

Voluntary Emissions Reduction Program for
Major Industrial Sources of Sulfur Dioxide in
Nine Western States and
A Backstop Market Trading Program

An Annex to the
Report of the
Grand Canyon Visibility Transport Commission

Submitted by the
Western Regional Air Partnership
to the U.S. Environmental Protection Agency

September 29, 2000

EXECUTIVE SUMMARY

The Colorado Plateau is a spectacular landscape of massive landforms, unique geology and vivid colors. People from around the world have experienced these wonders at Grand Canyon...and other national parks and wilderness areas on the Plateau. The panorama is a visual experience, and air quality is the key to full enjoyment. On hazy days, when visibility is reduced, the human eye perceives a loss of color, contrast and detail in the landscape...The Colorado Plateau has some of the best visual air quality in the United States. Paradoxically, this means that reduced visual air quality that might go unnoticed in other parts of the United States is starkly apparent on the Plateau. Visual air quality in the West is quite sensitive to relatively small increases in pollutants.

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Recommendations for Improving Western Vistas, June 1996, page 1

In the July 1, 1999, promulgation of the federal rule to address the regional haze that impairs visibility in mandatory Class I areas, EPA considered both the recommendations and the supporting technical work of the Grand Canyon Visibility Transport Commission. Section 309 of the rule provides a special option to implement the Commission's recommendations for the 16 Class I areas on the Colorado Plateau. However, in order for the states and tribes in the region to use the §309 option, an Annex to the Commission's recommendations must be submitted by October 1, 2000 for EPA review.

The Annex was developed by the Western Regional Air Partnership (the WRAP), the successor to the Commission. The Annex defines stepped reduction milestones through 2018 for sulfur dioxide emission from large industrial sources in the 9-state Commission Transport Region that affects the Colorado Plateau. The Annex also sets forth provisions for a backstop emission trading program to be implemented if the milestones are exceeded. This program is only one part of the Commission's comprehensive recommendations; other sources and other pollutants will be addressed as states and tribes prepare implementation plans due in 2003 and later.

The Annex has been developed over a three-year period by the WRAP's Market Trading Forum, a group made up of state, tribal and federal agency personnel as well as industrial and environmental group representatives, and by the WRAP's Initiatives Oversight Committee, a group that has similar representation. The resulting complete package of recommendations reflects the inter-relationships among the program elements and stresses the importance of a balanced proposal to address all stakeholder concerns. Further details can be found at www.wrapair.org.

2018 MILESTONE

The 2018 milestone of 510,000 tons, including a 30,000 ton set-aside for two copper smelters not currently operating (or 480,000 tons if the suspended smelters do not resume operation), represents a regional emission reduction of approximately 320,000 tons of SO₂ from the 1990 baseline emissions of 830,000 tons, and is well on the way to the Commission's goal of a 50 - 70% reduction by 2040. The regional haze rule requires that total reductions by 2018 be "better than BART," that is, greater than could be achieved by retrofitting 250 tons per year sources that were built between 1962 and 1977 and currently are operating without modern emissions controls. The WRAP estimated that BART reductions would total approximately 170,000 tons by 2018.

INTERIM MILESTONES

After considerable investigation, the Forum determined that 1999 SO₂ emissions, including expected emissions of 38,000 tons from the two smelters not currently operating, were about 690,000 tons. Interim milestones are intended to meet the Commission's recommendation for steady and continuing reductions, while giving the regulated community operating flexibility in the early years and time to mesh planning for regional haze reductions with other factors such as electricity deregulation. The proposed interim milestones with the suspended smelters in and out respectively are 720,000/682,000 tons in 2003; 715,000/677,000 tons in 2008; and 655,000/625,000 tons in 2013. Milestones step down every fifth year.

TRIGGERING THE TRADING PROGRAM

States and tribes will collect an annual SO₂ inventory. Compliance with the milestones is determined by an annual comparison of the rolling 3-year average of total regional emissions with the rolling 3-year average of the milestones. For 2018, total emissions will be compared with the 2018 milestone. If a milestone is exceeded, the trading program is activated, and emission allocations are made one year later with sources having 5 years from the year of exceedance to comply. Sources may comply by retrofitting to bring emissions below their allocation, by buying credits to emit from other sources that are able to comply more cheaply, or by retiring the source.

