from the IMPROVE sampler representing each Class I area. These concentrations were then used to determine the extinction coefficient for each pollutant species according to the updated IMPROVE

algorithm. Extinction was then converted to deciview values, the required visibility metric identified in the RHR. Second, appropriate modeling tools were used to determine which source categories contributed to the ambient concentrations of each pollutant species in each Class I area. Thus, impairment was distributed by source category.

The WRAP and Western States selected the Comprehensive Air Quality Model with Extensions (CAMx) in conjunction with PM Source Apportionment Technology (PSAT) first to determine source contribution to ambient sulfate and nitrate concentrations and then to decide which geographic source regions contribute to haze at specific Class I areas. The second modeling tool used by WRAP was the Weighted Emissions Potential (WEP) model, which was used primarily as a screening tool to determine the contribution of ambient organic carbon, elemental carbon, PM<sub>2.5</sub>, and coarse PM concentrations to visibility impairment in Oregon Class I areas. Description of these tools, their use and evaluation of them are described in more detail in section 6 of the WRAP TSD. Below is a summary of the source categories that contribute to the SO<sub>2</sub>, NO<sub>x</sub>, and organic carbon, which cause the most significant visibility impairment in Class I areas in Oregon.

The results of the PSAT and WEP modeling show that sources of visibility impairment in the Oregon Class I area vary significantly by location. The PSAT results show that the 20% worst days during 2000–2004 in the North and Central Cascades Class I areas are mostly impacted by sulfate from a combination of SO<sub>2</sub> point, area, and mobile sources in Washington and Oregon, and marine shipping in the Pacific offshore region. Most of the sulfate impacting the Southern Cascade Class I areas is from point sources in Oregon, Washington, California, and Canada. Pacific offshore shipping is also a substantial contributor of sulfate to this area. The most significant sources of sulfate to the only coastal Oregon Class I area (Kalmiopsis Wilderness Area) are natural fires in Oregon, and marine shipping in the Pacific Ocean. For the 20% worst days in Eastern Oregon Class I areas, the contribution of sulfates from each geographical area is relatively low, with the largest contribution being from point sources from Canada, Washington, and Oregon. See Oregon Regional Haze SIP submittal Figures 9.2.1–1 through Figures 9.2.1–6.

The PSAT results for nitrate show that a majority of the nitrate impacting the

North and Central Cascades Class I areas is from mobile sources in Oregon and Washington. For the 20% worst days in Southern Cascades, the most significant sources of nitrate are mobile sources in California, Oregon and Washington. A majority of the nitrate impacting the Kalmiopsis Wilderness Area is from mobile sources in Oregon and from marine shipping in the Pacific Ocean. The visibility on the 20% worst days in the Eastern Oregon Class I areas is significantly impacted by a combination of point, area, and mobile NO<sub>x</sub> sources in Idaho, Oregon and Washington. See Oregon Regional Haze SIP submittal Figures 9.2.2–1 through Figures 9.2.2–6.

Based on the WEP model results, the organic carbon in the North Cascades area on the 20% worst visibility days comes mostly from area sources and natural fires in Oregon, with a small contribution from area sources in Washington. For the 20% worst visibility days in the Central Cascades areas, most of the organic carbon comes from a combination of area source emissions and natural and anthropogenic fire in Oregon. For the 20% worst visibility days in the Southern Cascades area, approximately 90% of the organic carbon contribution came from natural fires in 2002. For the 20% worst visibility days in the Kalmiopsis Wilderness area, almost all of the organic carbon for the 2002 base year came from natural fire. For the 20% worst visibility days in the Eastern Oregon Class I areas, most of the organic carbon contribution came from a combination of natural fires and anthropogenic fires in Idaho and Oregon.

In its previous final rulemaking EPA found that Oregon had appropriately identified the primary pollutants impacting its Class I areas, and that the SIP contains an appropriate analysis of the impact these pollutants have on visibility in the Class I areas in Oregon. See 76 FR 38997.

#### *E. Best Available Retrofit Technology*

EPA previously reviewed and approved Oregon's BART determinations for all sources subject to BART in Oregon. See 76 FR 38997. As explained in the **Federal Register** notice approving the State's determinations, BART was determined for one source, the PGE Boardman Electric Generating Unit (EGU), and Federally Enforceable Permit Limits (FEPLs) were established for four BART-eligible sources to reduce visibility impacts at any Class I area below the 0.5 dv subject to BART-subject threshold. These four sources are:

- PGE Beaver EGU

- Georgia Pacific Wauna Mill
- International Paper, Springfield
- Amalgamated Sugar Plant, Nyssa

In summary, the emission limits established through FEPLs for the above four sources were achieved through the following methods.

1. PGE Beaver EGU: To achieve the emission limits established in the Title V permit, the facility is using ultra-low sulfur diesel fuel (with no more than 0.0015% sulfur) in its oil-fired BART eligible units. The source must also use only "pipe line quality" natural gas in the gas-fueled PWEU1 unit.

2. Georgia Pacific Wauna Mill: To achieve the emission limits established in the Title V permit, the mill has reduced its SO<sub>2</sub> emissions by (1) permanently reducing use of fuel oil in the Power Boiler, (2) discontinuing the use of fuel oil in the Lime Kiln until the Non-Condensable Gas Incinerator (NCGI) unit is shut down, and (3) limiting pulp production rate to 1,030 tons per day until the NCGI unit is shut down, at which time production rate will be limited to 1,350 tons per day.

3. International Paper, Springfield: To achieve the emission limits established in its Title V permit, the plant has reduced its emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM by accepting limits on fuel usage and operation, and meeting a combined SO<sub>2</sub> and NO<sub>x</sub> daily emission limit based on a plant fuel use specific formula. The permit requires this facility to include the package boiler (EU-150B) emissions when demonstrating compliance with condition 210 of the permit until the source submits a notice of completion of No. 4 recovery boiler mud and steam drum replacement.

4. Amalgamated Sugar Plant, Nyssa: This plant is currently shutdown and has no identified date to resume operations. In the event this source resumes operation in the future, ODEQ will require that this facility be subject to a FEPL in its Title V permit, or conduct a BART analysis and install BART prior to resuming operation.

