

## DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

### Air Quality Control Commission

#### AIR QUALITY STANDARDS, DESIGNATIONS AND EMISSION BUDGETS

##### 5 CCR 1001-14

*[Editor's Notes follow the text of the rules at the end of this CCR Document.]*

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## I. Ambient Air Quality Standards

### I.A. National Ambient Air Quality Standards

For National Ambient Air Quality Standards and associated ambient air monitoring reference methods, see Title 40, CFR Part 50.

### I.B. Colorado Ambient Air Quality Standards (State Only)

#### I.B.1. Sulfur Dioxide (SO<sub>2</sub>) <sup>1</sup>

The actual concentration of sulfur dioxide at any given receptor site (no greater than five meters above ground level) in the State of Colorado shall not exceed a three-hour maximum of 700 micrograms per cubic meter (ug/m<sup>3</sup>) (or 0.267 parts per million by volume (ppmv) at one atmosphere and 25 degrees Celsius more than once in any twelve-month period.

The analytical methods to be employed for the determination of ambient air concentrations of sulfur dioxide shall be any reference method identified in title 40 CFR, Part 50, Appendix A. Alternative methods may be used listed as a "reference" or "equivalent" method by the U.S. Environmental Protection Agency in accordance with Title 40 CFR, Part 53. Concentrations shall be reported as micrograms per cubic meter or parts per million referred to a temperature of 25 degrees Celsius and a pressure of one atmosphere (1013 millibars).

<sup>1</sup> Sulfur Dioxide: Revised: 3/10/83; Effective 4/30/83. Revised 2/18/10; Effective 3/30/10.

## II. Reserved

**III. Classification of Nonattainment and Attainment/Maintenance Areas in Colorado\***

Carbon Monoxide

<u>Area</u>	<u>Classification</u>	<u>Boundary</u>
Denver Metro Area	Attainment/Maintenance (effective 1/14/02)	See attached legal description and map.
Colorado Springs	Attainment/Maintenance (effective 10/25/99)	Urban Transportation Planning Study Area as defined in 1989. See attached map.
Fort Collins	Attainment/Maintenance (effective 9/22/03)	Fort Collins Urban Growth Area boundary as adopted by the city of Fort Collins and the Larimer County Commissioners and in effect as of July 30, 1991. See attached map.
Greeley Area	Attainment/Maintenance (effective 5/10/99)	Urban Boundaries defined in the North Front Range Regional Transportation Plan, May 1990. See attached map.
Longmont	Attainment/Maintenance (effective 11/23/99)	Begin at Highway 52 and Boulder/Weld county line and go west to 95th Street/Hooker Road to the intersection of Plateau Road, then west on Plateau Road to the intersection of N. 75th Street, then north to the Boulder/Larimer County line, then east along the Boulder/Larimer County line to the Boulder/Weld county line, then south along the Boulder/Weld County line to Highway 52, plus the portion of the City of Longmont east of the Boulder/Weld County line in Weld County. See attached map.

**Description of Boundaries for Denver Metropolitan Carbon Monoxide Attainment/Maintenance Area**

The Boundaries for the Denver metropolitan attainment/maintenance area for carbon monoxide (CO) are described as follows:

Starting at Colorado Highway 52 where it intersects the eastern boundary of Boulder County;

Follow Highway 52 where it intersects Colorado Highway 119;

Follow northern boundary of Boulder city limits west to the 6000-ft. elevation line;

Follow the 6000-ft. elevation line south through Boulder and Jefferson counties to US 6 in Jefferson County;

Follow US 6 west to the Jefferson County-Clear Creek County line;

Follow the Jefferson County western boundary south to the southern boundary of Range 72 West, Township 6 South, Section 24;

Follow the southern section line east to the eastern boundary of Range 71 West, Township 6 South, Section 24;

Follow the eastern section line north to South Turkey Creek;

Follow South Turkey Creek northeast to Deer Creek Canyon Road;

Follow Deer Creek Canyon Road to the eastern boundary of Range 69 West, Township 6 South, Section 5;

Follow the Pike National Forest boundary southeast through Douglas County to the Douglas County - El Paso County line;

Follow the southern boundary of Douglas County east to the Elbert County line;

Follow the eastern boundary of Douglas County north to the Arapahoe county line;

Follow the southern boundary of Arapahoe County east to Kiowa Creek;

Follow Kiowa Creek northeast through Arapahoe county and Adams counties to the Adams County - Weld County line;

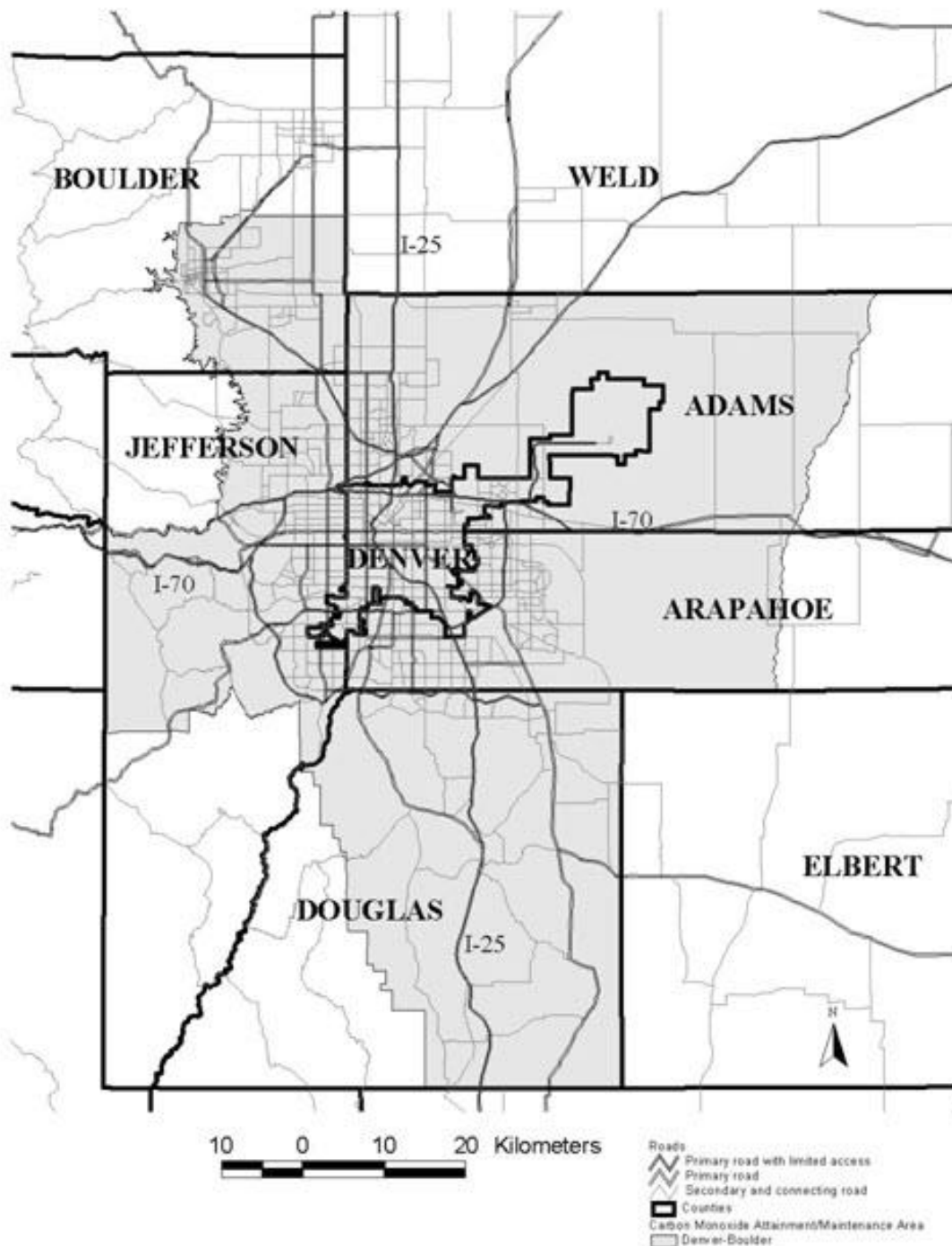
Follow the northern boundary of Adams County west to the Boulder County line;

Follow the eastern boundary of Boulder County north to Highway 52.

Descriptions and Maps

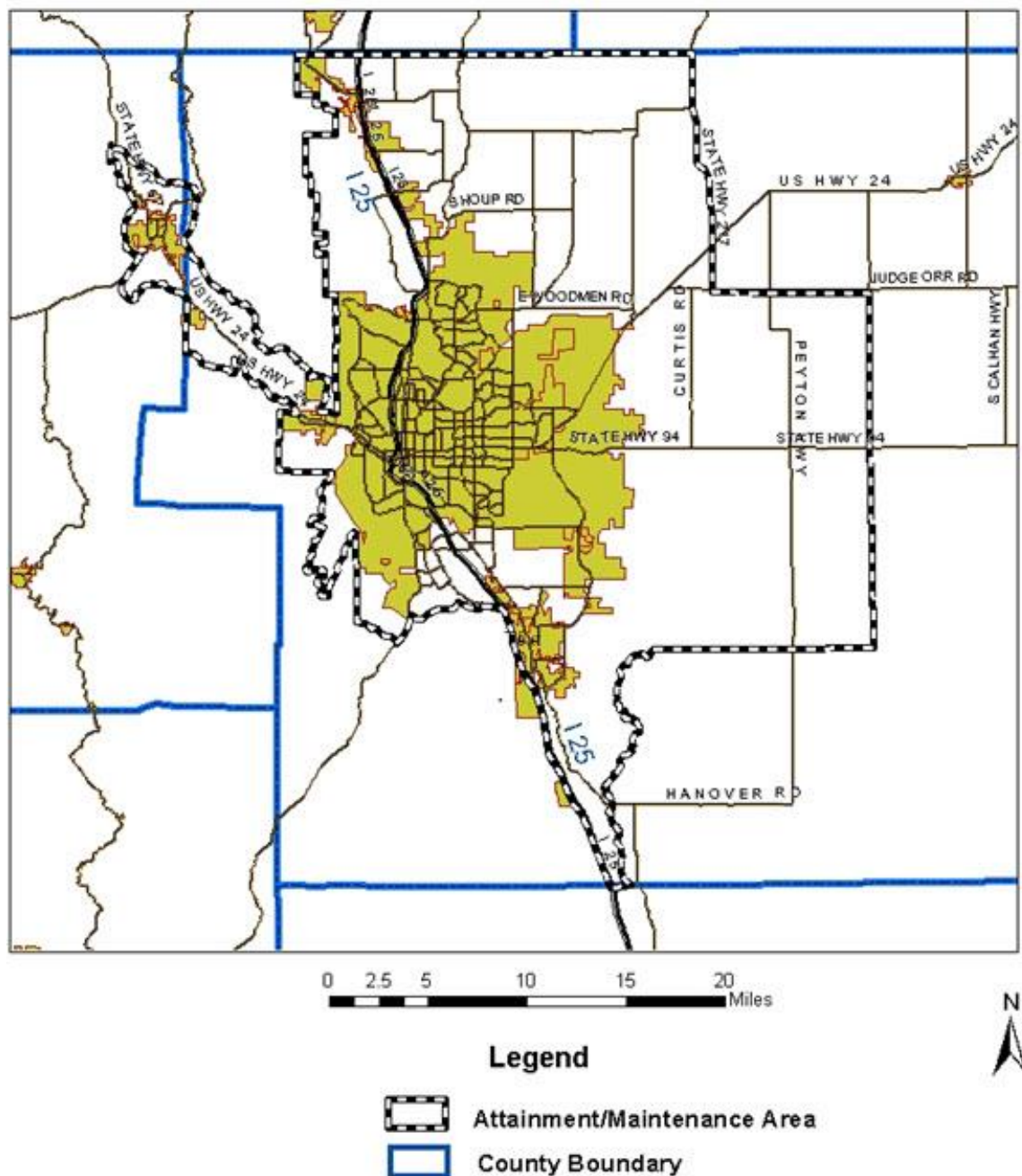
### III.A. Denver Attainment/Maintenance Area for Carbon Monoxide

