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STATE OF COLORADO

Bill Owens, Governor
Jane E. Norton, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

December 20, 2001

The Honorable Stan Matsunaka
President of the Senate
The State Senate
State Capitol
Denver, CO 80203

The Honorable Doug Dean
Speaker of the House
House of Representatives
State Capitol
Denver, CO 80203

Subject: Annual WRAP Report Update

In fulfillment of the requirements of C.R.S. 25-7-137, attached is the annual report updating the legislature on activities of the Western Regional Air Partnership and the Regional Haze program.

The Air Quality Control Commission held a number of public information meetings during the year to explore various aspects of the requirements of the Regional Haze rule. These outreach efforts are expected to result in a recommended option in early 2002 for consideration by the department and the Governor's office.

If you have any questions about this report, please contact me at 303-692-3115 or Steve Arnold, Deputy Director at 303-692-3220.

Sincerely,

Margie Perkins
Division Director
Air Pollution Control Division

cc: Doug Benevento
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STATE OF COLORADO



Colorado Department
of Public Health
and Environment

Regional Haze Annual Report

Annual Report C.R.S. 25-7-137

Submitted to the Colorado Legislature
by the Division of Air Quality
Colorado Department of Public Health and Environment
December 20, 2001

Introduction

This annual report is provided to the Colorado General Assembly as an update by the Colorado Department of Public Health and Environment and its Air Pollution Control Division regarding regional haze and the Western Regional Air Partnership process. This report is intended to meet the requirements of C.R.S. 25-7-137, which directs the department to produce an annual report to the General Assembly.

Background Leading to the 1999 Regional Haze Rule

- **Regional Haze and Clean Air Act Amendments in Class I Areas**

Visibility in Colorado's Class I areas, which include national parks and wilderness areas in existence as of 1977, is among the best in the country. These vistas exist due to unique combinations of topography and scenic features, low humidity in the western states and minimal levels of visibility-degrading pollutants. However, research shows that visual air quality in the rural West has experienced a decline. This decline in visual air quality is referred to as "regional haze." On hazy days, when visibility is reduced, the human eye perceives a loss of color, contrast and detail in the landscape.

In 1977, Congress set a national goal in the nation's Class I areas of remedying existing visibility impairment, and preventing future impairment, from manmade air pollution. The 1990 Federal Clean Air Act directed the Environmental Protection Agency to develop regional haze rules aimed at widespread haze from a multitude of sources such as mobile sources, burning activities and industrial processes.

Congress also directed the Environmental Protection Agency to establish the Grand Canyon Visibility Transport Commission in response to a request from western states that they be given the opportunity to determine how best to address haze in the West.

- **The Grand Canyon Visibility Transport Commission**

The Environmental Protection Agency established the Grand Canyon Visibility Transport Commission on November 13, 1991, to provide policy recommendations to address regional haze visibility impacts in 16 Class I areas on the Colorado Plateau, including six of the 12 Class I areas in Colorado. The Grand Canyon

Visibility Transport Commission states included Colorado, Nevada, Arizona, Utah, Idaho, New Mexico, Oregon, Wyoming and California. These states worked within a stakeholder process for over four years and issued recommendations in June 1996. Generally, the recommendations are conceptual and directional suggestions that reflect broad-based, multi-stakeholder agreements regarding approaches for mitigating regional haze in the West. It was recognized that additional regional collaboration would be necessary to create potentially implementable programs. The Grand Canyon Visibility Transport Commission had no regulatory authority, but Congress did direct the Environmental Protection Agency to consider the work done by the western states in the development of a national regional haze rule.

The primary recommendations of the Grand Canyon Visibility Transport Commission are in the following areas:

- Air Pollution Prevention
 - Clean Air Corridors
 - Stationary Sources
 - Areas In and Near Parks
 - Mobile Sources
 - Road Dust
 - Emissions from Mexico
 - Fire
 - Future Coordinating Entity
- **Western Regional Air Partnership the Grand Canyon Visibility Transport Commission Successor Organization**

Recognizing the need for a process to monitor and coordinate the implementation of its recommendations, the Grand Canyon Visibility Transport Commission voted to create the Western Regional Air Partnership. The Western Regional Air Partnership was formed in July 1997. The organization is an advisory body designed to provide coordination and planning for regional haze programs within a setting of broad stakeholder involvement. The Western Regional Air Partnership has no regulatory authority. Individual states, through their legislatures and rulemaking bodies, ultimately will decide what approaches are appropriate in developing state implementation plans.