The PGE EGU near Boardman, Oregon is a coal-fired power plant capable of producing about 617 MW of electricity constructed between 1962 and 1977, and based on 2005 actual emissions data, emitted about 12,000 tons of SO<sub>2</sub>, 8,300 tons of NO<sub>x</sub>, and 880 tons of particulate matter (PM) that year. ODEQ determined BART for this source to be 0.23 lbs/mmBtu for NO<sub>x</sub> based on a new low-NO<sub>x</sub> burner/modified overfire air system, 0.40 lbs/mmBtu for SO<sub>2</sub> based on initial operational efficiency of a new Direct Sorbent Injection System, and 0.40 lb/mmBtu for PM, based on the current PM emission limit for the existing electrostatic precipitation

system. The BART rule for this facility requires that the Foster Wheeler boiler at the facility permanently cease burning coal by no later than December 31, 2020. OAR 340–223–0030(1)(e).

#### *F. Reasonable Progress Goals*

##### 1. Determination of Reasonable Progress Goals

The RHR requires States to show "reasonable progress" toward natural visibility conditions over the time period of the SIP, with 2018 as the first milestone year. The RHR at 40 CFR 51.308(d)(1) also requires that the State establish a goal, expressed in deciviews (dv), for each Class I area within the State that provides for reasonable progress towards achieving natural visibility conditions by 2064. As such the State must establish an RPG for each Class I area that provides for visibility improvement for the most-impaired (20% worst) days and ensures no degradation in visibility for the least-impaired (20% best) days in 2018.

RPGs are estimates of the progress to be achieved by 2018 through implementation of the LTS which includes anticipated emission reductions from all State and Federal regulatory requirements implemented between the baseline and 2018, including, but not limited to, BART and any additional controls for non-BART sources or emission activities including any Federal requirements that reduce visibility impairing pollutants. As explained above, the rate needed to achieve natural conditions by 2064 is referred to as the uniform rate of progress or URP.

If the State establishes a reasonable progress goal that provides for a slower rate of improvement than the rate that would be needed to attain natural conditions by 2064, the State must demonstrate based on the factors in 51.308(d)(1)(i)(A), that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and the progress goal adopted by the State is reasonable. The State must provide an assessment of the number of years it would take to attain natural conditions if visibility continues at the rate of progress selected by the State. 40 CFR 51.308(d)(B)(ii).

The primary tool relied upon by Oregon for determining regional haze improvements by 2018 and for establishing the RPGs, was the CMAQ modeling conducted by WRAP. The CMAQ model was used to estimate 2018 visibility conditions in Oregon, based on application of the regional haze strategies included in this plan. WRAP developed CMAQ modeling inputs,

including annual meteorology and emissions inventories for: (1) A 2002 actual emissions base case, (2) a planning case to represent the 2000–04 regional haze baseline period using averages for key emissions categories, and (3) a projected 2018 case to determine improvements achievable by 2018. EPA approves the use of the CMAQ model to determine future visibility conditions in Oregon Class I areas. A more detailed description of the CMAQ modeling performed by WRAP can be found in the WRAP TSD for this action.

To determine the 2018 RPGs for its Class I areas, ODEQ followed the eleven steps described below:

1. Compare baseline conditions to natural conditions. For each Class I area, ODEQ identified baseline (2000–2004) visibility and natural conditions in 2064, for the 20% worst and best days.
2. Identify the Uniform Rate of Progress for achieving natural conditions on the 20% worst days. For each Class I area, ODEQ calculated the URP glide path from baseline to 2064, including the 2018 planning milestone, for the 20% worst days.
3. Identify contributing pollutant species. For each Class I area, ODEQ identified the pollutant species that are contributing to visibility impairment on during the 2000–2004 baseline 20% worst and 20% best days.
4. Identify major emission sources within the State. Using the WRAP

Emission Inventory for 2002 and 2018, ODEQ identified statewide emissions by source category and pollutant, and identified projected emission trends from current (2002) to the 2018 planning milestone.

5. Identify the larger emission sources contributing to visibility impairment. For each Class I area, ODEQ identified the relative contribution of anthropogenic and non-anthropogenic sources in Oregon and neighboring states to the 20% worst and best days, using monitoring data, and source apportionment and modeling results.

6. Document the emission reductions from BART. ODEQ described the results of the BART process, and identified the emission reductions that will be achieved from BART and from FEPLs taken by sources so that they are no longer subject to BART.

7. Identify projected visibility change in 2018 from “on-the-books” controls and BART. For each Class I area, ODEQ determined the visibility improvement expected in 2018 from on-the-books controls and BART, using the WRAP CMAQ modeling results, for the 20% worst and best days.

8. Identify sources or source categories that are major contributors and apply the four-factor analysis. As a result of the analysis under step 5 above, for each Class I area, ODEQ determined key pollutant species and source categories that could have the greatest impact on visibility in Oregon

Class I areas, and analyzed these sources using the four-factor analysis.

9. Describe the results of the four-factor analysis. ODEQ conducted a four-factor analysis on the major Oregon source emission categories using the following factors: Cost of compliance, time necessary for compliance, energy and non-air quality environmental impacts of compliance, and remaining useful life of any potentially affected sources.

10. Set the RPGs based on the above steps. ODEQ set the RPGs for each Class I area in deciviews, based on expected improvements by 2018 for the 20% worst and 20% best days, due to on-the-books controls, BART, and the results of the four-factor analysis on major source categories.

11. Compare RPG to the 2018 URP milestone and provide an affirmative demonstration that reasonable progress is being made. For each Class I area, ODEQ compared the RPG developed in step 10 to the 2018 URP milestone and provided an affirmative demonstration that reasonable progress is being made.

After considering each of the factors described above, Oregon established RPGs for each of its mandatory Class I areas. The visibility projections were based on estimates of emissions reductions from all existing and known controls resulting from Federal and state CAA programs as of December 2010. Oregon’s RPGs for its 12 Class I areas are shown in Table 1 below.