#### III.A. Denver Attainment/Maintenance Area for Carbon Monoxide



### III.B. Colorado Springs Attainment/Maintenance Area for Carbon Monoxide

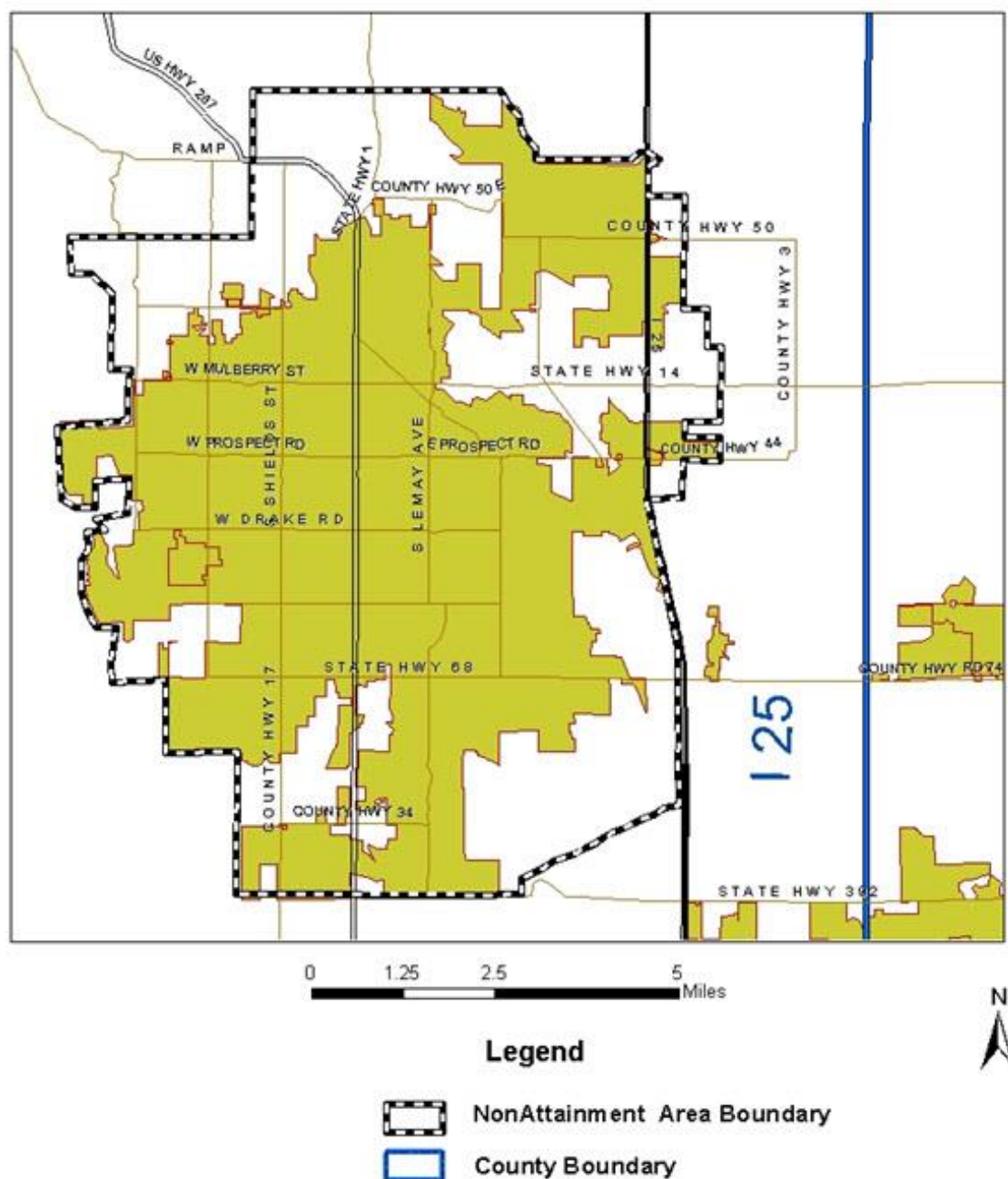
III.B. Colorado Springs Attainment/Maintenance Area for Carbon Monoxide



Map Created by the APCD Technical Services Program  
Colorado Department of Public Health and Environment

### III.C. Fort Collins Attainment/Maintenance Area for Carbon Monoxide

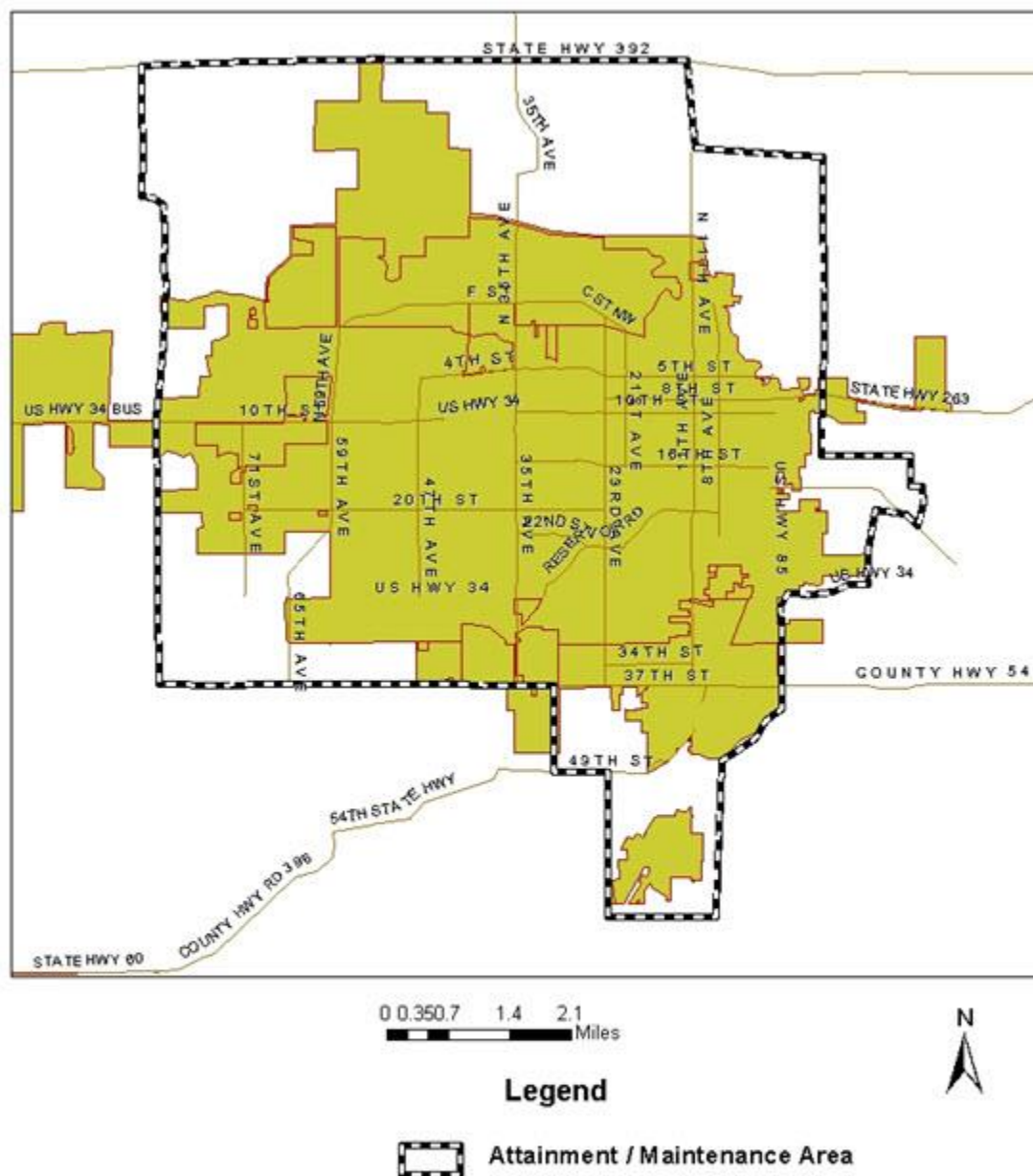
#### III.C. Fort Collins Attainment/Maintenance Area for Carbon Monoxide



Map created by the APCD Technical Services Program.  
Colorado Department of Public Health and Environment

### III.D. Greeley Attainment/Maintenance Area for Carbon Monoxide

#### III.D. Greeley Attainment/Maintenance Area for Carbon Monoxide



Map created by the APCD Technical Services Program,  
Colorado Department of Public Health and Environment



### III.E. Longmont Attainment/Maintenance Area For Carbon Monoxide





**PM10**

Area	Classification	Boundary
Denver Metro (effective 10/16/02)	Attainment/Maintenance *	All of Denver, Jefferson, and Douglas Counties; Boulder County (excluding Rocky Mountain National Park) and the Automobile Inspection and Readjustment Program portions of Adams and Arapahoe Counties. See attached map.
Steamboat Springs (effective 11/24/04)	Attainment/Maintenance	Steamboat Springs Area Airshed as adopted by the Routt County Commissioners May 28, 1991. See attached map.
Pagosa Springs (effective 8/14/01)	Attainment/Maintenance	See attached map.
Telluride/Mt. Village/San Miguel County (effective 8/14/01)	Attainment/Maintenance	See attached map.
Aspen/Pitkin County (effective 7/14/03)	Attainment/Maintenance	See attached map.
Canon City/Fremont County (effective 7/31/00)	Attainment/ Maintenance	See attached map.
Lamar (effective 11/25/05)	Attainment/Maintenance	Lamar City Limits as of July 30, 1991. See attached map.

**Ozone**

Denver 1-Hour Ozone Attainment/Maintenance Area (effective 10/11/01)	Attainment/Maintenance	The Counties of Jefferson and Douglas, the Cities and Counties of Denver and Broomfield, Boulder County (excluding Rocky Mountain National Park), Adams County west of Kiowa Creek, and Arapahoe County west of Kiowa Creek. See attached map.
Denver Metro Area/North Front Range 8-Hour Ozone Nonattainment Area (effective 11/20/07)	Nonattainment	The Counties of Adams, Arapahoe, Boulder (includes part of Rocky Mountain National Park), Douglas, and Jefferson; the Cities and Counties of Denver and Broomfield; and the following portions of the Counties of Larimer and Weld:
.	.	For Larimer County (includes part of Rocky Mountain National Park), that portion of the county that lies south of a line described as follows: Beginning at a point on Larimer County's eastern boundary and Weld County's western boundary intersected by 40 degrees, 42 minutes, and 47.1 seconds north latitude, proceed west to a point defined by the intersection of 40 degrees, 42 minutes, 47.1 seconds north latitude and 105 degrees, 29 minutes, and 40.0 seconds west longitude, thence proceed south on 105 degrees, 29 minutes, 40.0 seconds west longitude to the intersection with 40 degrees, 33 minutes and 17.4 seconds north latitude, thence proceed west on 40 degrees, 33 minutes, 17.4 seconds north latitude until this line intersects Larimer County's western boundary and Grand County's eastern boundary.
.	.	For Weld County, that portion of the county that lies south of a line described as follows: Beginning at a point on Weld County's eastern boundary and Logan County's western boundary

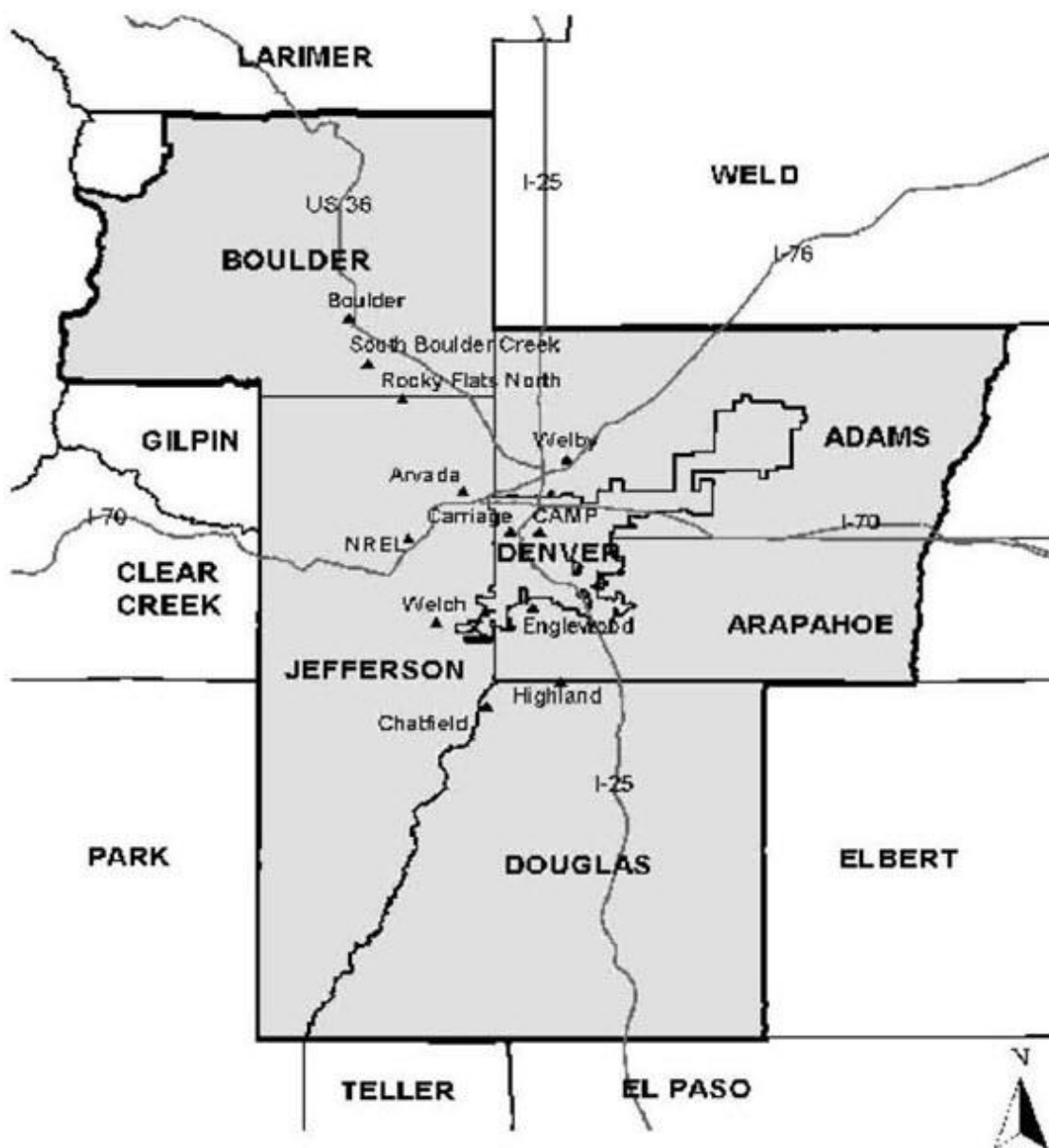
		intersected by 40 degrees, 42 minutes, 47.1 seconds north latitude, proceed west on 40 degrees, 42 minutes, 47.1 seconds north latitude until this line intersects Weld County's western boundary and Larimer County's eastern boundary. See attached map.
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\*The classification of the Denver Metro Area as an attainment/maintenance area shall not affect Air Quality Control Commission Regulations Number 1, 5 CCR 1001-3, Section VIII; or Number 3, 5 CCR 1001-5, Part B, Section IV.D.2(d)(i) or (ii). Such provisions shall apply in the Denver Metro Area in the same manner as they would apply if the Denver Metro Area were nonattainment area for PM10.

