

Chapter 13 Summary

13.1 National Visibility Goal

In 1977, Congress amended the Clean Air Act (CAA) and declared a national visibility goal:

“The prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.” (CAA § 169A).

Since then, EPA promulgated regulations to address both Reasonably Attributable Visibility Impairment (RAVI) and Regional Haze (RH). RAVI is visibility impairment directly attributable to emissions from a large stationary source. Visibility impairment due to regional haze is caused by emissions from numerous sources that are often mixed and transported long distances.

The objectives of the Regional Haze Rule (RHR) are to improve existing visibility in all 156 mandatory Class I Areas, prevent future impairment of visibility by human-caused sources, and meet the national goal of natural visibility conditions by 2064.

13.2 Washington’s Foundational State Implementation Plan

The RHR breaks the RH Program into several planning phases extending from 2005 to 2064. This first RH State Implementation Plan (SIP) covers the initial (or foundational) planning period that extends from 2005 to 2018. The foundational SIP provides the basis for future RH SIPs to continue reducing visibility impairing emissions and meet the national visibility goal over several planning periods.

This foundational RH SIP sets Reasonable Progress Goals (RPGs) for each of the eight mandatory Class I Areas in Washington. The RPGs reflect already adopted controls and Best Available Retrofit Technology (BART) controls for older industrial facilities that cause or contribute to visibility impairment. These industrial facilities that began operation before federal Prevention of Significant Deterioration (PSD) rules were adopted to protect visibility in Class I Areas. The RPGs reflect CAA requirements and methodology developed by the Western Regional Air Partnership (WRAP).

Washington developed a Long-Term Strategy that addresses RAVI and RH. The Long-Term Strategy applies to mandatory Class I Areas both within the state and outside the state where emissions from the state are reasonably anticipated to contribute to visibility impairment. The coordinated strategy is designed to achieve the RPGs established by this foundational RH SIP for mandatory Class I Areas inside Washington and the RPGs established by other states for mandatory Class I Areas outside of Washington where emissions from Washington are reasonably anticipated to contribute to visibility impairment. The first planning period, 2005-

2018, focuses on implementing BART controls and developing controls for one or more point source categories of visibility-impairing pollutants.

13.3 Long-Term Challenges and Issues

Under the RHR, the state of Washington is responsible for doing its share of reducing visibility-impairing pollutants to achieve the national goal for mandatory Class I Areas within Washington and mandatory Class I Areas outside Washington. While technical development of this foundational RH SIP through the WRAP has provided a framework for understanding and dealing with the source regions and sources of visibility impairment, it has also revealed significant challenges to long-term reasonable progress and raised technical and regulatory issues.

Significant challenges to meeting the national visibility goal in Washington's mandatory Class I Areas:

- Visibility is significantly impacted by emissions from outside the modeling domain, Pacific offshore, and Canada, all of which are beyond the state's control.
- It does not appear possible for Pasayten Wilderness, North Cascades National Park, and Glacier Peak Wilderness to achieve natural conditions unless the contribution of organic mass carbon from natural fire to visibility impairment can be greatly reduced.

Meeting the national goal also requires addressing technical and regulatory issues including:

- Better understanding of the role of biogenic organic aerosols in visibility impairment and analytical technical tools
- Better ammonia emission inventories and better understanding of the chemistry of the formation of ammonium sulfate and ammonium nitrate
- Reconsideration of natural conditions especially in light of the expectation that fire will be more widespread in the future
- Continued development of federal rules reducing visibility-impairing pollutants
- Continued development of controls for on-road and off-road mobile sources

Meeting the challenges and dealing with the issues will ultimately enable Washington to achieve natural conditions within the state and contribute toward meeting natural conditions in Class I Areas outside the state.