



Addressing the Interstate Transport of Ozone and Fine Particulate Matter

Section 110(a)(2)(D)(i) State Implementation Plan for 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards

A Washington State Implementation Plan Revision

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Addressing Interstate Pollutant Impacts under the Clean Air Act

The state of Washington developed this revision to the Washington State Implementation Plan (SIP) to meet requirements of the Clean Air Act regarding interstate transport of ozone (O₃) and fine particulate matter (PM_{2.5}). EPA promulgated revised primary and secondary National Ambient Air Quality Standards (NAAQS) for O₃ and new primary and secondary NAAQS for PM_{2.5} on July 18, 1997. When EPA adopts a new or revised NAAQS, each state must develop a SIP for implementing, maintaining, and enforcing the NAAQS. The SIP must meet the interstate transport requirements of Section 110(a)(2)(D)(i) of the Act.

Section 110(a)(2)(D)(i) requires each state to submit a SIP that will prohibit any source or other type of emissions activity within the state from emitting air pollutants in amounts that will:

- (I) Contribute significantly to nonattainment, or interfere with maintenance, in another state with respect to a primary or secondary NAAQS, or
- (II) Interfere with measures in another state's SIP to prevent significant deterioration of air quality or protect visibility.

EPA issued guidance to the states on August 15, 2006 regarding meeting Section 110(a)(2)(D)(i) requirements for the 8-hour O₃ and PM_{2.5} NAAQS promulgated in 1997. This guidance is called Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM_{2.5} NAAQS. The state of Washington used the guidance in developing this SIP revision. The EPA guidance divides the Section 110(a)(2)(D) requirements into the following three categories:

- “Significant Contribution” and “Interfere with Maintenance” Requirements
- “Prevention of Significant Deterioration” Requirement
- “Protect Visibility” Requirement

Each is addressed in one of the sections of this SIP revision.

“Significant Contribution” and “Interfere with Maintenance” Requirements

The state of Washington verifies that the Washington State Implementation Plan (40 CFR 52 Subpart WW) prohibits any source or type of emissions activity within the state from emitting air pollutants in amounts that will contribute significantly to nonattainment, or interfere with maintenance, in another state with respect to the PM_{2.5} and O₃ NAAQS.

Clean Air Interstate Rule

Washington is not subject to the Clean Air Interstate Rule, which addresses interstate transport of sulfur dioxide and nitrogen oxides in the eastern United States.¹ EPA did analysis for the original proposed rule, then titled “Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Interstate Air Quality Rule).”² EPA’s analysis identified states that were contributing significantly to nonattainment of PM_{2.5} and O₃ in adjacent states. The Preamble to the proposed Interstate Air Quality Rule states the following with regard to Washington:

In analyzing significant contribution to nonattainment, we determined it was reasonable to exclude the Western U.S., including the States of Washington, Idaho, Oregon, California, Nevada, Utah and Arizona from further analysis due to geography, meteorology, and topography. Based on these factors, we concluded that the PM_{2.5} and 8-hour ozone nonattainment problems are not likely to be affected significantly by pollution transported across these States’ boundaries. Therefore, for the purpose of assessing State’s contributions to nonattainment in other States, we have only analyzed the nonattainment counties located in the rest of the U.S.³

Closest Nonattainment Areas

The closest nonattainment area for O₃ is San Francisco, California.⁴ San Francisco is over 600 miles away from Vancouver, the closest major city and the southernmost urban area in

¹ Final rule at 70 FR 25162, May 12, 2005.

² Proposed rule at 69 FR 4566, January 30, 2004.

³ 69 FR at 4581, January 30, 2004.

⁴ 69 FR at 23887, April 30, 2004.

Washington. The supporting documentation for this designation contains information that the San Francisco airshed is separate from areas to the north.⁵

The closest nonattainment area for PM_{2.5} is Libby, Montana.⁶ Libby is over 150 miles away from Spokane, the nearest major city in Washington. The technical support document (TSD) for the designation of this area contains a description of the nonattainment area and sources of emissions. The TSD describes the nonattainment situation in Libby as follows:

The Lincoln County PM_{2.5} nonattainment issue is unique in that the area of impact is localized within and around the vicinity of the town of Libby due to topographical features and meteorology in the area impacted by emissions.⁷

Portland-Vancouver Interstate Ozone Area

Portland-Vancouver Interstate Ozone Area comprises Portland, Oregon and Vancouver, Washington. The area was a maintenance area for the 1-hour standard. It has been meeting the 8-hour O₃ NAAQS since the standard was promulgated in 1997.

The Southwest Clean Air Agency (SWCAA, Vancouver, WA) and the Oregon Department of Environmental Quality (OR DEQ) worked together on modeling that demonstrates that the Portland-Vancouver area will continue to attain the O₃ NAAQS through 2015. The modeling also demonstrates that the Salem-Keizer area to the south of Portland will continue to maintain the O₃ NAAQS through 2015. Both SWCAA and Oregon have developed 110(a)(1) maintenance plans for the 8-hour ozone NAAQS based on the modeling to meet EPA O₃ implementation requirements. Washington and Oregon will submit the plans to EPA for approval this year. The draft plans are available on the SWCAA and OR DEQ websites.⁸

⁵ http://www.epa.gov/ozonedesignations/documents/03Recommendations/9/s/California_R.pdf

⁶ 70 FR at 986, January 5, 2005.

⁷ Pages 6-347 through 6-354, <http://www.epa.gov/pmdesignations/documents/final/TSD/Ch6.pdf>

⁸ <http://www.swcleanair.org/ozoneplan.html> and <http://www.deq.state.or.us/aq/aqplanning/index.htm#control>, respectively.

“Prevention of Significant Deterioration” Requirement

The state of Washington verifies that the Washington State Implementation Plan (40 CFR 52, Subpart WW) prohibits any source or type of emissions activity within the state from emitting air pollutants in amounts that will interfere with another state’s SIP measures for preventing significant deterioration of air quality or protecting visibility.

Washington State has no 8-hour O₃ or PM_{2.5} nonattainment areas. As a result, Washington permit sources through the Prevention of Significant Deterioration (PSD) program. EPA has delegated authority to implement and enforce federal PSD regulations to the Energy Facility Site Evaluation Council (EFSEC) and the Washington State Department of Ecology (Ecology) in separate delegation agreements. Ecology applies PSD regulations to most facilities in Washington; EFSEC applies PSD regulations to large energy industry facilities.

Ozone

Ecology and EFSEC are coordinating on updating the two Delegation Agreements. First, each agency must update its rules to reflect current federal PSD requirements. This includes the requirements of Phase II of the Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard.⁹

PM_{2.5}

EPA issued interim guidance in 1997 on using PM₁₀ as a surrogate for PM_{2.5} in PSD programs.¹⁰ The state of Washington confirms that it implements PSD permitting programs according to the interim guidance.

⁹ 70 FR 7162, November 20, 2005.

¹⁰ Memorandum from John Seitz, EPA OAQPS, “Interim Implementation for the New Source Review Requirements for PM_{2.5} (October 23, 1997).

“Protect Visibility” Requirement

EPA’s Regional Haze Regulations require states to submit Regional Haze SIPs to EPA by December 17, 2007.¹¹ Since states have not yet submitted Regional Haze SIPs, it is not possible at this time for the state of Washington to determine whether Washington interferes with measures to protect visibility in the applicable SIP of another state until Regional Haze SIPs are submitted and approved.

¹¹ 64 FR 3517, July 1, 1999.