III.F. Denver PM10 and 1-Hour Ozone Attainment/Maintenance Area

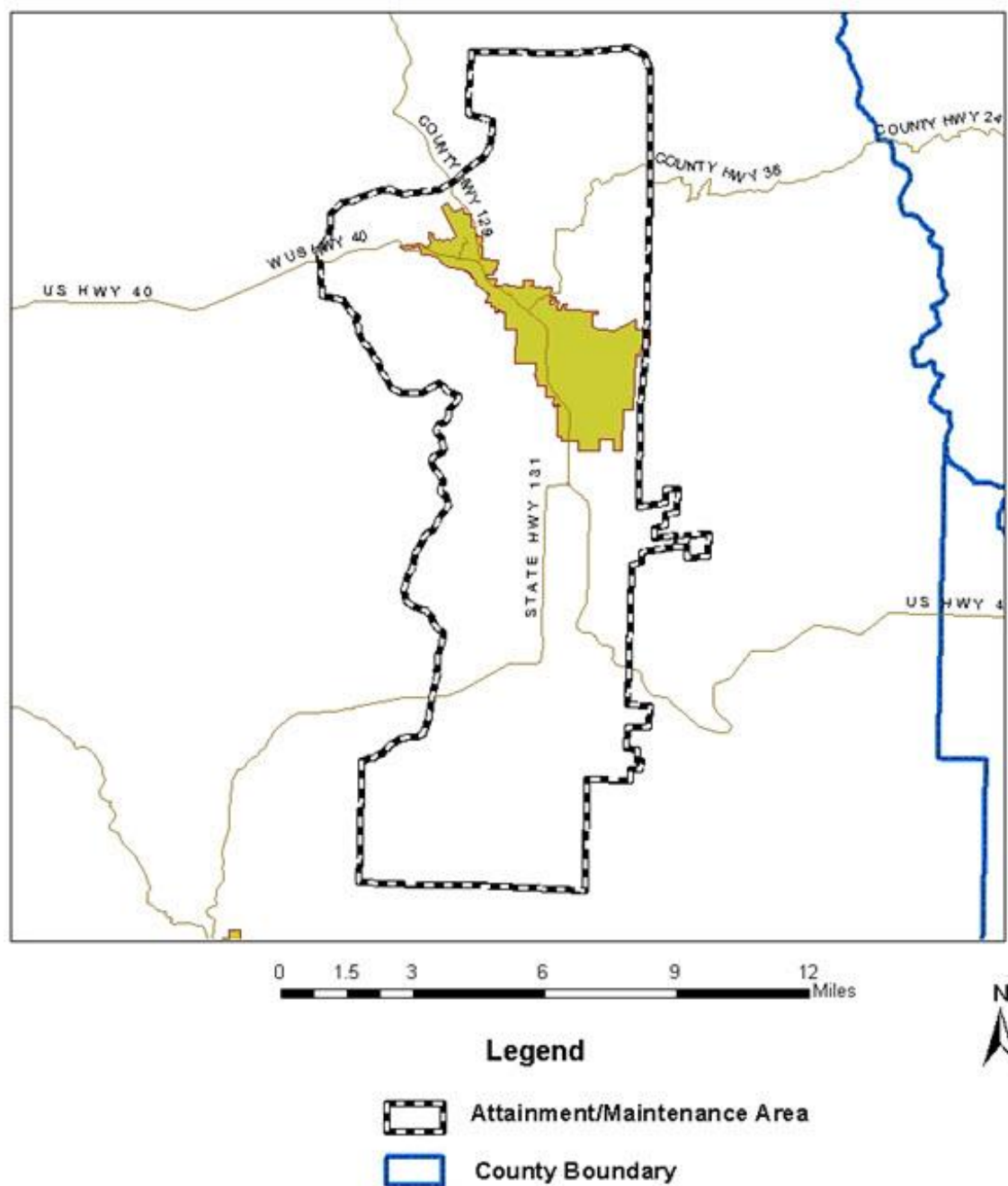
III.F. Denver PM10 and 1-Hour Ozone Attainment/Maintenance Area

**Map of the Denver Metropolitan 1-Hour Ozone  
Attainment/Maintenance Area and Monitoring Sites**



### III.G. Steamboat Springs Attainment/Maintenance Area for PM10

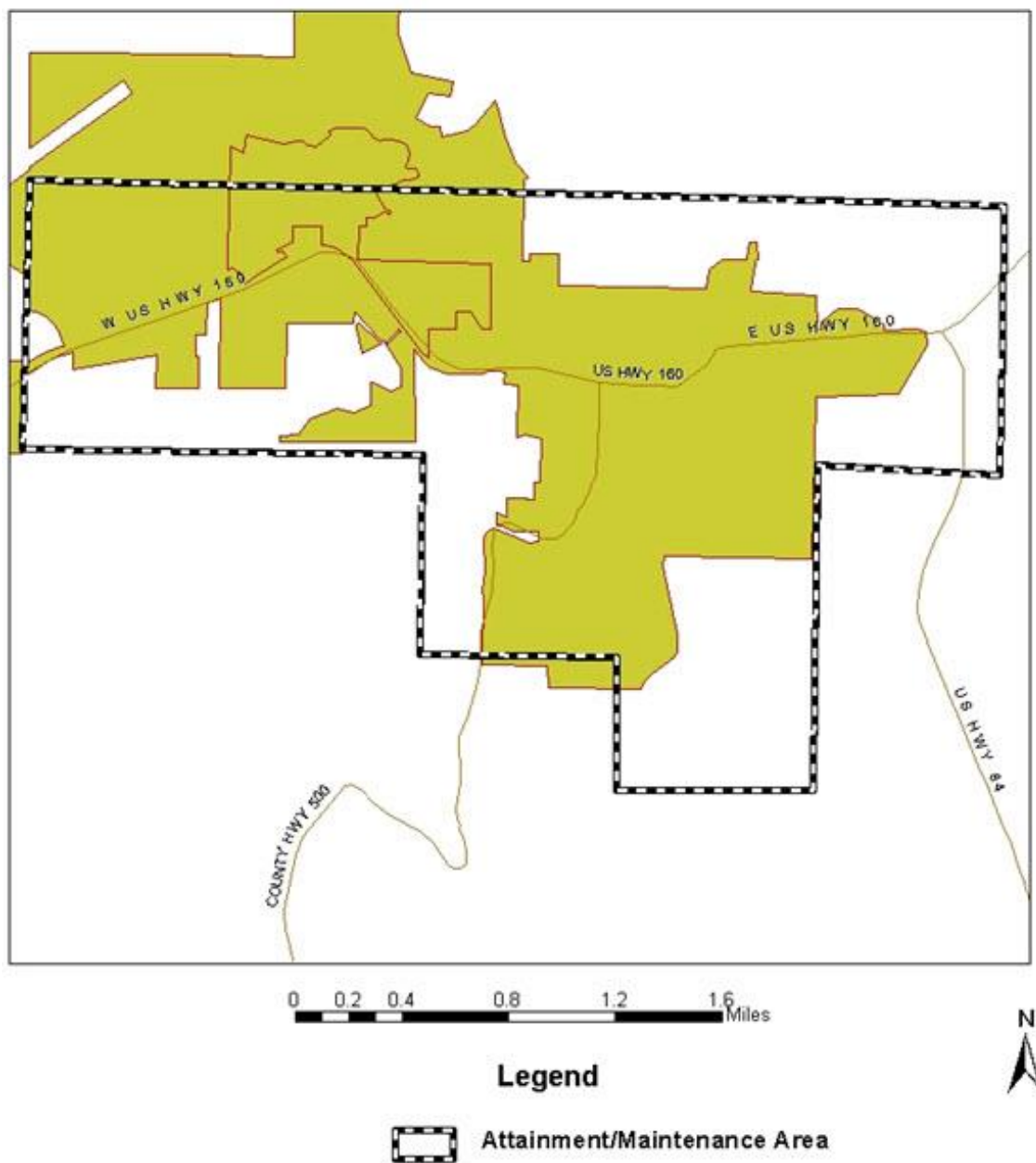
#### III.G. Steamboat Springs Attainment/Maintenance Area for PM10



Map created by the APCD Technical Services Program.  
Colorado Department of Public Health and Environment

### III.H. Pagosa Springs Attainment/Maintenance Area for PM<sub>10</sub>

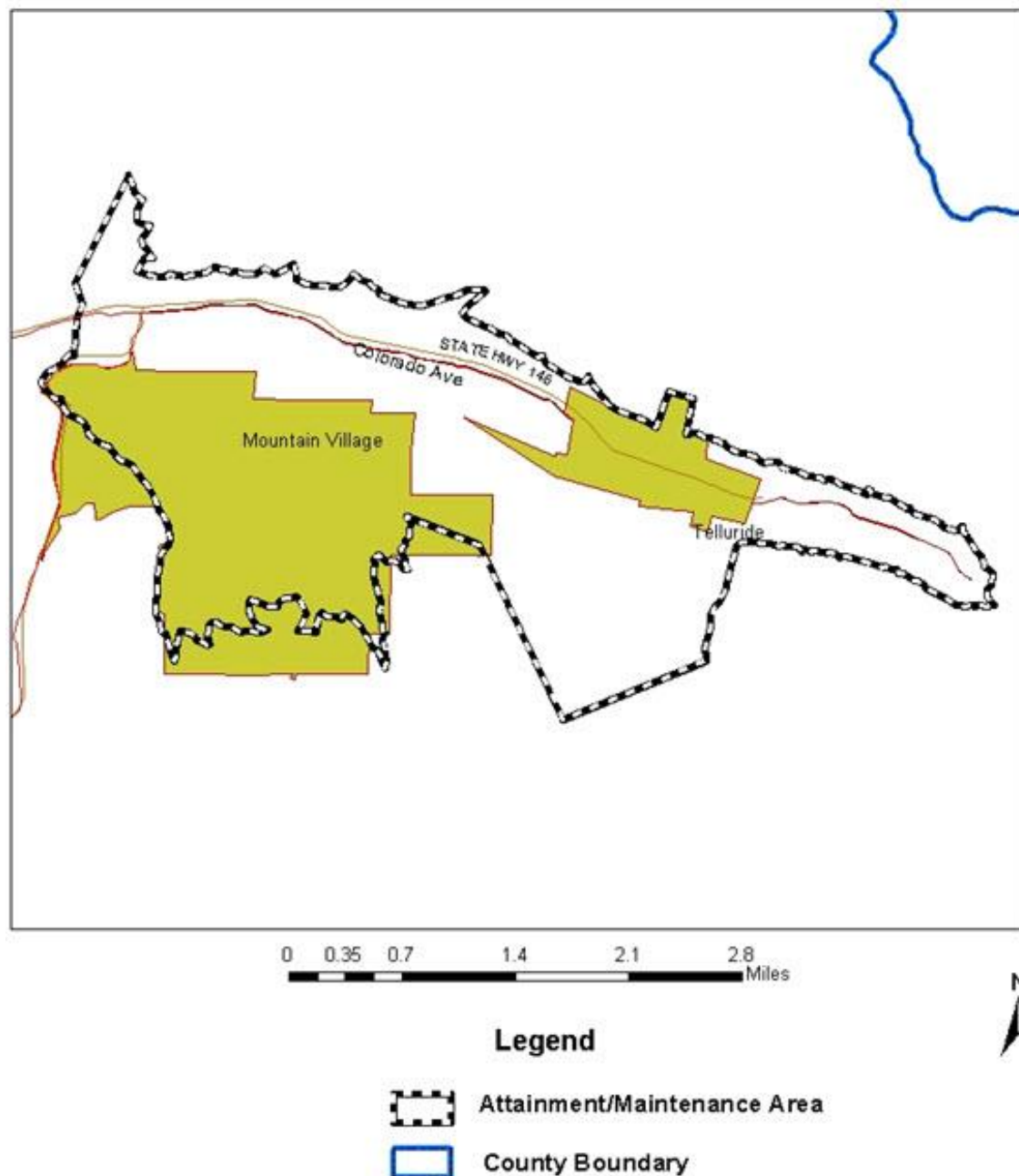
III.H. Pagosa Springs Attainment/Maintenance Area for PM<sub>10</sub>



Map created by the APCD Technical Services Program.  
Colorado Department of Public Health and Environment

III.I. Telluride/Mt. Village/San Miguel County Attainment/Maintenance Area for PM10

III.I. Telluride/Mt. Village/San Miguel County Attainment/Maintenance Area for PM10