TABLE 1—2018 RPGs FOR CLASS I AREAS IN OREGON

Region	Oregon class I area	20% Worst days			Years from baseline to attain natural conditions at reasonable progress	20% Best days	
		Baseline condition (dv)	2018 Uniform rate of progress (dv)	2018 Reasonable progress goal (dv)		Baseline condition (dv)	2018 reasonable progress goal (dv)
Northern Cascades	Mt. Hood Wilderness Area .....	14.9	13.4	13.8	87	2.2	2.0
Central Cascades ..	Mt. Jefferson, Mt. Washington, and Three Sisters Wilderness Areas.	15.3	13.8	14.3	93	3.0	2.9
Southern Cascades	Diamond Peak, Mountain Lakes, and Gearhart Mountain Wilderness Areas and Crater Lake National Park.	13.7	12.3	13.4	287	1.8	1.5
Coast Range .....	Kalmiopsis Wilderness Area .....	15.5	14.1	15.1	216	6.3	6.1
Eastern Oregon .....	Strawberry Mountain and Eagle Cap Wilderness Areas.	18.6	16.3	17.5	125	4.5	4.1
Eastern Oregon/ Western Idaho.	Hells Canyon Wilderness Area .....	18.6	16.2	16.6	74	5.5	4.7

SIP submission Table 11.4.2–2 as supplemented by May 7, 2012 letter from ODEQ.

2. Demonstration of Reasonable Progress

Oregon recognized that based on the results of the CMAQ modeling, none of the Class I areas in Oregon are expected to achieve the URP for 2018. Nevertheless, Oregon concludes that the goals it established for each of the Class I areas for the first planning cycle are reasonable, and no additional controls

are reasonable at this time. Oregon believes that these RPGs are justified and “reasonable” based on the following considerations: (1) Findings of the four-factor analysis which evaluated controls on major source categories that impact visibility in Class I areas in Oregon, (2) substantial future emission reductions from the PGE Boardman EGU, initially due to BART emission

limits in place by 2014, and then further reductions in emissions from this facility when it ceases to burn coal by the end of 2020, (3) evidence that emissions from natural sources (primarily wildfires) significantly impact visibility in the Class I areas and adversely affect Oregon’s ability to reach the 2018 URP goal, (4) evidence that offshore marine shipping emissions



significantly impact visibility in the Class I areas and adversely affect Oregon’s ability to meet the 2018 URP goal in these Class I areas, and (5) ODEQ’s demonstration that it will achieve significant reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions from anthropogenic sources in Oregon, primarily due to major reductions in mobile source emissions of SO<sub>2</sub> and NO<sub>x</sub> by 2018. See Oregon Regional Haze SIP submission section 11.4.1 for additional detail.

These five factors, and how they were considered, are summarized in the following paragraphs.

*Findings of the Four-Factor Analysis:* ODEQ based its analysis on the WRAP four-factor analysis for Oregon, and focused on the largest anthropogenic point and area sources that have the greatest projected amounts of SO<sub>x</sub> and NO<sub>x</sub> emissions in each source category in 2018. Based on the emissions inventory, ODEQ identified the

following source categories as being the largest SO<sub>x</sub> and NO<sub>x</sub> emitters: External Combustion Boilers; Stationary Source Fuel Combustion; Industrial Processes; Internal Combustion Engines; Agricultural Orchard Heaters; and Waste Disposal, Treatment, and Recovery. The annual SO<sub>2</sub> and NO<sub>x</sub> emissions from each of these categories are shown in Table 2.

TABLE 2—OREGON’S LARGEST SOURCE CATEGORIES

Pollutant	Type	Source category	Extent of contribution
SO <sub>2</sub>	Point	External Combustion Boilers	858 tons/year.
	Point	Industrial Processes	377 tons/year.
	Area	Stationary Source Fuel Combustion	5,699 tons/year.
NO <sub>x</sub>	Area	Misc. (Agriculture Orchard Heaters)	2,243 tons/year.
	Point	External Combustion Boilers	4,995 tons/year.
	Point	Industrial Processes	3,639 tons/year.
	Point	Internal Combustion Engines	3,688 tons/year.
	Area	Stationary Source Fuel Combustion	13,454 tons/year.
	Area	Waste Disposal, Treatment, and Recovery	2,881 tons/year.

ODEQ’s four-factor analysis for each source category is summarized below:

a. External Boilers: This source category consists of point sources with emissions totaling 858 tons per year (tpy) of SO<sub>2</sub> and 4,995 of NO<sub>x</sub>. Technically feasible NO<sub>x</sub> emission control technologies for external boilers included Overfire Air, Selective Non-Catalytic Reduction and Selective Catalytic Reduction. See section 11.3.3.1 of the SIP submittal for additional detail regarding the State’s analysis of this source category.

b. Industrial Processes: This source category consists of SO<sub>2</sub> and NO<sub>x</sub> point sources, with emissions totaling 377 tpy of SO<sub>2</sub> and 3,639 tpy of NO<sub>x</sub>. In this category, ODEQ focused on cement manufacturing, which is the only sizeable subcategory in this category, with about 57% of the NO<sub>x</sub> in the Industrial Processes category. See section 11.3.3.1, Industrial Processes table and section 11.3.3.3 of the SIP submittal for additional detail regarding the State’s analysis of this source category.

c. Stationary Source Fuel Combustion: This source category consists of area sources, with emissions totaling 5,699 tpy of SO<sub>2</sub> and 13,354 tpy of NO<sub>x</sub>. The largest subcategory in this category is residential wood and natural gas combustion (6,642 tpy of NO<sub>x</sub>, combined). These represent the woodstoves and home heating devices found throughout Oregon. ODEQ’s residential wood heating rules in OAR 340, Division 262, require that only certified woodstoves can be sold in the

state. As a result of these current federally enforceable state requirements and programs for residential wood heating, ODEQ did not conduct a four-factor analysis for this subcategory. ODEQ also found that the low emissions generated by natural gas home heating devices did not warrant further analysis. The remaining sizeable subcategories were industrial and commercial/institutional combustion, involving mostly natural gas and distillate oil. ODEQ believes that emissions from these subcategories come from smaller generators and engines. The control options available for stationary sources burning natural gas are very limited, since this fuel already produces very low emissions, and there are no cost-effective post-combustion controls for this category of sources. As a result of its review of this source category, ODEQ did not believe a detailed four-factor analysis was appropriate, and that such a review would not identify any cost effective controls. See section 11.3.3.2 of the SIP submittal for additional detail regarding the State’s analysis of this source category.