CERTAINTY THAT 2018 MILESTONE WILL BE MET ON TIME

With such a large proportion of the reductions scheduled to occur in the last 5 years of the program, it is important to ensure that all the reductions occur on time. Therefore, the proposal includes a mechanism for the states and tribes to activate the trading program in 2013 if available evidence indicates the 2018 milestone will not be reached. Also, compliance with the 2018 milestone will be based on 2018 emissions alone (in addition to compliance based on a three-year rolling average of emissions), and sources that have not controlled their emissions in accordance with their allocations will be subject to financial penalties and a 2-to-1 offset of future emissions allocations for each ton of excess emissions if the 2018 milestone is not met.

TRADING PROGRAM FEATURES

Details of the backstop trading program such as applicability, monitoring and reporting, trading procedures, compliance requirements and penalties, are defined in the Model Rule that will be used as a template as participating states and tribes develop their implementation plans in 2003. States and tribes will agree to participate and administer the program by signing a memorandum of understanding. Sources that reduce their emissions below their allocation will be able to "bank" those credits for sale to other sources, within certain programmatic restrictions.

REASONABLY ATTRIBUTABLE BART AND GEOGRAPHIC ENHANCEMENT

The existing program to address "hot spots" where specific sources contribute to visibility impairment in protected Class I areas remains in place through 2018. Federal land managers expect to certify impairment only in Class I areas where sulfates are not decreasing, the sources are within 100 miles, and the sources are controlling less than 85% of their emissions. States and tribes intend that the program not be used to address regional haze, but focus on reasonably attributable impacts, and expect to develop guidance to address the distinction between the two. If there is a finding of reasonable attribution, states and tribes have 3 options: BART controls could be required on the attributable sources, emission reductions could be required from other sources, or, in advance of certification, reasonably attributable sources and states could negotiate a settlement to apply control measures.

ALLOCATIONS

If the program is triggered, 20,000 tons of SO₂ allocations will be set aside for tribal interests, acknowledging that tribal lands are largely undeveloped and that tribes would not benefit from a plan based only on past emissions. Second, there will be a new source set-aside to accommodate growth within the region. Third, there will be an allocation for the California RECLAIM program. Fourth, existing sources will receive a "floor" allocation based on some specified level of control such as BACT, BART, LAER, and certain renewable energy sources also will be eligible to receive an allocation. The remainder of the allowances, which will decline over the years, will be allocated to existing sources. Each source's allocation will be specified in state and tribal implementation plans due in 2003 and every fifth year thereafter. If the program is triggered, sources may buy and sell allowances to come into compliance.

STATE AND TRIBAL OPT-IN OR OPT-OUT

In the event that states or tribes with existing sources in the region choose to develop their regional haze plans under §308, proportional adjustments will be made to the milestones and the program components will be altered accordingly.

OTHER CLASS I AREAS

It is the intention of the states and participating tribes to demonstrate in the 2003 Implementation Plans, that the milestones and backstop trading program will satisfy the "greater reasonable progress than BART" requirements, and any other reasonable progress requirements for additional Class I areas through 2018. This demonstration will apply to all sources of sulfur dioxide participating in that program. The work plan and resources needed to make this demonstration in the 2003 implementation plans will be identified and provided by the WRAP. Class I areas beyond the original 16 will be addressed in the Annex, even if only to identify the process and procedures to address this issue in the 2003 implementation plans.

Further, the states must evaluate other sources and pollutants in order to demonstrate reasonable progress for additional Class I area. Although it is their intent to do so, the states and tribes recognize that it may not be practicable to satisfy the additional Class I area requirements for all other sources of anthropogenic emissions besides stationary sources (e.g., mobile and area source sectors), and for all species of visibility impairing pollutants from stationary sources (e.g., NO_x and PM), by the 2003 deadline. States have the option of addressing these additional issues later, in a 2008 SIP.