

percent of the future population) would be living in areas with visibility degradation where fine PM levels are above 15 µg/m³ annually.⁸⁴ Thus, at least a quarter of the population would experience visibility impairment in areas where they live, work and recreate.

As shown in Table I.C-1, accounting for the different visibility impact of the chemical constituents of the PM_{2.5}, in 2030 we expect visibility in the East to be about 20.5 deciviews (or visual range of 50 kilometers) on average, with poorer visibility in urban areas, compared to the average Eastern visibility conditions without man-made pollution of 9.5 deciviews (or visual range of 150 kilometers). Likewise, we

expect visibility in the West to be about 8.8 deciviews (or visual range of 162 kilometers) on average in 2030, with poorer visibility in urban areas, compared to the average Western visibility conditions without man-made pollution of 5.3 deciviews (or visual range of 230 kilometers). Thus, the emissions from these nonroad diesel sources, especially SO_x emissions that become sulfates in the atmosphere, contribute to future visibility impairment summarized in the table.

Control of nonroad land-based engines emissions, as shown in Table I.C-1, will improve visibility across the nation. Taken together with other programs, reductions from this proposal will help to improve visibility. Control

of these emissions in and around areas with PM levels above the annual PM_{2.5} NAAQS will likely improve visibility in other locations such as mandatory Federal Class I areas. Specifically, for a preliminary control option described in the draft RIA chapter 3.6 that is similar to our proposal, we expect on average for visibility to improve to about 0.33 deciviews in the East and 0.35 deciviews in the West. The improvement from our proposal is likely to be similar but slightly smaller than what was modeled due to the differences in emission reductions between the proposal and the modeled scenario.

TABLE I.C-1—SUMMARY OF MODELED 2030 NATIONAL VISIBILITY CONDITIONS

[Average annual deciviews]

Regions ^a	Predicted 2030 visibility baseline	Predicted 2030 visibility with rule controls ^b	Change in annual average deciviews
Eastern U.S.	20.54	20.21	0.33
Urban	21.94	21.61	0.33
Rural	19.98	19.65	0.33
Western U.S.	8.83	8.58	0.25
Urban	9.78	9.43	0.35
Rural	8.61	8.38	0.23

Notes:

^a Eastern and Western Regions are separated by 100 degrees north longitude. Background visibility conditions differ by region. Natural background is 9.5 deciviews in the East and 5.3 in the West.

^b The results illustrate the type of visibility improvements for the preliminary control option, as discussed in the Draft RIA. The proposal differs based on updated information; however, we believe that the net results would approximate future PM emissions, although we anticipate the visibility improvements would be slightly smaller.

c. Visibility Impairment in Mandatory Federal Class I Areas

The Clean Air Act establishes special goals for improving visibility in many national parks, wilderness areas, and international parks. In the 1990 Clean Air Act amendments, Congress provided additional emphasis on regional haze issues (*see* CAA section 169B). In 1999, EPA finalized a rule that calls for States to establish goals and emission reduction strategies for improving visibility in all 156 mandatory Federal Class I areas. In that rule, EPA established a “natural visibility” goal, and also encouraged the States to work together in developing and implementing their air quality plans. The regional haze program is focused on long-term emissions decreases from the entire regional emissions inventory comprised of major and minor stationary sources, area sources and mobile sources. The regional haze

program is designed to improve visibility and air quality in our most treasured natural areas from these broad sources. At the same time, control strategies designed to improve visibility in the national parks and wilderness areas are expected to improve visibility over broad geographic areas. For mobile sources, there is a need for a Federal role in reduction of those emissions, especially because mobile source engines are regulated primarily at the Federal level.

Because of evidence that fine particles are frequently transported hundreds of miles, all 50 states, including those that do not have mandatory Federal Class I areas, participate in planning, analysis, and, in many cases, emission control programs under the regional haze regulations. Virtually all of the 156 mandatory Federal Class I areas experience impaired visibility, requiring all States with those areas to prepare

emission control programs to address it. Even though a given State may not have any mandatory Federal Class I areas, pollution that occurs in that State may contribute to impairment in such Class I areas elsewhere. The rule encourages states to work together to determine whether or how much emissions from sources in a given state affect visibility in a downwind mandatory Federal Class I area.

The regional haze program also calls for states to establish goals for improving visibility in national parks and wilderness areas to improve visibility on the haziest 20 percent of days and to ensure that no degradation occurs on the clearest 20 percent of days (64 FR 35722, July 1, 1999). The rule requires states to develop long-term strategies including enforceable measures designed to meet reasonable progress goals toward natural visibility conditions. Under the regional haze

⁸⁴ Technical Memorandum, EPA Air Docket A-99-06, Eric O. Ginsburg, Senior Program Advisor, Emissions Monitoring and Analysis Division,

OAQPS, Summary of Absolute Modeled and Model-Adjusted Estimates of Fine Particulate Matter for Selected Years, December 6, 2000, Table P-2.

Docket Number 2000-01, Document Number II-B-14.