d. Waste Disposal, Treatment, and Recovery: This source category consists of NO<sub>x</sub> area sources with emissions totaling 2,881 tpy. ODEQ found that the largest source within this category is residential open burning, which like agricultural and forestry burning is not suitable for applying the four-factor analysis because there are no feasible emission control technologies for these types of sources. However, as discussed below, ODEQ intends to conduct an

evaluation of residential open burning to determine the extent of the contribution to visibility impairment, and the need for emission reductions, as part of the LTS of this plan (See chapter 12, section 12.6.3 of the SIP submittal).

e. Agricultural Orchard Heaters: This source category consists of SO<sub>2</sub> area sources with emissions totaling 2,243 tpy. ODEQ found that a four-factor analysis was not appropriate for this category of sources for the following reasons: (1) ODEQ’s confidence in the emissions estimates from orchard heaters is very low, (2) these heaters are used only intermittently, to prevent frost damage for selected crops in diverse regions of the state, and the probability that the intermittent use and spatial distribution of this source is a sizeable contributor to Class I area impairment is extremely low, and (3) few cost effective control options are available for this type of source. See section 11.3.3.5 of the SIP submittal for additional detail regarding the State’s analysis of this source category.

f. Internal Combustion Engines: This source category consists of NO<sub>x</sub> point sources with emissions totaling 3,688 tpy. This source category consists of two types of engines: (1) Natural gas fired reciprocating internal combustion engines, and (2) natural gas fired turbines that are compressors, combustors, or power turbines. Emissions from internal combustion engines vary from engine to engine, model to model, and mode of operation. ODEQ found that there was no currently available information on this source

category that would allow a four-factor analysis. Given the relatively low emissions represented by this source category, and the unknown level of contribution to visibility impairment, ODEQ decided not to conduct any further analysis on this source category. See section 11.3.3.6 of the SIP submittal for additional detail regarding the State's analysis of this source category.

As the purpose of the reasonable progress analysis is to evaluate the potential of controlling certain sources or source categories to address visibility from manmade sources, the four-factor analysis conducted by Oregon addressed only anthropogenic sources on the assumption that the focus should be on sources that could be controlled. Thus, in its evaluation of potential sources or source categories for reasonable progress, the state primarily evaluated controls on point sources. Oregon determined that the key pollutants contributing to visibility impairment from sources in Oregon are SO<sub>2</sub>, NO<sub>x</sub>, and organic carbon. The State determined that the major source of organic carbon was natural fire, and after reviewing the WRAP modeling results, Oregon found that PM emissions from point sources only contribute a minimal amount to the visibility impairment in the Oregon Class I areas. Therefore, for this initial planning period, Oregon focused on SO<sub>2</sub> and NO<sub>x</sub> controls for point source emissions. Based on its evaluation, Oregon concluded that little gain would be achieved from further reduction in SO<sub>2</sub> and NO<sub>x</sub> from point sources in Oregon, and therefore concluded it is not reasonable to require controls for these source categories at this time. See Chapter 11.3 of the Oregon SIP submittal.

*Substantial emission reductions From the PGE Boardman EGU:* ODEQ projects that there will be a total SO<sub>2</sub> and NO<sub>x</sub> emission reduction of 9,944 tpy from the PGE Boardman facility when BART emission controls are fully implemented by July 2014. These reductions will result in an additional visibility improvement of 2.4 dv in the Mt. Hood Class I area, and an additional cumulative visibility improvement of 16.2 dv in all 14 Class I areas impacted by this source. By 2018, there will be an additional reduction of 2,400 tpy of SO<sub>2</sub> when the reasonable progress controls (Direct Sorbent Injection-phase 2) are implemented, resulting in an additional 2.3 dv of cumulative improvement. By the end of 2020, when Boardman permanently ceases to burn coal, there will be an additional combined SO<sub>2</sub> and NO<sub>x</sub> reduction of 12,877 tpy, resulting in an additional 13.0 dv cumulative

improvement in all 14 Class I areas. See appendix D-7 of the Oregon Regional Haze SIP submittal.

*Significant contribution to visibility impairment from natural sources:* The emission data in Chapter 8 of the SIP submittal demonstrate that there are major contributions of Organic Carbon (OC), Elemental Carbon (EC), PM<sub>2.5</sub>, and coarse particulate matter (coarse PM) from wildfires and windblown dust to the total state inventory for these species. In 2002, OC from wildfires constituted 69% of the total state's OC emission inventory, and EC from wildfires constituted 61% of the state's EC emission inventory. Also in 2002, windblown dust constituted 26% of the Oregon's total PM<sub>2.5</sub> inventory, and constituted 61% of the coarse PM inventory. Based on CMAQ modeling results shown in Chapter 9 of the SIP submittal, OC and PM<sub>2.5</sub> from wildfires, and PM<sub>2.5</sub> and coarse PM from windblown dust, had significant to substantial impacts on visibility in Oregon Class I areas on the 20% worst days in 2002. The contribution of natural fires to visibility impairment from OC in Oregon Class I areas ranges from about 15% at the Mt. Hood Class I area to about 95% at the Kalmiopsis Class I area. Windblown dust and wildfires combined contribute from about 10% to 90% of the PM<sub>2.5</sub> measured ambient air concentrations in the Oregon Class I areas, and windblown dust and wildfires combined contribute from about 30% to 95% of the coarse PM measured in Oregon Class I areas. Since the emissions from these natural sources are uncontrollable, and are projected to remain at 2002 baseline levels through 2018, emissions from these sources will continue to have major visibility impacts on Oregon Class I areas, prevent visibility improvement from achieving the URP, and increase the percent contribution to visibility impairment from uncontrolled sources as concentrations of pollutants from controlled sources decrease.