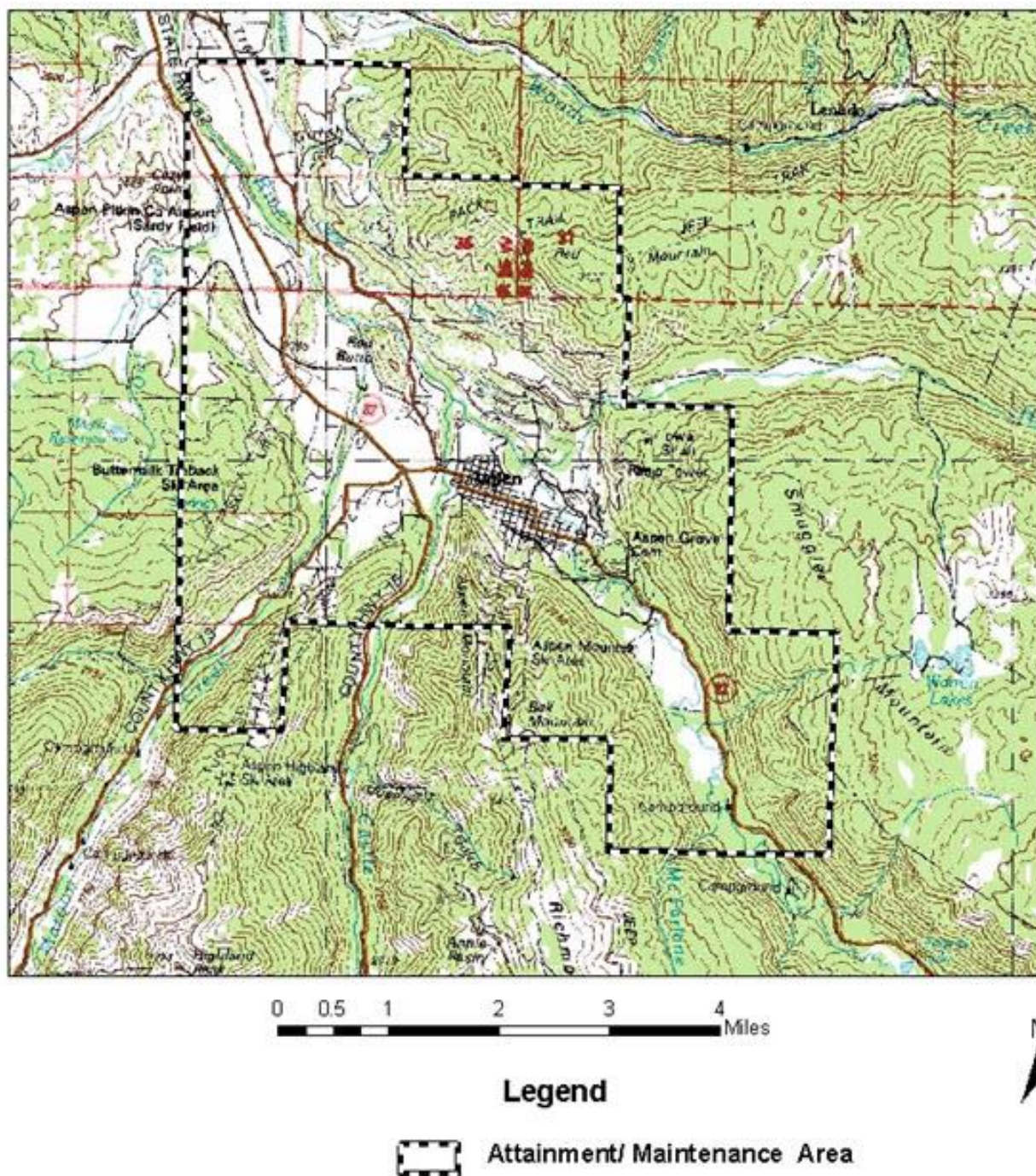


Map created by the APCD Technical Services Program.  
Colorado Department of Public Health and Environment



III.J. Aspen/Pitkin County Attainment/Maintenance Area for PM<sub>10</sub>

III.J. Aspen/Pitkin County Attainment/Maintenance Area for PM<sub>10</sub>

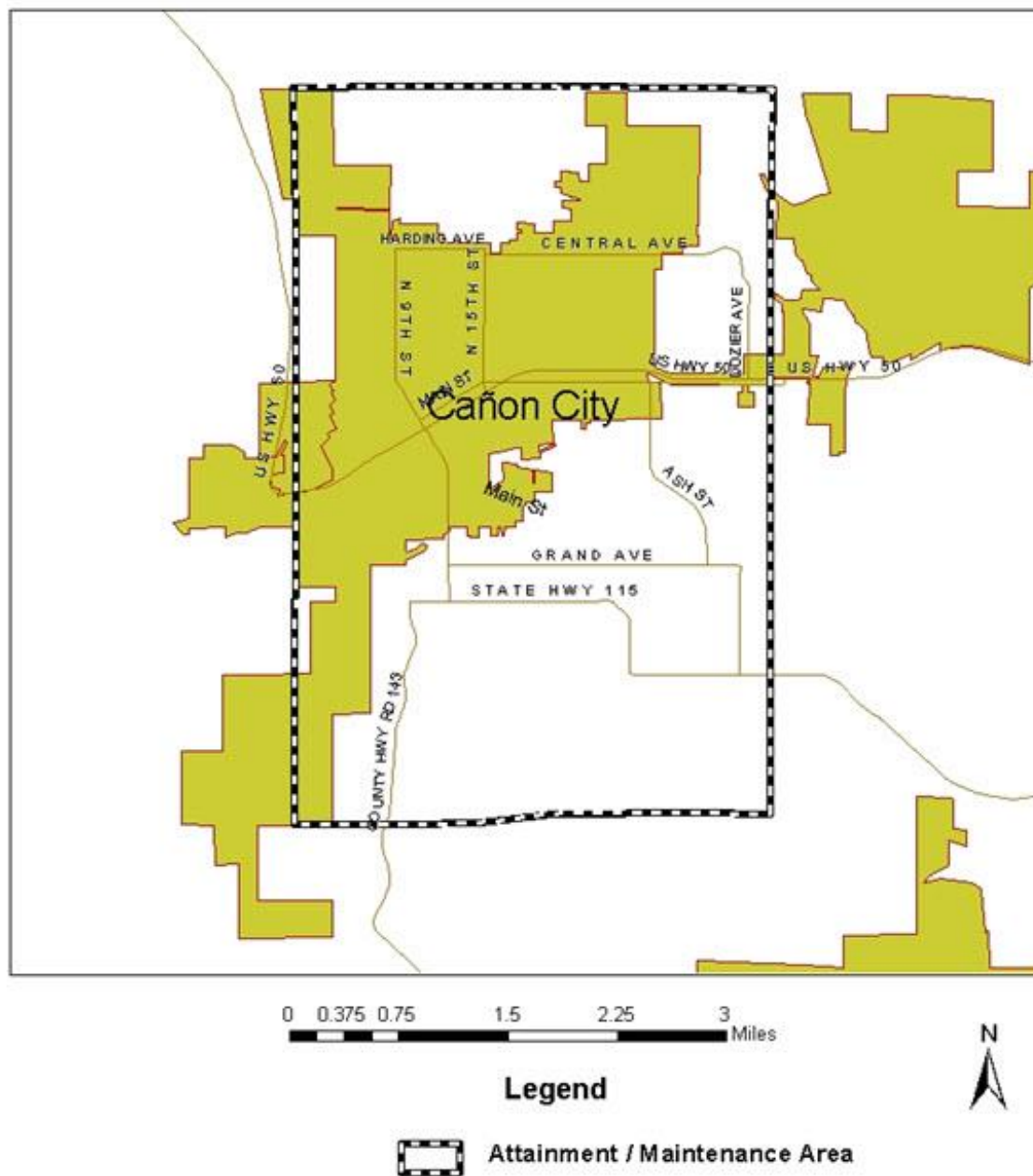


Map created by the APCD Technical Services Program,  
Colorado Department of Public Health and Environment



III.K. Canon City/Fremont County Attainment/Maintenance Area for PM<sub>10</sub>

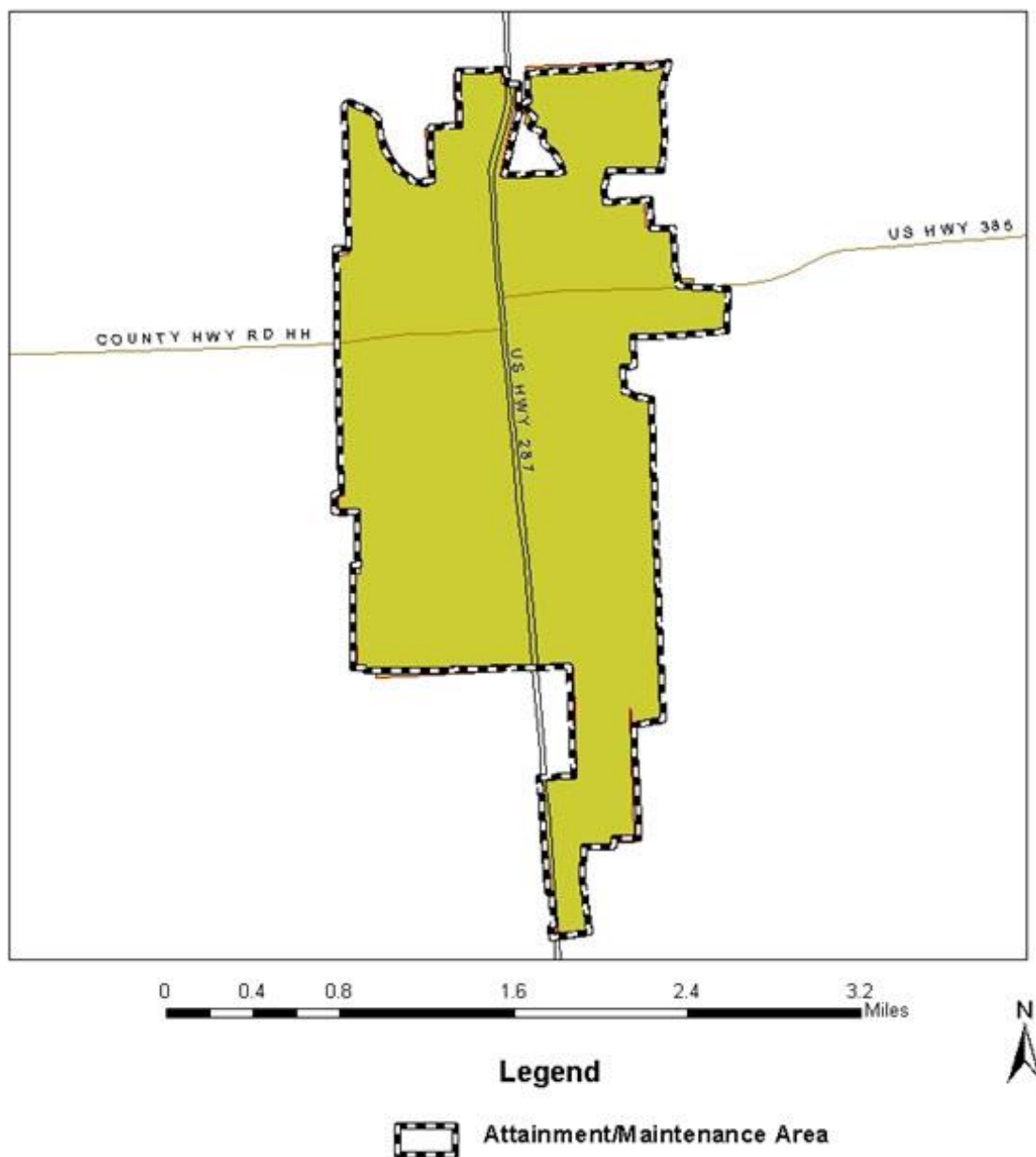
III.K. Cañon City/Fremont County Attainment/Maintenance Area for PM<sub>10</sub>



Map created by the APCD Technical Services Program.  
Colorado Department of Public Health and Environment

