

Appendix M: Monitoring Requirements

M-1: Clean Air Corridor Emissions Tracking System

The preamble of the RHR defines a CAC as “a region that generally brings clean air to a receptor region”, and also says, “the requirement to track emissions will enable states to quickly determine if changes in patterns of emissions will reduce the number of clean air days (defined as the average of the 20% clearest days) in any of the 16 Class I areas.” The actual requirements state that the §309 SIP or TIP must describe and provide for implementation of comprehensive emission tracking strategies for CAC to ensure that the visibility does not degrade on the least-impaired days at any of the 16 Class I areas.

Using the most recent emission inventory data available through the Emissions Data Management System (EDMS), WRAP will produce a report for each five-year implementation plan revision (2007-8, 2013, and 2018) on the current and projected emissions in the CAC and in areas surrounding the corridor and compare these emissions to a 1996 baseline, as part of a larger source apportionment exercise managed by the Technical Oversight Committee (described in the next section).

The EDMS will have the capability to produce the following special reports in tabular and simple plots (i.e. bar graph and pie chart) formats and allow queries of the same information including presentation in GIS format, in addition to the standard reports:

- A summary report of the annual summed total emissions for all six source categories and all of the pollutants by county/state and tribal lands, as well as for the entire CAC.
- A summary report of the annual summed total emissions for all six source categories and all of the pollutants for the same types of political boundaries surrounding the CAC.
- A summary report of the comparison of the annual summed total emissions for all six source categories and all of the pollutants for the same types of political boundaries, as well as the entire CAC and the corresponding base year total emissions.

The EDMS to be developed is described in a draft technical report to the Emissions Forum: Needs Assessment for Evaluation and Design of an Emissions Data Reporting, Management, and Tracking System, (EA Engineering, Science, and Technology, June 26, 2003).

As part of the next round of analysis and preparation for regional haze SIPs due in 2007-08, the Technical Oversight Committee will be conducting two separate visibility source apportionment exercises (described in the WRAP 2003-08 Strategic Plan), integrating analytical results from aerosol and meteorological monitoring, air quality modeling, and preparation of emissions inventories. These source apportionment exercises will identify the source regions and categories causing visibility impairment at Class I areas. As part of those source apportionment exercises, the TOC will analyze the changes in emissions for the counties and tribal lands in the CAC, as well as those surrounding the CAC. Better emissions inventory data expected to be available each time, as the TOC iterates through these 2 exercises. Specific results from each of the source apportionment exercises will address emissions growth both inside and surrounding the CAC, as well as the impact on visibility at affected Class I areas.

M-2: Fire Emissions Tracking and Inventory

All sources of fire in New Mexico are required to submit tracking information following completion of burns (see Appendix E-2, New Mexico's Smoke Management Regulation). Burners are required to submit information on acreage or pile volume of burns and emission reduction techniques utilized. This tracking information will be used to develop an emissions inventory for fire emissions from all sources of fire in New Mexico. Emission factors will be applied to each burn to develop emissions estimates.

M-3: Road Dust Emissions Tracking and Inventory

Fugitive dust from paved and unpaved roads is a significant source of PM emissions. To ensure that PM emissions are tracked effectively, the State of New Mexico will track PM emissions using the WRAP emissions database management system (EDMS). The EDMS will track PM emissions, along with VOC, NO_x, SO₂, EC, OC, CO, and NH₃, and provide the necessary activity data and emission factors needed to calculate emissions. The data will be tracked at the county and reservation level for all sources and also individually for point and fire sources. The following is a WRAP EDMS flowchart.

WRAP EDMS Flow Chart