*Evidence that offshore marine shipping emissions affect ability to meet the 2018 URP goal:* ODEQ found that marine vessel emissions (primarily SO<sub>2</sub> and NO<sub>x</sub>) are a significant contributor to haze in Oregon Class I areas, and significantly affect Oregon's ability to meet its 2018 URP milestones. The PSAT and WEP results in the Oregon SIP submittal Chapter 9 show that offshore marine emissions are a significant contributor to visibility impairment in the Kalmiopsis Class I area and the seven Oregon Class I areas in the Cascade Mountains. Marine vessel emissions are included in the

"Pacific offshore" portion of the pie charts shown in Figures 9.2.1-1 through 9.2.1-5 of the SIP submittal. According to the emission inventory in Chapter 8 of the Oregon SIP submittal, marine vessel emissions constitute 56% of the total SO<sub>2</sub> and 31% of the total NO<sub>x</sub> inventory for the State of Oregon for 2002. As discussed further in the long term strategy portion of the submittal, Oregon has only limited ability to regulate offshore marine emissions and the Pacific offshore marine vessel emissions are currently beyond Oregon's regulatory authority.

*ODEQ's determination that it will achieve significant reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions by 2018:* Oregon explained that it will achieve significant reduction of SO<sub>2</sub> and NO<sub>x</sub> emissions from anthropogenic sources in Oregon by 2018, primarily due to existing Federal rules that control SO<sub>2</sub> and NO<sub>x</sub> emissions from mobile sources. See section 11.4.3 of the SIP submittal. Based on the WEP analyses of SO<sub>2</sub> and NO<sub>x</sub> emissions in 2018, SO<sub>2</sub> emissions from sources upwind of the Class I areas in Oregon are projected to decrease by 33% to 46%, and upwind emissions of NO<sub>x</sub> are projected to decrease by 28% to 48% on the 20% worst days compared to the 2002 baseline. These results are shown in Tables 11.4.2-2 and 11.4.2-3 of the SIP submittal. As a result of this reduction in SO<sub>2</sub> and NO<sub>x</sub> emissions, the CMAQ regional visibility modeling results project a 4% to 18% improvement in visibility in Oregon Class I areas due to reductions in SO<sub>2</sub> emissions, and projects a 27% to 58% improvement in visibility in the Oregon Class I areas from reductions in NO<sub>2</sub> emissions. See section 11.4.2 of the SIP submittal.

3. EPA's Determination Whether the SIP Meets 40 CFR 51.308(d)(1)

In a previous action, EPA approved Oregon's determination of baseline and natural visibility conditions in each Class I area in Oregon. See 76 FR 38997. The linear progress from baseline visibility to natural visibility in 2064 defines the URP. The '2018 URP' is the rate of progress to be achieved by 2018 in order to stay on track to achieve natural conditions by 2064. In reviewing the Oregon SIP submittal, EPA independently evaluated whether there are reasonable control measures available for sources located within Oregon's regulatory jurisdiction that would achieve further progress toward achieving the 2018 URP.

We began this evaluation using a screening methodology called "Q/d" to determine which stationary (point) sources would be candidates for

controls under reasonable progress. The value  $Q/d$  is the ratio of the mathematical sum of actual  $SO_2$ ,  $NO_x$  and PM emissions in tpy, denoted as “ $Q$ ”, divided by the distance (in kilometers, denoted as “ $d$ ”) of the point source to the nearest Class I area. A high  $Q/d$  would indicate the likelihood of the source causing or contributing to impairment in that Class I area.

To determine the  $Q/d$  value that would provide assurance that a source would, or would not, cause or contribute to impairment in any Class I area, we considered the modeled visibility impacts from the CALPUFF modeling used to determine the BART-eligible sources subject to BART in EPA Region 10 and the distance of the source to the nearest Class I area. There were 19 BART-eligible sources used in this analysis. See memorandum to the files from Keith Rose, EPA Region 10, dated March 21, 2012, for this analysis. All sources with a  $Q/d$  ratio of less than 26.1 had visibility impacts of less than 0.5 dv. The resultant average of the range is about 0.3 dv, which is more conservative than the 0.5 dv that was used in determining which sources would be subject-to-BART under the federal BART regulations. Since the threshold is more conservative than the subject-to-BART threshold, we believe that a  $Q/d$  value of 20 is reasonable for determining which point sources the State should consider for the reasonable progress analysis.

Next, EPA determined the  $Q/d$  ratio at all non-BART point sources in Oregon based on information in the EPA National Emission Inventory database for emissions for point sources in 2005. Based on the 2005 EPA National Emission Inventory Database, six of the largest non-BART point sources and their  $Q/d$  values are: Roseburg Forest Products (16.9  $Q/d$ ), Co-Gen Co. LLC (15.5  $Q/d$ ), Gas Transmission Northwest Corporation (14.0  $Q/d$ ), Weyerhaeuser Company, Albany (13.1  $Q/d$ ), Boise Cascade Corporation, La Grande (12.7  $Q/d$ ), and Boise Cascade Corporation, Elgin (11.5  $Q/d$ ). Since all of these sources have  $Q/d$  values below 20, EPA believes that their impacts on nearby Class I areas are expected to be less than 0.5 dv. Thus, EPA agrees with Oregon’s conclusion that additional controls of non-BART point sources for reasonable progress purposes are not reasonable in the first planning period, because even though there are cost effective controls identified, visibility improvement is anticipated to be relatively small.

EPA also considered control measures for anthropogenic fire (prescribed forest fire and agricultural fire). Oregon

already operates a robust enhanced smoke management program for prescribed forest fire and agricultural burning (see description of Oregon’s smoke management and agricultural burning programs in section G.5 below). There are no other source categories of smoke that appear to emit visibility impairing pollutants sufficient to warrant consideration for additional control at this time.