### III.L. Lamar Attainment/Maintenance Area for PM10

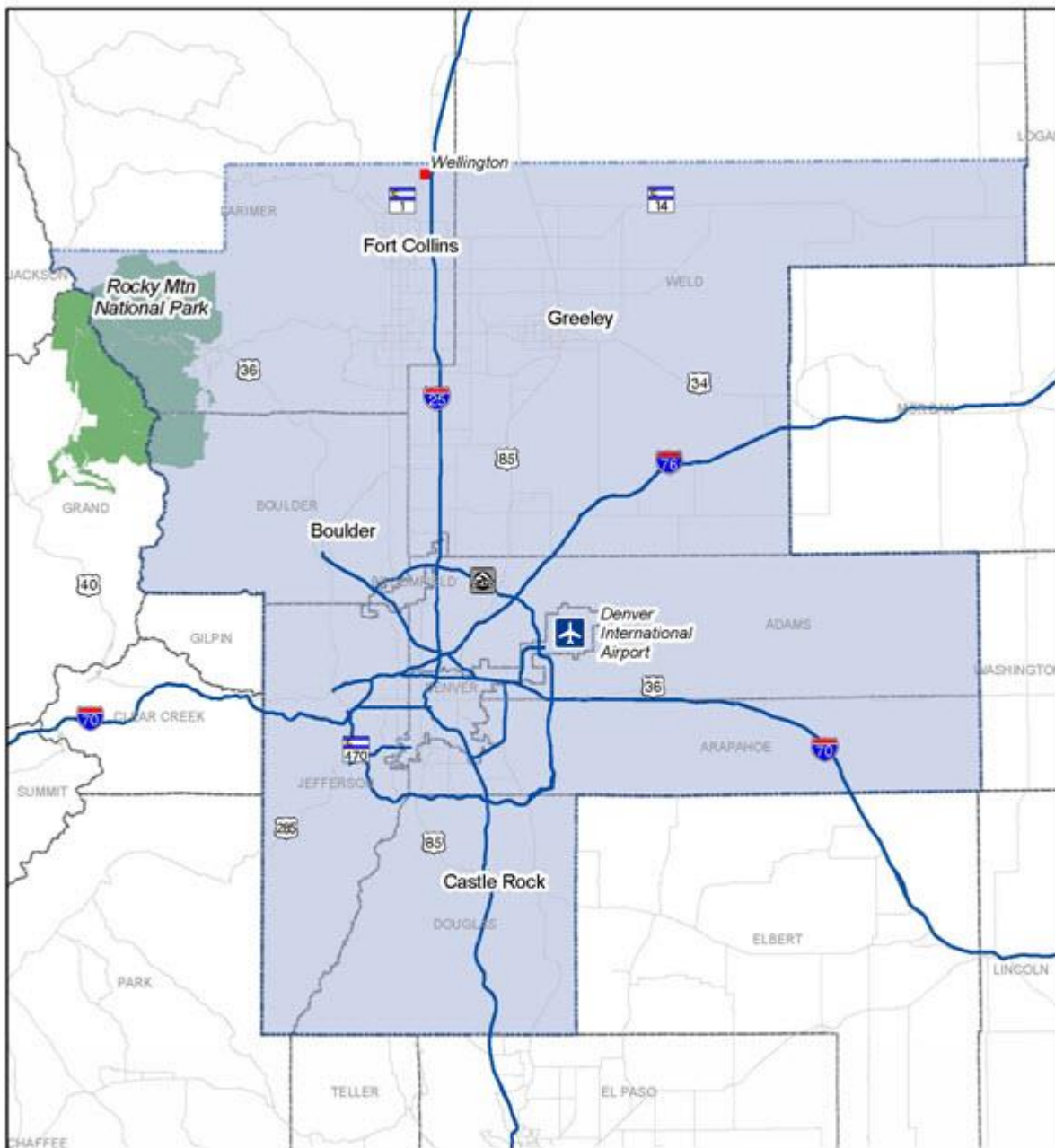
III.L. Lamar Attainment/Maintenance Area for PM10



Map created by the APCD Technical Services Program,  
Colorado Department of Public Health and Environment

### III.M. Denver Metro Area/North Front Range 8-Hour Ozone Nonattainment Area

III.M. Denver Metro Area/North Front Range 8-Hour Ozone Nonattainment Area



Denver-Boulder-Greeley-Fort Collins, Colorado  
Eight-Hour Ozone Nonattainment Area Boundary

#### IV. Visibility Standard

To be added to the Colorado Air Quality Control Commission document "Ambient Air Standards for Metropolitan Denver Air Quality Control Region, State Air Pollution Control Areas and the State of Colorado."

##### Visibility Standard for the AIR Program Area

Level: The Visibility Standard for the AIR program area is an atmospheric extinction of .076/km <sup>1</sup>, equivalent to a standard visual range of 32 miles <sup>2</sup>

Averaging Time: The Averaging time is four hours. All four hours must be contiguous. No four-hour average in violation of the standard can have hours in common with any other four-hour period in violation of the standard. <sup>3</sup>

Applicability: The visibility standard is applicable in the AIR program area. <sup>4</sup> The visibility standard applies during an eight-hour period from 8:00 a.m. (0800) to 4:00 p.m. (1600) each day Mountain Local Time. The visibility standard applies only during hours when the hourly average relative humidity is less than 70 percent. <sup>5</sup>

<sup>1</sup> Extinction is a measure of the ability of the atmosphere to attenuate light. It is traditionally expressed in light attenuation per kilometer. It is measured directly with a long-path transmissometer or by other equivalent methods as determined by the Air Pollution Control Division.

<sup>2</sup> Extinction (Bext) can be converted to standard visual range (SVR) in miles as follows:

$$\text{SVR (Miles)} = (3.912/(\text{Bext} + .01 \text{ km})) * .06214$$

where Bray is the Rayleigh scattering coefficient (.0099/km) for Denver's altitude and the visual range is standardized to a Rayleigh scattering coefficient of .01/km or an altitude of 1.55km. The formula assumes a contrast threshold of two percent.

<sup>3</sup> There are five possible contiguous four-hour periods from 0800 to 1600 each day (0800 to 1200, 0900 to 1300, 1000 to 1500, and 1200 to 1600). Only the periods from 0800 to 1200 and from 1200 to 1600 do not have overlapping hours. Therefore, a maximum of two standard violations are possible each day that have no overlapping hours or hours in common.

<sup>4</sup> The AIR program area is defined in C.R.S. 42-4-307 (8).

<sup>5</sup> Any hour with a relative humidity of 70 percent or over would not be included in the four-hour running averages.

\* Visibility: Adopted: 12/21/89 Effective: 1/1/95

#### V. Emission Budgets for Attainment/Maintenance Areas in the State of Colorado

##### V.A. Budgets

V.A.1. The following Motor Vehicle Emission Budgets shall be utilized to assess the conformity of Transportation Plans, TIPs, and where appropriate, Projects, for the applicable periods and geographic areas indicated:

<u>Denver</u> <u>Attainment/Maintenance Area</u> <u>(Modeling Domain)</u>	<u>PM10</u> : 2015 through 2021: 54 tons/day; 2022 and beyond: 55 tons/day. <u>Nitrogen Oxides</u> : 2015 through 2021: 70 tons/day; 2022 and beyond: 56 tons/day Trading provisions: Trading of PM10 for NOx, or NOx for PM10 to adjust emission budgets for purposes of demonstrating transportation conformity shall be allowed using the emission trading formula as follows: For trades necessary to increase a primary PM10 budget, 15.0 tons/day of NOx will be taken from the NOx budget to increase the primary PM10 budget by 1.0 tons/day, a ratio of 15 to 1.
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	<p>For trades necessary to increase a NOx budget, 1.0 tons/day of primary PM10 will be taken from the primary PM10 budget to increase the NOx budget by 12.0 tons/day, a ratio of 1 to 12.</p> <p>Implementation of trading provisions: In the event the MPO cannot demonstrate consistency with the specific PM10 and NOx mobile source emission budgets, the trading provisions may be utilized only after the MPO has considered all reasonably available local control measures to meet the budgets. The MPO must demonstrate the need for trading through the usual consultation procedures for state implementation plan development delineated in Section IV (F) of AQCC Regulation Number 10, Criteria for Analysis of Conformity.</p> <p>If trading is utilized, the MPO shall include the following information in the transportation conformity determination:</p> <p>(1) The budget for primary PM10 and NOx for each required year of the conformity determination, before trading is employed; (2) The portion of the original budget to be used to supplement a wanting budget, for each required year for the conformity determination; (3) The increased budget that results from trading, along with relevant calculations, and (4) the resulting primary PM10 and NOx budgets for each required year of the conformity demonstration. The MPO shall then compare projected emissions to the adjusted PM10 and NOx motor vehicle emission budgets to demonstrate conformity.</p>
<u>Denver Attainment Maintenance Area</u>	<p><u>Ozone Precursors (attainment/maintenance area boundary) NOx 2002 and beyond 134 tpsd VOC 2002 and beyond 119 tpsd (tpsd = tons per summer day) Carbon Monoxide (attainment/maintenance area boundary) 2013 through 2020: 1625 tons/day; 2021 and beyond: 1600 tons/day.</u></p>
<u>Denver Metro Area/North Front Range 8-Hour Ozone Nonattainment Area (for the 1997 8-Hour Ozone NAAQS; to be superseded by the emissions budgets associated with the 2008 8-Hour Ozone NAAQS upon the effective date of EPA's determination of adequacy for transportation conformity purposes)</u>	<p><u>Regional Emissions Budgets</u>  <u>NOx: 122.9 tons/day</u>  <u>VOCs: 109.2 tons/day</u>  <u>Southern Sub-Regional Emissions Budgets</u>  <u>NOx: 102.4 tons/day</u>  <u>VOCs: 89.7 tons/day</u>  <u>Northern Sub-Regional Emissions Budgets</u>  <u>NOx: 20.5 tons/day</u>  <u>VOCs: 19.5 tons/day</u></p>

Denver Metro Area/North Front Range 8-Hour Ozone Nonattainment Area (for the 2008 8-Hour Ozone NAAQS: these emissions budgets will supersede the previous emissions budgets upon the effective date of EPA's determination of adequacy for transportation conformity purposes)	<u>Regional Emissions Budgets</u> NOx: 73 tons/day VOCs: 55 tons/day <u>Southern Sub-Regional Emissions Budgets</u> NOx: 61 tons/day VOCs: 47 tons/day <u>Northern Sub-Regional Emissions Budgets</u> NOx: 12 tons/day VOCs: 8 tons/day
<u>Aspen Attainment/Maintenance Area</u>	<u>PM10</u> 2023 and Beyond: 1,146 lbs./day
<u>Cañon City</u>	<u>PM10</u> 2020 and Beyond: 1,613 lbs./day
<u>Lamar (Modeling Area)</u>	<u>PM10</u> 2025 and Beyond: 764 lbs./day
<u>Pagosa Springs (Modeling Area)</u>	<u>PM10</u> 2021 and Beyond: 946 lbs./day
<u>Steamboat Springs (Modeling Area)</u>	<u>PM10</u> 2015 through 2023: 21,773 lbs./day <u>PM10</u> 2024 and Beyond: 1,103.2 lbs./day
<u>Telluride (Modeling Area)</u>	<u>PM10</u> 2021 and Beyond: 1,008 lbs./day
<u>Longmont Attainment/Maintenance Area</u>	<u>Carbon Monoxide</u> 2010 through 2014: 43 tons/day 2015-2019: 43 tons/day 2020 and Beyond: 43 tons/day
<u>Colorado Springs Attainment/Maintenance Area</u>	<u>Carbon Monoxide</u> 2010 and Beyond: 531 tons/day
<u>Ft. Collins Attainment/Maintenance Area</u>	<u>Carbon Monoxide</u> 2005 through 2009: 99 tons/day 2010 through 2014: 98 tons/day 2015 and Beyond: 94 tons/day
<u>Greeley Area Attainment/Maintenance Area</u>	<u>Carbon Monoxide</u> 2005 through 2009: 63 tons/day 2010 through 2014: 62 tons/day 2015 and Beyond: 60 tons/day

V.A.2. Geographic Coverage

Unless otherwise specified, the geographic coverage of each of the area Motor Vehicle Emissions Budgets shall be the nonattainment or attainment maintenance area as defined in the respective state implementation plans.

V.A.3. The Motor Vehicle Emissions Budget for PM10 applies to total primary PM10 emissions, including emissions from tailpipe exhaust, unpaved roads (except for the Denver PM10 nonattainment area), re-entrained road dust and street sand. It does not include precursor or secondary emissions, which, where appropriate, are covered under separate budgets.

V.A.4. Effective Dates

V.A.4.a. Denver Carbon Monoxide

The 1,520 tons per day (2013 and beyond) carbon monoxide emission budget established in Section V.A.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 1,520 tons per day budget takes effect pursuant to this section and 40 CFR Section 93.118, the carbon monoxide emission budgets for the Denver CO attainment/maintenance area shall be 800 tons per day (2002 and beyond).

V.A.4.b. Colorado Springs Carbon Monoxide

The 531 tons per day carbon monoxide emission budget established in Section V.A.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 531 tons per day budget takes effect pursuant to this section and 40 CFR Section 93.118, the carbon monoxide emission budget for the Colorado Springs CO attainment/maintenance area shall be 270 tons per day (2001 and beyond).

V.A.4.c. Reserved

V.A.4.d. Reserved

V.A.4.e. Aspen PM10

The 16,244 pounds-per-day PM10 emission budget established in Section V.A.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 16,244 pounds-per-day budget takes effect pursuant to this section and 40 CFR Section 93.118, the PM10 emission budget for the Aspen PM10 Nonattainment Area shall be 13,974 pounds-per-day.

V.A.4.f. Pagosa Springs PM10

The 946 pounds-per-day PM10 emission budget established in Section V.A.1. shall take effect as a matter of state law when budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 946 pounds-per-day budget takes effect pursuant to this section and 40 CFR Section 93.118, the PM10 emission budget for the Pagosa Springs PM10 attainment/maintenance area shall be 7,486 pounds-per-day.

V.A.4.g. Canon City PM10

The 1,1613 pounds-per-day PM10 emission budget established in Section V.A.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 1,613 pounds-per-day budget takes effect pursuant to this section and 40 CFR section 93.118, the PM10 emission budget for the Canon City PM10 attainment/maintenance area shall be 7,439 pounds-per-day.

V.A.4.h. Lamar PM10

The 764 pounds-per-day PM10 emission budget established in Section V.A.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 764 pounds-per-day budget takes effect pursuant to this section and 40 CFR Section 93.118, the PM10 emission budget for the Lamar PM10 Nonattainment Area shall be 7,534 pounds-per-day.



**V.A.4.i. Steamboat Springs PM10**

The 21,773 pounds-per-day PM10 emission budget established in Section V.A.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 21,773 pounds-per-day budget takes effect pursuant to this section and 40 CFR Section 93.118, the PM10 emission budget for the Steamboat Springs PM10 Nonattainment Area shall be 20,682 pounds-per-day.