- **Colorado House Bill 97-1324 (C.R.S. 25-7-137)**

This 1997 law affirms Colorado's sovereignty in addressing the state's interests in regional haze and encourages the state to examine all options for implementation of the regional haze rule through a broad based stakeholder process. No final recommendation or other action of the Western Regional Air Partnership may impose new or different requirements upon the regulated community or citizens of Colorado unless approved or enacted by the Colorado General Assembly acting by bill. The law also requires a stakeholder process and an annual report on the activities of the Grand Canyon Visibility Transport Commission and/or Western Regional Air Partnership to the General Assembly.

Final Regional Haze Rule Published July 1, 1999

- **Basic Framework of the Final Regional Haze Rule**

The Environmental Protection Agency signed the final rule on April 22, 1999, with publication in the Federal Register on July 1, 1999. The rule provides states with two choices for the development of the Regional Haze State Implementation Plans. The choices are referred to as Sections 308 and 309. Both approaches require states to develop plan elements for each Class I area in their state. Under the two options there are differences in the time for plan submittal and differences in the approach to meeting long-term goals. Both approaches become quite similar after 2018 and have the same long-term goals for 2064.

Similarities between the 308 and 309 approaches include:

- **Long-term Goals.** There are long-term goals, which are designed to restore visibility to the "natural condition" by the year 2064.
- **Emissions Reporting.** Emission reporting is required and periodic emissions tracking and reporting is necessary.
- **Interstate Coordination.** Interstate coordination with neighboring or groups of states will be necessary to develop acceptable state implementation plans under both processes.
- **Enforceable Emissions Limits.** Enforceable emission limits are required

for both processes. However, the nature of these can be quite different between the two options.

Differences between the 308 and 309 approaches include:

- **Reasonable Progress Goals.** Reasonable progress goals are to be established for interim years expressed in a measure of visibility known as “Deciview” for the 308 planning areas. In the 2003 to 2018 period, a 309 State Implementation Plan only is held accountable to demonstrate that emissions of sulfur dioxide are complying with the emission reduction targets
- **Tracking of Progress.** Progress under Section 308 will be judged by improvements in the visibility Deciview rating of each Class I area in each state. Progress under Section 309 will be evaluated against reductions in emissions for the Grand Canyon Visibility Transport Commission conglomerate area, although visibility improvements must also be tracked.
- **State Implementation Plan Submittal Dates.** Under the Section 309 process, the first submittal is due by December 31, 2003. Under the Section 308 process, an area attaining the standard for particulate matter less than 2.5 microns must submit a state implementation plan within 12 months of the time when the area is designated as attainment for that standard. This will likely be no sooner than 2004. States with non-attainment areas for particulate matter less than 2.5 microns can form partnerships with other states where trans-boundary emission problems occur. This could extend first plan submissions to December 31, 2008, for a state that chooses the 308 option. Colorado does not anticipate that it will have any PM_{2.5} non-attainment areas.
- **Best Available Retrofit Technology Analysis and Adoption.** Section 308 requires that all eligible major stationary sources be identified and a Best Available Retrofit Technology analysis, for reducing sulfur dioxide emissions, be performed. These retrofits must be implemented within five years of adoption of the State Implementation Plan and no later than 2013. This time and resource intensive analysis can be avoided if a state has an emissions trading program in place and the actual emissions reductions are greater than required by the Best Available Retrofit Technology analysis.

Under Section 309, a Best Available Retrofit Technology level of emissions reduction has been estimated for all applicable sources. In the West, under the 309 option, a western states emissions trading program takes the place of implementing Best Available Retrofit Technology emissions reduction control technology for each source and under the current proposal is less stringent than the proposed Best Available Retrofit Technology guidance requirements.

- **Mobile Source Emissions Budget.** A mobile source emissions budget is not required under Section 308. Mobile source emissions budgets are required under Section 309. The budget must represent the lowest level of emissions projected to occur in the future. This budget must cover volatile organic compounds, nitrogen oxides and sulfur dioxide.
- **Emission Reduction Strategies.** Under 308, emission reduction strategies would have to be adopted as federally enforceable control measures. Under Section 309, a list of other control programs must be considered by the state to help reduce emissions in voluntary ways.

Colorado Public Participation

During the past year the Colorado Department of Public Health and Environment and the Colorado Air Quality Control Commission have coordinated several public meetings involving stakeholders throughout the state and from other western states: 1) to gain a clearer understanding of both options 308 and 309; 2) to assess whether the 309 Annex proposed by the Western Regional Air Partnership is feasible, and in the best interest of the state of Colorado; and 3) to listen to the perspectives of other states which, like Colorado, are primarily receptor states – that is, states that are receiving significant pollution from other states. The Air Quality Control Commission provided the Colorado Department of Public Health and Environment with its observations and recommendations regarding the 309 Annex. These outreach efforts are expected to result in a recommended option in early 2002 for consideration by the department and the Governor's Office.