In regard to the impact of offshore marine shipping emissions, ODEQ did not consider potential improvements in visibility its Class I areas due to amendments adopted by the International Maritime Organization (IMO) in October 2008. See [http://www.imo.org/blast/mainframe.asp?topic\\_id=233](http://www.imo.org/blast/mainframe.asp?topic_id=233). These amendments, known as the Annex VI amendments specify: (1) New fuel quality requirements for commercial marine vessels beginning from July 2010, (2) Tier II and III  $NO_x$  emission standards for new commercial marine engines, and (3) Tier I  $NO_x$  requirements for existing pre-2000 commercial marine engines. The Annex VI amendments designate waters within 200 miles of the North American coast as an emission control area, including waters offshore of Oregon. Even though the effects of IMO Annex VI amendments were not evaluated in the Oregon SIP submittal, EPA believes that visibility impacts from marine vessel emissions will decrease by 2018 when the requirements of the Annex VI amendments are fully implemented. Because these reductions were not included in the CMAQ or WEP analyses conducted by WRAP for Oregon, the specific visibility improvements cannot be quantified at this time, but they will likely result in further visibility improvements in the Oregon Class I areas located near the coast and in the Cascade Mountains.

As explained in the EPA’s RGP Guidance, the 2018 URP estimate is not a presumptive target and the State’s RPGs may be lesser, greater or equivalent to the glide path. The glide path to 2064 represents a rate of progress which states must use for analytical comparison to the amount of progress they expect to achieve. EPA believes the RPGs established by Oregon for the Class I areas in Oregon, although not achieving the URP, are reasonable when considering that significant visibility improvement is expected from BART controls for Boardman and other point sources, additional controls on other point sources and other source categories would not result in significant visibility improvement, and the significant visibility impacts due to

uncontrollable natural fire and significant impacts from off shore marine emissions. Consequently, we propose to find that the State has demonstrated that its 2018 RPGs are reasonable and consistent with 40 CFR 51.308(d)(1) and 51.308(d)(1)(ii).

### G. Long Term Strategy

The Long Term Strategy (LTS) required by 40 CFR 51.308(d)(3) is a compilation of all existing and anticipated new air pollution control measures. The LTS must include “enforceable emission 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. 40 CFR 51.308(d)(3). In developing its LTS, Oregon considered all the factors required for developing a LTS identified in the RHR. These factors included: (1) Ongoing Air Pollution Control Programs, (2) Measures to Mitigate Impacts of Construction Activities, (3) Emission Limitations and Schedules for Compliance, (4) Source Retirement and Replacement Schedules, (5) Smoke Management Techniques for Agricultural and Forestry Burning, and (6) Enforceability of Emission Limitations and Control Measures. A summary of how Oregon is addressing each of these factors in its LTS is provided below.

#### 1. Ongoing Air Pollution Control Programs

##### a. Prevention of Significant Deterioration/New Source Review Rules

In Oregon, a primary regulatory tool for addressing visibility impairment from industrial sources is the Prevention of Significant Deterioration (PSD) New Source Review rules. The SIP approved Oregon PSD rules protect visibility in Class I areas from new industrial sources, and major changes to existing sources, by requiring a visibility impact assessment (OAR 340, Division 225). Specifically, OAR 340–225–0070 describes the process for conducting a visibility impact assessment and review by ODEQ, as well as the process for conducting modeling to determine visibility impacts, which is used to determine if a source causes a significant impairment in any Class I area. Any new major source or major modifications within a distance of 300 km of a Class I area that are found through modeling to cause significant visibility impairment will not be issued an air quality permit by Oregon unless the impact is mitigated. The level of significance is defined as an increase in

visibility impairment above natural background of 5%.

b. Reasonably Attributable Visibility Impairment BART

Oregon has adopted the RAVI BART requirements as part of the Oregon Visibility Protection Plan. RAVI specifies that if the Federal Land Manager certifies that visibility impairment exists in a federal Class I area, Oregon would be required to analyze BART controls and identify BART for any contributing source.

c. Oregon's Phase I Visibility Protection Program

In 1986, Oregon adopted EPA's Phase I Visibility rule into Oregon Visibility Protection Plan (OAR 340-200-0040). This rule addresses visibility impairment that is "reasonably attributable" to one or small group of sources, in relatively close proximity to a Class I area. The Oregon Visibility Protection Plan contains short and long-term strategies to address reasonably attributable impairment, including PSD new source review rules along with seasonal protection of visibility during the summer months from prescribed forestry burning and agricultural field burning. Air quality monitoring showed that during the summer months in the northern and central Cascades, visibility was frequently impaired by smoke or "plume blight" from Willamette Valley agricultural open field burning and forest prescribed burning. Monitoring also demonstrated that there was summer visibility impairment in the Eagle Cap Wilderness area caused by Union County agricultural open field burning, and that field burning in Jefferson County was contributing to summer visibility impairment in the central Oregon Cascade Class I areas. As a result, ODEQ adopted specific visibility control strategies for these areas into the original plan. These included smoke management requirements to avoid Class I visibility impacts from Willamette Valley, Jefferson County and Union County open field burning, and from forest prescribed burning in parts of Western Oregon. The Jefferson and Union County smoke management programs adopted provisions to avoid any burning upwind of nearby Class I areas. The Oregon Department of Forestry Smoke Management Program was revised to shift prescribed burning in Western Oregon from the summer to the spring and fall, as part of an effort to eliminate burning during the summer. Oregon also explained that it made additional revisions and improvements to the Visibility Protection Plan in 2002 as part

of the Oregon Visibility Protection Plan Reasonable Progress Report, March 5, 2002. See SIP Submittal section 12.5.5.1 for additional discussion of the Oregon Phase I Visibility Protection Program.

d. Implementation of State and Federal Mobile Source regulations

Mobile source annual emissions show a major decrease in NO<sub>x</sub> and SO<sub>2</sub> in Oregon from 2002 to 2018, due to numerous "on the books" federal mobile source regulations for on-road mobile sources as well as non-road mobile sources and equipment. These rules are expected to reduce SO<sub>2</sub> emissions as well as NO<sub>x</sub> and PM emissions. In 2005, Oregon adopted California's emissions standards for light and medium duty vehicles as the Oregon Low Emission Vehicle Program. This program took effect beginning with 2009 model year vehicles. Although the primary purpose was to reduce greenhouse gas emissions, these rules will also decrease NO<sub>x</sub> and PM emissions from light and medium duty vehicles. In 2007, the Oregon Legislature authorized a clean diesel program that included funding for a grant/loan program to retrofit existing diesel engines with exhaust controls, repowering non-road diesel engines with biodiesel, and scrapping older engines. ODEQ projects that with normal turnover bringing new, cleaner engines into the fleet, there will be a 60% reduction in diesel PM<sub>2.5</sub> emissions by 2018.