**V.A.4.j. Telluride PM10**

The 1,108 pounds-per-day PM10 emission budget established in Section V.a.1. shall take effect as a matter of state law when such budget takes effect as a matter of federal law pursuant to 40 CFR Section 93.118. Until such time as the 1,108 pounds-per-day budget takes effect pursuant to this section and 40 CFR Section 93.118, the PM10 emission budget for the Telluride PM10 Attainment Area shall be 10,001 pounds-per-day (2012 and beyond).

**V.B. Reserved**

**V.C. Additional Requirements for the Denver PM10 Attainment/Maintenance Area**

**V.C.1. Geographic Coverage**

The geographic coverage for the Denver PM10 Motor Vehicle Emissions Budget is the modeling domain contained in the most recent revision to the Denver PM10 state implementation plan and technical support documentation, which are available for inspection at the offices of the AQCC located at 4300 Cherry Creek Drive South, Denver, Colorado.

**V.C.2. Regional Emissions Analysis**

The emissions budgets set out in this section shall be used for regional emissions analyses required for conformity determinations.

**V.D. Additional Requirements for the Denver CO Attainment/Maintenance Area**

**V.D.1. Geographic Coverage**

The geographic coverage for the Denver CO Motor Vehicle Emissions Budget is the Denver CO attainment/maintenance area as defined in the section of this Ambient Air Standards regulation entitled "Description of Boundaries for Denver CO Attainment/Maintenance Area."

**VI. Carbon Monoxide Standard within the Eisenhower Tunnel\* (State Only)**

Pursuant to the authority of Section 25-7-106 (1), (b) and (c) and of 25-7-107 (1), (a), and (b) of Colorado Revised Statutes 1973, the Colorado Air Pollution Control Commission designated and confines of any traveled portions of the roadways within the Eisenhower Tunnel as a control area in which the adoption and maintenance of an ambient air standard is deemed necessary with particular identification of "carbon monoxide" as the pollutant hereby made subject to the following standard to maintain an acceptable human carboxyhemoglobin level: the ambient air within the Eisenhower Tunnel shall be maintained so that the levels of carbon monoxide shall not exceed a 15 minute average of 100 parts per million volume (115 milligrams per cubic meter at 760 Torr and 25 degrees Celsius) concentration.

\* Carbon Monoxide/Eisenhower Tunnel: Adopted: 9/5/75 Effective: 12/17/75

**Method of Testing:**

1. For the purpose of this regulation, primary determinations of CO shall be made by use of instrumentation based on non-dispersive infrared spectrophotometry (NDIR), as specified in Federal Register, 36 (84), 8194-8195 (30 April, 1971), Appendix C. Other methods equivalent, in accuracy, precision, and freedom from interferences may be used if approved in advance by the Air Pollution Control Division.
2. Routine monitoring of CO may be performed by instruments based on other principles, provided that such instruments are demonstrated to yield results equivalent to measurements by NDIR. methods, within the limits of accuracy and precision approved in advance by the Air Pollution Control Division.
3. Instruments used for primary determinations and routine monitoring shall be maintained to at least the minimum standards recommended by their manufacturers. Calibrations shall be made at the location of use according to the procedures set out in "Guidelines for Development of a Quality Assurance Program: Reference Method for the "Continuous Measurement of Carbon Monoxide in the Atmosphere" , EPA-R4-028A, June 1973, pp. 8-20.
4. Records of maintenance and calibrations of all instruments shall be kept in a current, timely manner. The sources and identifications of gas mixtures used in calibrations shall be entered in records of calibration. These records of calibration and summaries of operating CO levels shall be made available within 30 days after the end of the calendar quarter to the Air Pollution Control Division for review.

**VII. Rationale**

**VII.A. Rationale for the Promulgation of Ambient Air Quality Standards for Sulfur Dioxide**

The Commission's review of the large volume of scientific data presented at the hearings led to several conclusions relevant to the establishment of appropriate ambient air quality standards for the State of Colorado.

Sulfur dioxide is a colorless, irritating gas with a taste threshold on the order of 600 to 800 micrograms per cubic meter and an odor threshold approximately twice that value. It is converted in the atmosphere (at a presently undetermined rate) into particulate sulfuric acid droplets, and solid metallic sulfates. The hazards to human health of such sulfates are presently under extensive investigation by EPA and a broad section of the scientific community. This Commission has not considered the question of health impacts of particulate surfaces in its adoption of ambient air standards for Colorado except to note that the information available is often conflicting and confusing. The same remarks are applicable to the effect of particulate sulfates on visibility. The Commission is very much aware that many have questioned the validity of EPA primary and secondary sulfur dioxide standards to protect humans, and animals, and vegetation with regard to (a) long term exposure to low concentrations of sulfur dioxide, (b) effects of altitude on atmospheric conversion of sulfur dioxide and attendant sulfate hazards, and (c) synergistic action of sulfur dioxide with other pollutants on vegetation.

The concerns of this Commission with regard to such considerations has led to the adoption of ambient air standards more restrictive than the EPA primary and secondary standards because: (1) the Commission is charged under the Colorado Air Pollution Control Act of 1970 with the achievement of the maximum practical degree of air purity throughout the State, (2) the evidence presented before this Commission and the evaluation conducted by the Commission and its staff raises serious unanswered questions about the possible effect of long term exposure of certain low levels of sulfur dioxide on vegetation and on the agricultural industry in our State, (3) the Commission desired to ensure that the policy of this State with regard to maximization of air purity and the Federal Prevention of Significant Deterioration policies, under which Colorado desires to seek delegation of authority, will be realized with regard to existing air quality in Colorado for sulfur dioxide which is generally very good.

Under the Prevention of Significant Deterioration doctrine, EPA has adopted sulfur dioxide ambient air quality standards in three classes. Class I preserves the pristine quality of pristine air. Class II permits moderate deterioration, and Class III sets an absolute limit at the Federal secondary standard (that ambient air standard designed to protect human welfare). The evidence received by this Commission was overwhelming in its support of the preservation of pristine conditions in National Parks, National Monuments, Wilderness and Primitive Areas, and the Gunnison Gorge Recreation area. It is logical to apply the EPA Prevention of Significant Deterioration Class I standards to these regions, to protect the air quality for intrusion by external sources, and no submission by any industrial representative in these public hearings opposed the use of the Federal Class I standards for the areas noted above.

The Commission has discovered no adequate rationale for adoption of the (EPA) PSD Class III standard for sulfur dioxide. This Commission questions the need for authorization of such concentrations of sulfur dioxide in the State of Colorado. Existing conditions in Colorado do not appear to even approach the Class in levels, and no proposal for development, as described by industrial representatives at the hearings, would be at all restricted by a standard more stringent than the Federal Class II standard. Therefore, Federal PSD Class II standards have been adopted as the Colorado Category III standards: proposed development of sulfur dioxide sources as presented to the Commission by a variety of industrial representatives, can proceed with much less impact than the Federal Class II for sulfur dioxide would allow. The Commission has thereby maintained consistency with Federal PSD requirements and feels that the State will be in a position in the near future to request delegation of authority from the Environmental Protection Agency for enforcement of PSD requirements.

The Colorado Category I standards for sulfur dioxide effective December 18, 1975 are very stringent ones, and because the bulk of the state is now designated as a Colorado Category I, certain proposed industrial development, as presented before this Commission and including energy conversion, might thereby be restricted. One proposed solution to this problem was redesignation to the Federal (PSD) Class II for the entire state. This concentration of sulfur dioxide. As noted above, the Commission simply does not feel that such extreme degradation in existing air quality for sulfur dioxide throughout the entire state is necessary. It is not necessary, according to evidence presented to the Commission, to go to the Colorado Category II standards set forth under the 1975 regulation to permit projected new industrial development. The Commission has therefore adopted a standard, which are essentially at the halfway mark between PSD Class I and PSD Class II. This standard does allow for all the proposed development of sulfur dioxide sources described in hearings before this Commission and is an acceptable one to the Commission because it will not prohibit development, with careful siting considerations, yet avoids the necessity for redesignation involving substantial deterioration of existing air quality for sulfur dioxide. It should be noted that, at the PSD Class II levels, many Colorado citizens might actually be physically affected by the unpleasant and irritating taste of sulfur dioxide in the ambient air.

All of the above-described ambient standards to be established by this Commission for sulfur dioxide, are incremental standards. However, the Commission also feels strongly that an absolute standard, and “under lid,” should be placed on sulfur dioxide levels as well. It is the absolute concentration, rather than the increment, which affects human health, welfare, and the “quality of life” which our Colorado Air Pollution Control Act so clearly seeks to protect. In order to assure compliance with the policy of this state, this Commission has adopted a three-hour average concentration of sulfur dioxide, of 700 micrograms per cubic meter, as an absolute standard not to be exceeded more than once per year. This absolute standard is again related to that level of sulfur dioxide in the ambient air, which may cause obvious physical irritation for certain Colorado citizens. This Commission intends to protect those citizens and all other residents of our State from impairment of their general welfare, convenience, and enjoyment of the beauty of life, which Colorado has to offer.

Ambient air quality standards will play an important role in the permitting process, and since that process involves the application of predictive modeling all incremental standards should be considered significant only to one significant figure.

As noted above, Colorado Category I for sulfur dioxide has been designated for certain areas based on the evidence received at public hearing. The Commission has also provided for designation of any National Parks, Monuments, Wilderness or Primitive Areas or Wild and Scenic River Corridors, which may be established in Colorado in the future. Such designation will be made after Commission evaluation of the comments of members of the public at hearing.

The Commission, on the basis of broad support from industry and the general public, decided not to permit redesignation of the Category I areas. The Commission found that sufficient documentation should accompany a redesignation request to show that the request is serious, well thought out in its various implications, and has some public support. On the basis of considerable testimony, it also developed a set of criteria by which the redesignation request will be judged. The Commission thus concluded that all of these elements in the redesignation process must be met before the designation is granted.

#### **VII.B. Rationale and Justification for Revision to the Ambient Air Quality Standards for Sulfur Dioxide Regarding the Method of Testing and Reporting (Section C)**

This action brings the State of Colorado regulations into conformity with the Federal regulations for (a) the methods for measurements of ambient concentrations of sulfur dioxide and (b) the manner in which these concentrations are reported:

This question as to whether these concentrations should be expressed in (a) micrograms per actual cubic meter or (b) micrograms per standard cubic meter (at 25 degrees Celsius and one atmosphere) is not resolved. If the hazard is related to the ratio of sulfur dioxide to oxygen the standard cubic meter concentration is preferable. If the concentrations are expressed in micrograms per standard cubic meter, the equivalent expression in parts per million is independent of altitude and temperature; this is not true if the concentrations are given in micrograms per actual cubic meter. The deciding issue in the decision was conformity with Federal Standards.

#### **VII.C. Rationale and Justification for the Repeal and Readoption of Ambient Air Quality Standards for Total Suspended Particulates\***

This action brings the State of Colorado Ambient Air Quality Standards for Total Suspended Particulates into conformity with the existing Federal Ambient Air Quality Standards for Total Suspended Particulates, and are the same standards, which are required to be met by 1982 by the Clean Air Act (1977 Amendments) and the Colorado State Implementation Plan.

Ambient Air Quality Standards play an important role in determining various aspects of the State air pollution permitting process and thus the adoption of State Ambient Air Quality Standards for Total Suspended Particulates identical to the Federal standards subjects applicants for an emission permit to only one standard, rather than different State and Federal Standard

The deciding issues in the decision were conformity with Federal standards and great public understanding.

\* Rationale/TSP – Repeal and Readoption: Adopted 4/12/79

## **VIII. Statements of Basis, Specific Statutory Authority and Purpose**

### **VIII.A. Emission Budgets for Nonattainment Areas in the State of Colorado**

Adopted: February 16, 1995

Section 176(c) of the Federal Clean Air Act Amendments of 1990 requires that transportation plans and programs adopted by a metropolitan planning organization conform to the appropriate state implementation plan. Pursuant to EPA regulations implementing Section 176(c), mobile source emissions resulting from such plans and programs ultimately must be demonstrated, to be consistent with the motor vehicle emissions budget set forth in the applicable SIP. Without a clearly indicated intent otherwise, the SIP's highway and transit mobile source inventory serves as the motor vehicle emissions budget. However, where a SIP quantifies a "safety margin" by which emissions from all sources are less than would be consistent with attainment throughout the region, the State may submit a SIP revision which assigns some or all of this safety margin to the motor vehicle emissions budget for purposes of conformity determinations.

#### **ADOPTION OF MOBILE SOURCE EMISSIONS BUDGETS FOR THE DENVER NONATTAINMENT AREA**

##### **A. PM10**

The Denver PM10 SIP, which originally was submitted prior to EPA's adoption of the conformity regulations in November 1993, does not have mobile source emissions budgets explicitly labeled. The Denver PM10 SIP adopted by the Air Quality Control Commission on October 20, 1994 notes the intent to establish specific mobile source emissions budgets for both primary PM10 emissions and emissions of PM10 precursors. The Regional Air Quality Council proposed and the Air Quality Control Commission adopted a regional PM10 emissions budget that allocates some of the "safety margin" in regional emissions to the mobile source emissions budget for purposes of conformity.