Highlights of Specific Activities Planned for 2002

- **Funding for Individual States**

Funding has been made available to the Western Regional Air Partnership for the purpose of developing regional approaches under 308 and 309. There have been no federal funds allocated to individual states. Colorado stakeholders made an appeal to the Western Regional Air Partnership for increased funding to establish additional monitors in Colorado. Currently, no new monitors are planned. The Western Regional Air Partnership still has this issue under consideration and Colorado will continue to pursue it, as the need for monitors is critical for tracking the impacts from other states' emissions.

- **Expansion of Monitoring Network**

Colorado gained one additional monitoring site in 2001, bringing the total monitoring sites to seven. These seven have been deemed adequate to characterize visibility in Colorado's 12 Class I areas by the Western Regional Air Partnership monitoring taskforce. As mentioned above, Colorado is not convinced that these seven sites and the existing meteorological data is sufficient to characterize the visibility impacts from upwind sources. In 2001, the first summary report on visibility conditions in the West was published and an online database for all visibility monitors is available. This alleviates a considerable amount of work for individual states for establishing the background and baseline and natural conditions.

- **308 and 309 SIP Planning Requirements**

In 2001, the State Implementation Plan Template project was completed providing states with a roadmap for State Implementation Plan development. This project applies to both 308 and 309 planning options. It also established a guidance for other states outside the West to begin the implementation plan development process.

- **Selection of Planning Process**

Colorado is one of nine states that can select a planning process known as the 309 Regional Haze State Implementation Option. The mainstay of this approach is a market-based system, initially to address sulfur dioxide emissions. Subsequently, nitrogen oxides and particulate matter must be addressed by the state before 2008.

A set of additional control programs, prescribed by the 309 portion of the rule, must also be considered in the adoption of the 309 plan. This planning option only applies to six of Colorado's 12 Class I areas, but it could be expanded to include any or all of the remaining six areas. The initial 309 State Implementation Plan must be submitted to EPA by December 31, 2003. This option requires that Colorado develop and submit a State Implementation Plan to the legislature in the 2003 session.

Under the 308 option, states may elect to develop an independent plan to show how each of their Class I areas will attain the standards set during the planning process. Under a sub-option to this 308 path, a state may elect to join with neighboring states to develop a regional plan with controls selected by the states in addition to a mandatory Best Available Retrofit Technology analysis and adoption of Best Available Retrofit Technology on some or all of Colorado's eligible 18 major sources.

Both planning processes result in adoption of long range regional haze plans for Colorado's 12 applicable Class I areas. Differences in the timelines for adoption of the plans will require that the state select a planning option early in 2002.

- **Analysis of Background, Baseline and Natural Conditions**

Under both planning processes it is necessary to develop a picture of current visibility conditions and to determine what the standard will be for the future. This analysis of existing and future data will establish the goals for each area. In Colorado, only seven monitoring sites cover the 12 Class I areas. An analysis will have to be done to show how those seven sites are adequate representations of all areas.

- **Emission Inventories and Preparation of Projected Emissions**

A key element of the regional haze analysis is to prepare accurate baseline and credible projected emission inventories for the state. These inventories form the basis for the evaluation of source and receptor relationships. They also define the universe of sources that are to be considered for future emission control strategies. In addition to work done by the Colorado Air Pollution Control Division for the

Western Regional Air Partnership emission inventories, new Colorado rules will require land managers of areas greater than 10,000 acres to submit detailed emission inventories to enhance existing work. Colorado will have to generate inventories for a number of state and private lands meeting this criteria and the federal land managers will have to submit formal data to cover their areas. Adoption of official inventories will be presented to the Colorado Air Quality Control Commission in 2002.

- **Multi-Pollutant Trading Bill**

Congress currently is considering a national, multi-pollutant trading bill that would cover sulfur dioxide, nitrogen oxides, mercury and possibly carbon dioxide. The concept of the bill is to establish a national emissions trading rule that would allow market forces to adjust and lower emissions by prescribed amounts declared in the bill. It is unclear what benefit or detriment a multi-pollutant strategy would have for Colorado being able to deal with regional haze issues. In 2002, Colorado will analyze multi-pollutant approach

Conclusion

The Colorado Department of Public Health and Environment remains strongly committed to 1) maintaining state sovereignty; 2) establishing the most flexible alternative for Colorado; and 3) maintaining as many options as possible to choose from. The department looks forward to working with the Colorado General Assembly, stakeholders and rule-making bodies to develop a strategic direction that will result in an environmentally effective and cost effective approach for protecting visibility in Colorado's spectacular landscapes.