e. On-Going Implementation of Programs To Meet PM<sub>10</sub> NAAQS

In Oregon there are six communities that are PM<sub>10</sub> maintenance areas and two communities that are nonattainment areas under the PM<sub>10</sub> NAAQS. All of these communities are located within 20 to 50 miles of one or more Class I area, and have the potential to impact visibility in these Class I areas. As a result of being designated as PM<sub>10</sub> nonattainment areas, these communities have made significant reductions in PM<sub>10</sub> emissions in the last 10 years by adopting control strategies to reduce PM<sub>10</sub> emissions from sources such as residential woodstoves and outdoor burning. For example, ODEQ's federally enforceable wood-heating rules (OAR 340, Division 262) require woodstove curtailment programs in each of these communities, and specify that only certified woodstoves be sold in the state. Oregon's wood-heating rules have been very effective in reducing PM<sub>10</sub> levels during the heating months in these communities.

2. Measures To Mitigate the Impacts of Construction Activities

Oregon's rules addressing impacts from construction activities are primarily found in the OAR 340, Division 208. OAR 340-208-0210 addresses "fugitive emissions" from a variety of sources, and would be the most applicable regulation to construction activities. This regulation requires "reasonable precautions" be taken to prevent particulate matter from becoming airborne from activities such as construction projects. Actions that can be taken to control particulate emissions include the use of water or chemicals to control dust from demolition, construction operations, unpaved roads at construction sites, and material stockpiles, and containment of sandblasting operations.

3. Emission Limitations and Schedules of Compliance

Emission limits and compliance schedules for stationary sources are specified under Oregon and federal regulations in accordance with the CAA. Additionally as discussed above, the emission limits and schedules of compliance for those sources with BART limits, and sources taking FEPLs, are described in Chapter 10 of the SIP submittal and in our previous action approving these limits and schedules.

4. Source Retirement and Replacement Schedules

Oregon's LTS contains an evaluation of non-BART sources, as described below. This evaluation will include a review of all existing industrial sources to identify scheduled shutdowns, retirements in upcoming years, or replacement schedules, such as planned installation of new control equipment to meet other regulations or routine equipment replacement or modernization.

5. Smoke Management Techniques for Agricultural and Forestry Burning

Smoke from agricultural and forestry burning are major contributors to visibility impairment in Oregon Class I areas. Organic and elemental carbon particulates are the dominant pollutant species contributing to haze in Oregon Class I areas on the 20% worst days. Much of these particulates are from wildfires, which fluctuates significantly from year to year, but there is also a significant contribution from controlled agricultural and forestry burning. Of the controlled burning, prescribed forestry burning represents the largest source, at approximately 58% of the total burning in the state, and agricultural burning

(including open field burning) is approximately 11%.

In Oregon, prescribed forest burning and agricultural burning is regulated under the Oregon Smoke Management Plan. On November 2, 2007, the Oregon Department of Forestry (ODF) adopted revisions to this plan which included new visibility protection provisions that incorporated references to the Oregon Regional Haze Plan and the Enhanced Smoke Management Program (ESMP) criteria in the RHR section 309. Oregon's current smoke management programs, operated by Oregon Department of Agriculture (ODA) and ODF, includes the following ESMP elements: (1) Taking actions to minimize smoke emissions, (2) burning only during appropriate weather conditions in order to avoid smoke impacts in urban areas, (3) encourages using alternatives to fire, and includes a comprehensive reference manual of alternatives to prescribed fire, (4) a requirement that burning permits must be obtained prior to burning, and (5) a burn authorization process that involves the issuance of smoke management forecasts and burning instructions. Agricultural burning in the Willamette Valley is further controlled under a smoke management program operated by ODA. Field burning in Jefferson and Union counties is controlled through smoke management programs established by county ordinance and operated at that level. These county programs have requirements to avoid burning upwind of nearby Class I areas when smoke would impair visibility.

#### 6. Enforceability of Emission Limitations and Control Measures

Oregon has ensured that all emission limitations and control measures used to meet reasonable progress goals are enforceable, and pursuant to OAR 340-200-0040, are included in the State of Oregon Clean Air Act Implementation Plan. ODEQ has adopted the Oregon Regional Haze Plan, including the Oregon BART rules, into the SIP submittal, which ensures that all elements in the plan are enforceable.

In addition to six factors discussed above, Oregon indicated a number of additional measures it intends to take in the future as part of its long term strategy. As described in additional detail in the SIP submittal section 12.6, the State intends to: (1) Further evaluate controls for Non-BART Sources, (2) evaluate prescribed burning contribution to haze and possible controls, (3) evaluate the contribution from general outdoor open burning, and (4) evaluate the contribution from rangeland burning. EPA acknowledges

these additional measures and analysis that Oregon is planning to conduct, but is not necessary to take these specific activities into account at this time in evaluating whether the enforceable measures contained in the State's LTS satisfy the RHR requirement.

EPA is proposing to find that Oregon adequately addressed the RHR requirements in developing its LTS. The LTS provides sufficient documentation to ensure that Oregon will meet its emission reduction obligations for all Class I areas it affects in the first planning period. Oregon relied on monitoring, emission inventories and modeling information from the WRAP as the technical basis for its LTS. Coordination and consultation occurred with other states through the WRAP, in which all western states participated in developing the technical analysis upon which their SIPs are based. Oregon's analysis included all anthropogenic sources of visibility impairment including major and minor stationary sources, mobile sources, and area sources. The anticipated net effect on visibility over the first planning period due to changes in point, area, and mobile source emissions is an improvement in visibility in all Class I areas in Oregon on the worst 20% days, and no degradation of visibility on the 20% best days.