##### **1. Establishing the Primary PM10 Budget**

The attainment demonstration for the Denver PM10 SIP indicates that modeled concentrations approaching the federal PM10 health and welfare standard are limited to a very small portion of the Denver region centered along the 1-25 corridor generally between Broadway and 1-70. The remainder of the region is well below the federal standard. Thus, while the mobile source inventory in the central Denver area is at the Maximum consistent with meeting the health and welfare standards, on a regional basis there is a "safety margin" by which emissions from all sources in the region are less than the total emissions that would be consistent with attainment of the PM10 health and welfare standard.

In order to determine how much of the regional emissions “safety margin” to assign to the mobile source emissions budget, the RAQC used DRCOG's transportation network as defined by the 2015 Interim Regional Transportation Plan and projections of vehicle miles traveled (“ VMT” ) as the basis for the analysis in order to determine how much of the anticipated mobile source emission growth can be accommodated in the revision while still maintaining the federal PM10 health and welfare standard. The emissions from the 2015 network and its resulting VMT were estimated for each modeling grid based on the primary PM10 emissions factors for tailpipe exhaust, re-entrained road dust and street sand used in the PM10 SIP. The resulting gridded emissions from the network were then modeled using the same dispersion model used for the PM10 SIP. The analysis then identified any areas where the increased emissions resulted in predicted concentrations greater than the federal standard of 150/ugm3. Emissions in these areas were then reduced sufficiently so that no values above the federal standard were predicted. The sum of the total emissions in the geographic area modeled, taking in to account emission reductions needed to assure that PM10 health and welfare standards were met, was then established as the PM10 mobile source emissions budget set forth in the Ambient Air Standards rule. That budget applies as a ceiling on emissions for each identified year.

The AQCC is aware that EPA is under court order to reconsider the PM10 national ambient air quality standard, and that EPA is actively considering revision of the particle size indicator and mass concentration of current standard. The AQCC considers this an interim budget that will be replaced by a 44-ton budget in 1998. This will give the AQCC an opportunity to develop and review a long range, comprehensive air quality management plan that will set the air quality goals and agenda for the Denver region over the next 20 years. The AQCC anticipates that the mobile source emissions budget in the long range, comprehensive air quality plan will not exceed 44 tons per day. The notice for the hearing on the long range, comprehensive air quality plan will also include a notice for rule making on the mobile source emissions budget.

2. Development of Control Measures

The PM10 SIP includes all control measures necessary to achieve the emissions budget levels for 1995 through 1997 and to ensure that localized violations of the national ambient air quality standard for PM10 will not develop prior to December 31, 1997. However, as the SIP does not extend beyond 1997, it does not include the control measures that may be necessary to achieve later budgeted levels. Additional control measures to reduce mobile source emissions in the years beyond 1997 must become enforceable as set forth in the Ambient Air Standards rule before an MPO may rely on any such reductions in assessing conformity of a future plan or program with the mobile source emissions budgets. This will ensure that no local violations of the national standard will result beyond 1997.

B. *PM10 Precursors*

The Motor Vehicle Emissions Budget for PM10 applies to total primary PM10 emissions and does not include precursor or secondary emissions. A separate Motor Vehicle Emissions Budget for emissions of nitrogen oxides as a precursor to PM10 is established by this Regulation. Available information indicates that SO2 emissions from mobile sources are an insignificant contributor to secondary particulate formation in the Denver area. Therefore, a Motor Vehicle Emissions Budget for SO2 is not established.

C. *Carbon Monoxide*

The RAQC recommended and the AQCC adopted as the Motor Vehicle Emissions Budget for 1995 through 1999 the Denver Nonattainment Area Carbon Monoxide ("CO") SIP's estimation of regional mobile source emissions that will result after implementation of the base programs and measures set forth in Chapter V of the SIP. These measures include 2.7% oxygenated gasoline, the first year of the Enhanced Inspection and Maintenance Program, and the base transportation system network that is in place or will be completed by 1995. For purposes of determining conformity, the budget of 1125 tons per day will remain in effect until the attainment budget takes effect in 2000.

The RAQC recommended establishing the CO mobile source emissions budget for the year 2000 and beyond at 825 tons per day, the level of emissions necessary to demonstrate attainment of the federal CO standard. The AQCC chose to adopt a budget of 808 tons per day when the Denver CO SIP was adopted on June 16, 1994. As part of this Regulation, the RAQC and DRCOG recommended adoption of the originally recommended CO Mobile Vehicle Emissions Budget of 825 tons per day.

D. *Specific Statutory Authority*

The specific statutory authority for this rule is set out at § 25-7-105(1)(a), C.R.S.

**VIII.B. Ozone Redesignation and the Adoption of the Mobile Source Emissions Budgets for Ozone Precursors: VOC and NOX Adopted: March 21, 1996**

The Denver metropolitan area was designated as nonattainment area by the EPA in 1978 for violations of the Ozone National Ambient Air Quality Standard (NAAQS). Pursuant to 185A of the 1990 amendments to the federal Clean Air Act (CAA), the Denver Metro Area was classified as a transitional nonattainment area. The Denver metropolitan area has demonstrated through quality-assured, monitored data from 1993 through 1995 that it has attained the ozone NAAQS. The Regional Air Quality Council has compiled the documentation required by Section 107(d)(3)(E) of the CAA to request redesignation to attainment status.

Included in the requirement for redesignation is a fully approved Maintenance Plan that meets Section 175A of the CAA. Upon approval by the EPA, the Maintenance Plan will become an element of the Colorado State Implementation Plan. The maintenance demonstration was based on future inventories that assumed the continuance of existing VOC controls in the Denver metro area. Such controls include the continued application of Regulation Number 7 to the Denver area.

Federal law does not require the redesignation of the Denver nonattainment area. However, such redesignation is required by state law. Section 25-7-107(2.5). The changes to the Ambient Air Quality Standard regulation are consistent with continued maintenance of the ozone standard and are not otherwise more stringent than the relevant federal requirements.

**Classification of the Denver metropolitan area**

Upon redesignation by the EPA, the classification of the Denver metro area will change from "transitional" to "attainment" for the ozone NAAQS. The Regional Air Quality Council recommended and the Commission adopted a change in classification for the Denver Metro area to attainment maintenance reflecting this change in status. In addition the boundaries of the attainment maintenance are redefined and a map depicting the boundaries is noted. The boundaries and map are the same as the present Denver metro nonattainment area.

The specific statutory authority to redesignate the area is set out in § 25-7-105(1)(a)(I) and (2), -106(1)(a); -107(1) and (2.5); and 25-7-301.



### **Adoption of mobile source emissions budgets**

Section 176(c) of the CAA requires that transportation plans and programs adopted by a metropolitan planning organization conform to the appropriate state implementation plan. Pursuant to EPA regulations implementing Section 176(c), mobile source emissions resulting from such plans and programs ultimately must be consistent with the motor vehicle emissions budget set forth in the applicable SIP.

Without clearly indicated intent otherwise, the SIP's highway and transit mobile source inventory serves as the motor vehicle emissions budget. However, where a SIP quantifies a "safety margin" by which emissions from all sources are less than would be consistent with attainment throughout the region, the state may submit a SIP revision which assigns some or all of this safety margin to the motor vehicle emissions budget for the purposes of conformity determinations.

The most recent revisions to the Denver Ozone SIP were submitted in 1989 and 1990, which was prior to EPA's adoption of the conformity regulations in November 1993, and those revisions did not include explicitly labeled mobile source emissions budgets. The Denver Ozone Maintenance Plan adopted March 21, 1996 notes the intent to establish specific mobile source emissions budgets for the two ozone precursor gases, volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>). The Regional Air Quality Council proposed, and the Commission adopted regional VOC and NO<sub>x</sub> emissions budgets as provide in the rule. Such budgets allocate the "safety margin" in regional emissions to the mobile source emissions budget for purposes of conformity.

The specific statutory authority to establish such budgets is set out in §25-7-105(1)(a)(I).

### **Establishing ozone precursor budgets**

The attainment demonstration is based on monitored data, which demonstrates attainment of the NAAQS during the three-year period, 1993-95. The attainment inventory is the baseline VOC and NO<sub>x</sub> inventory calculated for the 1993 year. The maintenance demonstration for the Denver Ozone Maintenance Plan is based on the future projected VOC and NO<sub>x</sub> maintenance year (2010) inventory being less than or equal to the respective, VOC or NO<sub>x</sub> attainment year (1993) inventory. The projected 2010 inventories take into account projected growth, existing state and local control strategies and additional federal measures and standards mandated by the Clean Air Act Amendments of 1990.

The total 2010 inventory for either precursor does not exceed the total 1993 inventory, therefore demonstrating maintenance of the NAAQS through the year 2010. Then inventory provides a "margin of safety", since the 2010 VOC inventory is about 33 tons per day less than the 1993 attainment inventory and the 2010 NO<sub>x</sub> inventory is about 14 tons per day less than the 1993 attainment inventory.

The emissions budget applies as a ceiling on emission in the year for which it is defined and for all subsequent years until another milestone year for which a different budget is defined.

### **Adopted ozone precursor budgets**

The Regional Air Quality Council recommended that the Commission adopt mobile source emission budgets for ozone precursors, VOC and NO<sub>x</sub> to include the available safety margin in 1993 and in 2010 and beyond.

The adopted mobile source emissions budget is 124 tons per day for VOC in 1993 and 2010 and beyond. For NO<sub>x</sub> the budget is 139 tons per day for 1993, and 135 tons per day is adopted for 2010 and beyond.

### **Findings required pursuant to § 25-7-110.8**

The Commission determines that:

1. The emission inventory and the maintenance demonstration that support the redesignation request are based on reasonably available, validated and sound scientific methodologies. Such inventory and maintenance demonstration were prepared by the Regional Air Quality Council and have been reviewed by the Division. Any validated and sound scientific methodologies and information made available by interested parties has been considered.
2. The rule is administrative in nature in that it redesignates the area as an attainment maintenance area, and will not result in any further reduction in air pollution beyond those reductions that are currently being achieved.
3. The alternative chosen by the Commission is the most cost-effective, provides the regulated community flexibility, and achieves the necessary reduction in air pollution.
4. The alternative chosen by the Commission will maximize the air quality benefits in the most cost-effective manner.

**VIII.C. Redesignation of the Greeley Carbon Monoxide Nonattainment Area to Attainment/Maintenance September 19, 1996**

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Administrative Procedures Act, Section 24-4-103, C.R.S., and the Colorado Air Pollution Prevention and Control Act, Section 25-7-110.5, C.R.S.

**Basis**

Greeley carbon monoxide (CO) nonattainment area has not exceeded the National Ambient Air Quality Standards for CO since 1988. Therefore, the area is eligible for redesignation to attainment status under Section 107 of the federal Clean Air Act. The State of Colorado is formally requesting redesignation, and the adopted redesignation request and maintenance plan for the area will become part of the State Implementation Plan (SIP) upon approval by the U.S. Environmental Protection Agency. The *Ambient Air Quality Standards for the State of Colorado* regulation must be revised to reflect the requested redesignation.

**Authority**

Specific authorities for revising the Ambient Air Quality Standards rule to reclassify the area to attainment are contained in the Colorado Air Pollution Prevention and Control Act, Sections 25-7-105 (1) and (2), 25-7-106(1)(a), and 25-7-107(1), (2.5), and (4). Additional authorities are contained in Sections 25-7-302 regarding SIP contents and 25-7-109 (2)(c) regarding the authority to regulate CO.

**Purpose**

The revisions to the Ambient Air Quality Standards regulation will implement the redesignation of the Greeley CO nonattainment area to attainment. The rule revisions become effective upon EPA's approval of the redesignation request and the accompanying maintenance plan. The purpose of this delay in the effective date of this rule revision is to comply with the requirement of 175 A(c) that all applicable nonattainment area requirements shall remain in place pending EPA approval. The changes to the Ambient Air Quality Standards regulation are as follows:

1. Revise the classification of the area to "Attainment/Maintenance" ; and
2. Update the map of the area with a more legible version (the boundaries of the area remain unchanged).

The overall effect of these rule changes will be to relax some of the applicable requirements for stationary source permitting and for transportation planning. These amendments to the rules are not specifically intended to reduce air pollution and, therefore, the findings of Section 25-7-110.8(1) C.R.S. are inapplicable.

### **Federal Requirements**

Redesignation to an attainment area is authorized but not strictly required by the federal Act. However, expeditious action to redesignate the area as an attainment area is required by Section 25-7-107(2.5) C.R.S. In order to be meaningful, such a redesignation must be submitted to the EPA as a SIP revision. The rule amendments are not otherwise more stringent than the requirements of the federal Act.

### **VIII.D. Steamboat Springs PM10 State Implementation Plan Element October 17, 1996**

This Statement of Basis, Specific Statutory Authority, and Purpose complies with the requirements of the Administrative Procedures Act, Section 24-4-103 C.R.S. and the Colorado Air Pollution Prevention and Control Act, Section 25-7-110.5, C.R.S.

#### **Basis**

Section 172 of the federal Clean Air Act requires that control measures and contingency measures be adopted as part of nonattainment area state implementation plans. The Colorado Attorney General's Office has determined that any emission control measure for a nonattainment area must be adopted as a State regulation in order for the measure to be enforceable by the State of Colorado.

The Steamboat Springs area is designated as nonattainment for fine particulate matter (PM10). In the Steamboat Springs State Implementation Plan (SIP) Element (September 1995), the State of Colorado committed to adopt additional control measures that allow the area to demonstrate continued maintenance of the PM10 National Ambient Air Quality Standards (NAAQS), and contingency measures that could be implemented in the future if the area fails to attain the PM10 NAAQS by the required date. The *State Implementation Plan-Specific Regulations for Nonattainment Areas* has been revised to include these measures. Also, the *Ambient Air Quality Standards for the State of Colorado* regulation has been revised to reflect the correct name of the nonattainment area and to include emission budgets that are utilized in transportation planning efforts.