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

The primary monitoring network for regional haze in Oregon is the IMPROVE network. There are currently IMPROVE sites in the Mt. Hood Wilderness area, Three Sister Wilderness area, Crater Lake National Park, Kalmiopsis Wilderness area, Strawberry Mountain Wilderness area, and Hells Canyon Wilderness area. IMPROVE monitoring data from 2000-2004 serves as the baseline for the regional haze program, and is relied upon in the Oregon Regional Haze submittal. Oregon commits to rely on the IMPROVE network for complying with the regional haze monitoring requirement in EPA's RHR for the current and future regional haze implementation periods. See section 4.4 of the SIP submittal. Data produced by the IMPROVE monitoring network will be used for preparing the five-year progress reports and the 10-year SIP revisions, each of which relies on analysis of the preceding five years of data.

#### I. Consultation With States and Federal Land Managers

Through the WRAP, member states and Tribes worked extensively with the FLMs from the U.S. Departments of the

Interior and Agriculture to develop technical analyses that support the regional haze SIPs for the WRAP states. The proposed Regional Haze plan for Oregon was provided to the FLM for comment on November 11, 2008, the start of a 60-day comment period. See section 13.1 of the SIP submittal. Oregon also consulted with the States of Washington, Idaho, Nevada, and California.

Oregon commits to continued consultation with the FLMs and the other states as part of the continued implementation of the plan and for future progress reports and revisions. This continuing consultation process will provide the opportunity for ongoing opportunities to address a host of items including, for example, the implementation of emission control programs, changes to the monitoring strategy or monitoring locations, status of state actions to meet commitments for future assessments or rulemaking, and work on the five-year reviews and ten-year revisions. Additionally, Oregon consulted with the tribes during development of their plan through the WRAP activities and direct outreach to the tribes.

#### J. Periodic SIP Revisions and Five-Year Progress Reports

Section 51.308(f) of the RHR requires that the regional haze plans be revised and submitted to EPA by July 31, 2018 and every 10 years thereafter. 40 CFR 51.308(g) requires the state to submit a progress report to EPA every five years evaluating progress towards the reasonable progress goals for each Class I area in the State and each Class I area located outside the State which may be affected by emissions from within the State. Oregon has committed to evaluate and reassess its Regional Haze plan and to provide a Regional Haze SIP revision by July 31, 2018 for the next 10 year planning cycle. See section 13.5 of the SIP submittal. Oregon has also committed to submitting the five-year review and report on the Regional Haze plan. See section 13.1 of the SIP submittal.

#### IV. What action is EPA proposing?

On June 21, 2011, EPA approved portions of the Oregon Regional Haze Plan submitted December 10, 2010, as supplemented on February 1, 2011, including the Oregon's emission inventory, determination of baseline and natural conditions and the BART controls and emission limits. Today, for the reasons explained above, EPA is proposing to approve the remaining parts of the Oregon Regional Haze submittal as meeting the requirements

set forth in section 169A and 169B of the Act and in 40 CFR 51.300–308 regarding regional haze.

#### V. Oregon Notice Provision

Oregon Revised Statute 468.126, prohibits ODEQ from imposing a penalty for violation of an air, water, or solid waste permit unless the source has been provided five days' advanced written notice of the violation and has not come into compliance or submitted a compliance schedule within that five-day period. By its terms, the statute does not apply to Oregon's Title V program or to any program if application of the notice provision would disqualify the program from Federal delegation. Oregon has previously confirmed that, because application of the notice provision would preclude EPA approval of the Oregon SIP, no advance notice is required for violation of SIP requirements.

#### VI. Scope of Action

Oregon has not demonstrated authority to implement and enforce the Oregon Administrative rules within "Indian Country" as defined in 18 U.S.C. 1151. "Indian country" is defined under 18 U.S.C. 1151 as: (1) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation, (2) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. Under this definition, EPA treats as reservations trust lands validly set aside for the use of a Tribe even if the trust lands have not been formally designated as a reservation. Therefore, this SIP approval does not extend to "Indian Country" in Oregon. See CAA sections 110(a)(2)(A) (SIP shall include enforceable emission limits), 110(a)(2)(E)(i) (State must have adequate authority under State law to carry out SIP), and 172(c)(6) (nonattainment SIPs shall include enforceable emission limits).

#### VII. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k);

40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994). In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the rule neither imposes substantial direct compliance costs on tribal governments, nor preempts tribal law. Therefore, the requirements of sections 5(b) and 5(c) of the Executive Order do not apply to this rule. Consistent with EPA policy, EPA nonetheless provided a consultation opportunity to Tribes in Idaho, Oregon and Washington in letters dated January 14, 2011. EPA received one request for

consultation, and we have followed-up with that Tribe.

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

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

Dated: May 14, 2012.

**Michelle L. Pirzadeh,**

*Acting Regional Administrator, Region 10.*

[FR Doc. 2012-12490 Filed 5-22-12; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA-R10-OAR-2012-0078, FRL-9675-5]

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

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

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to approve the Best Available Retrofit Technology (BART) determination for the TransAlta Centralia Generation LLC coal-fired power plant in Centralia, Washington (TransAlta). The Washington State Department of Ecology (Ecology) submitted its Regional Haze State Implementation Plan (SIP) on December 22, 2010 to meet the requirements of 40 CFR 50.308. On December 29, 2011 Ecology submitted an update to the SIP submittal containing a revised and updated BART determination for TransAlta. EPA plans to act on the remaining Regional Haze SIP elements for Washington in the near future.

**DATES:** Written comments must be received at the address below on or before June 22, 2012.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R10-OAR-2012-0078 by one of the following methods:

- [www.regulations.gov](http://www.regulations.gov). Follow the on-line instructions for submitting comments.
- *Email:* R10-Public Comments@epa.gov.
- *Mail:* Steve Body, EPA Region 10, Suite 900, Office of Air, Waste and Toxics, 1200 Sixth Avenue, Seattle, WA 98101.
- *Hand Delivery:* EPA Region 10, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101. Attention: Steve Body,