#### **Authority**

General authority for revising the *Ambient Air Quality Standards* ... to change the name of the nonattainment area and to adopt the emission budgets is contained in the Colorado Air Pollution Prevention and Control Act, Section 25-7-105 (1). General and specific authorities for revising the *SIP-Specific Regulations* ... to adopt the emission control measures and the contingency measures are contained in Sections 25-7-105 (1), 25-7-106(1)(c), and 25-7-109(1) and (2).

#### **Purpose**

Administrative changes to the *Ambient Air Quality Standards* ... regulation are as follows:

1. Revise the name of the nonattainment area from "Routt County" to "Steamboat Springs", making the regulation consistent with the Steamboat Springs PM10 SIP Element; and
2. Establish PM10 mobile source emission budgets for Steamboat Springs modeling area for the periods "1999-2001" and "2002 and Beyond" for use in making transportation conformity determinations.

Paved road dust is a primary source of PM10 emissions in the Steamboat Springs nonattainment area. Revisions to the *SIP-Specific Regulations* ... to control paved road dust are as follows:

1. The previously adopted “one percent” specification for fine materials contained in street sand is changed to “two percent” . This change was originally requested by the City of Steamboat Springs in order to provide the City with the maximum flexibility for providing safe streets during winter driving conditions. This revision will increase PM10 emissions, but the increase is more than offset by the street sweeping activities described below.
2. In order to show continued attainment and maintenance of the PM10 National Ambient Air Quality Standards (NAAQS), the City of Steamboat Springs must increase the frequency of street sweeping on Lincoln Avenue. Sweeping must occur at least once each day following each street sanding deployment (weather and road conditions permitting) until the City has swept Lincoln Avenue at least four times, instead of once after each sanding deployment as previously required. The City requested this increase in sweeping frequency in order to compensate for increased emissions that resulted from changing the street sand specification, and to provide emission reductions necessary to demonstrate continued maintenance with the PM10 NAAQS.
3. Within two months following a determination that the Steamboat Springs nonattainment area has failed to attain the PM10 NAAQS or show reasonable further progress, the City must sweep additional sections of Lincoln Avenue and all other City streets within a defined area of central Steamboat Springs within four days following each street sanding deployment (weather and road conditions permitting). This sweeping constitutes the federally required contingency measures for the Steamboat Springs nonattainment area.

## **Findings**

The Air Quality Control Commission makes the following findings pursuant to C.R.S. Section 25-7-110.8(1).

First, the rule revisions are based on reasonably available, validated, reviewed and sound scientific methodologies. The emission inventories that establish the emission budgets, and the monitoring, inventories, and dispersion modeling that indicate the need for control measures and their effectiveness in reducing PM10 emissions, were developed/performed in accordance with published guidance from EPA. Monitoring activities in Steamboat Springs are conducted in compliance with the EPA regulations of 40 CFR Part 58. Emission inventories were developed in accordance with EPA guidance found in “ AP-42”, the “SIP Development Guideline Document” , and the “Control of Open Fugitive Dust” document. Dispersion modeling using the “WYND valley” model was performed in accordance with EPA's “Supplement B to the Guideline on Air Quality Models” .

Second, the street sweeping revisions to the *SIP-Specific Regulations* ... shall result in a demonstrable reduction in air pollution due to the removal of street sand and background paved road dust from the streets. The amount of reductions relied upon in the SIP Element's attainment demonstration are supported by the EPA guidance documents cited above. The emission budgets in the *Ambient Air Quality Standards* ... regulation will result in PM10 emission reductions in the area by limiting growth from the mobile sources sector to 2002 levels (for the purposes of “transportation conformity” determinations - federal transportation conformity regulations of 40 CFR Subpart T). As a result, federally funded or approved projects will have to offset any additional growth in mobile source emissions.

Third, street sweeping is cost-effective in this case because the City is already conducting some of the sweeping in this rule. Other alternatives, such as alternative deicers and sand reduction plans, were not considered viable because of concerns about public safety during winter driving conditions. The potentially lower cost alternative of one percent fines was not adopted because the City of Steamboat Springs preferred this control measure.

Therefore, it is assumed that the street sweeping controls and the emission budget are the most cost effective alternative, and the rule revisions maximize air quality benefits in the most cost effective manner.

### **Federal Requirements**

The adoption of control measures, contingency measures, and emission budgets are required by federal regulations, and the federal regulations allow the State flexibility in determining what the measures and budgets should be. These measures and budgets will be submitted to the EPA as a SIP revision. The rule amendments are not otherwise more stringent than the requirements of the federal Act.

### **VIII.E. Redesignating Canon City/Fremont County PM10 Nonattainment Area to Attainment and Establishing a New Emissions Budget for the area for 1997 through 2015. Adopted October 17, 1996**

#### **Background**

This statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Administrative Procedures Act, C.R.S. 1973, Section 24-4-103(4) for adopted or modified regulations. Because the Canon City/Fremont County nonattainment area qualifies for redesignation to attainment/maintenance status, continuation of "nonattainment" status would keep in effect unnecessarily burdensome requirements for the area's the public and private sectors. Rule changes corresponding to redesignation are not more stringent than federal requirements.

#### **Basis**

The Canon City/Fremont County PM10 Nonattainment area has never violated the National Ambient Air Quality Standards for PM10, and has not had an exceedance in eight years (since May of 1988). Therefore the area is eligible for redesignation to attainment status under Section 107 of the federal Clean Air Act as amended. Colorado is formally requesting redesignation and proposing a maintenance plan for the area, which will become that area's portion of the State Implementation Plan (SIP) upon USEPA approval. The *Ambient Air Standards for the State of Colorado* rule must be revised to reflect the SIP changes.

#### **Authority**

General authority for the *Ambient Air Standards* rule is contained in the Colorado Air Pollution Prevention and Control Act. Sections 25-7-105 (1) and (2). Specific authority is found at Sections 25-7-107 (2.5), regarding expeditious redesignation; and 25-7-302, regarding SIP contents. Commission action in promulgating these revisions is taken pursuant to Sections 25-7-105(1)(a), regarding establishment of emissions budgets; 25-7-106 (1)(a), regarding redesignations; 25-7-109(2)(b), regarding the authority to regulate particulate matter.

#### **Federal Requirements**

Redesignation to an attainment area is authorized but not strictly required by the federal act. However, expeditious action to redesignate the area as an attainment area is required by State statute (25-7-107(2.5)). In order to be meaningful such redesignation must be submitted to EPA as a SIP revision, and, in fact, Section 25-7-107(4) compels that it be submitted to EPA. Federal law requires the establishment of a motor vehicle emissions budget in the SIP, either explicitly by identifying such an emissions budget or implicitly in the maintenance demonstration. The emissions budget required by Federal law must be consistent with the maintenance of the NAAQS. This rule explicitly establishes such an emissions budget as a regulation as required by 24-4-103(1), C. R.S. The motor vehicle emissions budget established in the rule is consistent with continued maintenance of the NAAQS and therefore complies with, and does not exceed, this federal requirement.

## Purpose

Expeditious action to redesignate to attainment status is taken pursuant to 27-7-107(2.5), C.R.S.

The proposed revisions to the *Ambient Air Standards for the State of Colorado* would implement changes to be made to the State Implementation Plan via redesignation to attainment for PM<sub>10</sub> and adoption and approval of the maintenance plan for the Canon City/Fremont County area. The rule revisions would relax certain requirements for the area. The purpose of an increased mobile source emissions budget is to provide greater flexibility in making transportation conformity findings, and to maintain a reasonable margin for accommodation of uncertainty and future growth. NOTE: Excepting the increase in the area's mobile source emissions budget, the rule revisions would take effect only upon published USEPA approval of redesignation and of the maintenance plan. The changes to the *Ambient Air Standards* would be as follows:

1. Page 12: Changing the Canon City/Fremont County classification from "Moderate" (nonattainment area) to: "Attainment/Maintenance" for the PM<sub>10</sub> NAAQS. This change does not take effect until request/plan is approved by USEPA.
2. Map page 19: Changing the Canon City/Fremont County area map from "nonattainment" to "attainment/maintenance" for PM<sub>10</sub>. This change does not take effect until request/plan is approved by USEPA.
3. Page 23: Motor Vehicle Emission Budget for the area would increase from 5,130 lbs./day to 7,439 lbs./day for 1997 and beyond.

## Overall Effect

The overall effect of these rule changes will be to relax the applicable regulations. These amendments to the rules are not specifically intended to reduce air pollution and, therefore, the findings in 25-7-110.8(1) are inapplicable.

## VIII.F. Longmont Nonattainment Area Redesignation as an attainment area for carbon monoxide (CO) Adopted: December 18, 1997

### Federal Requirements

42 USC § 7407 (d)(3) provides that the State may request redesignation to attainment status for areas of the State that qualify for such redesignation based on air quality data, planning and control considerations. In order for the EPA to approve of such a redesignation request, § 42 USC § 7407(d)(3)(E) and 7505a require the State to submit a maintenance plan that includes enforceable control measures, will provide for maintenance of the standard for ten years following the approval of the redesignation request, and that complies with the requirements of 42 USC § 7410.

EPA policy implementing federal law on maintenance plans gives the State a choice between two options. Under the first option, the State may develop a simplified maintenance plan based on a comparison of base-year and future-year emissions inventories. Such a maintenance plan is acceptable if the future-year emissions are less than the emissions in the base-year. However, this option is available only if the maintenance plan includes all of the control measures that were included in the attainment SIP for the area. Under the second option, the State may eliminate control measures from the maintenance plan, provided that the maintenance plan demonstrates maintenance of the NAAQS without such control measures. Such a maintenance demonstration must be supported by dispersion analysis or some other form of air quality modeling.

The rule change adopted by the Commission is based on a maintenance plan with a design value of 5.5 parts per million (ppm). This design value is well below the NAAQS of 9.0 ppm, and suggests that the

State may be able to eliminate some control measures from the maintenance plan. However, the State has not performed the level of air quality modeling adequate to justify removal of control measures from the maintenance plan. Therefore, the State cannot use the second option at this time. The rule change is supported by a maintenance plan that is based on the first option. Such a maintenance plan must include all of the control measures that were included in the attainment SIP in order to comply with federal requirements. Furthermore, the State may not eliminate the oxygenated fuels program from the Longmont maintenance area because Longmont is part of the Denver consolidated metropolitan statistical area. 42 USC 7512a(b)(3). Therefore, the rule adopted by the Commission does not differ or exceed federal requirements.

### **Statutory Authority**

Specific statutory authority for the redesignation of the Longmont area as an attainment area is provided in § 25-7-107(1).

### **Findings pursuant to § 25-7-110.8**

The rule change adopted by the Commission on October 16, 1997 does not include the adoption of any additional control measures intended to reduce air pollution. The Commission's action merely changes the status of the Longmont nonattainment area, and assigns the safety margin to mobile sources. This rule change provides flexibility for the community by establishing a Basis for redesignation of the area as an attainment area, and by allocating the safety margin to the mobile source sector for purposes of transportation conformity determinations. In the meantime, the Commission has initiated a process for evaluating whether control measures such as the Automobile Inspection and Readjustment Program are still necessary to maintain the NAAQS for CO in Longmont and other communities in Colorado. In this way the rule change provides greater flexibility in the near term while the Commission continues to evaluate its options for reducing air pollution and maintaining the NAAQS in the most cost-effective manner.

The Commission has also considered the factors described in § 25-7-109(1)(b) in adopting these revisions.

### **VIII.G. Colorado Springs Nonattainment Area Redesignation as an attainment area for carbon monoxide (CO), and to establish an emissions budget that allocates a portion of the safety margin to the mobile source sector Adopted: January 15, 1998**

### **Federal Requirements**

42 USC §7407(d)(3) provides that the State may request redesignation to attainment status for areas of the State that qualify for such redesignation based on air quality data, planning and control considerations. In order for the EPA to approve of such a redesignation request, § 42 USC § 7407(d)(3)(E) and 7505a require the State to submit a maintenance plan that includes enforceable control measures, will provide for maintenance of the standard for ten years following the approval of the redesignation request, and that complies with the requirements of 42 USC §7410.

EPA policy implementing federal law on maintenance plans generally gives the State a choice between two options. Under the first option, the State may develop a simplified maintenance plan based on a comparison of base-year and future-year emissions inventories. Such a maintenance plan is acceptable if the future-year emissions are less than the emissions in the base-year. As a general rule, this option is available only if the maintenance plan includes all of the control measures that were included in the attainment SIP for the area.



However, pursuant to a memo the EPA sent the Division on October 10, 1997, the State was able to eliminate the Clean Air Campaign and RIDEFINDERS from the Colorado Springs carbon monoxide maintenance SIP by supplementing the emission inventory comparison with additional modeling. EPA concurred that these two SIP elements (RIDEFINDERS and the Clean Air Campaign) may be deleted in accordance with its maintenance SIP policy. Under the second option, the State may eliminate control measures from the maintenance plan, provided that the maintenance plan demonstrates maintenance of the NAAQS without such control measures. Such a maintenance demonstration must be supported by adequate air quality modeling or analysis.

There is reason to believe that the state may be able to eliminate either the oxygenated fuels program or the motor vehicle inspection and maintenance program, and still demonstrate maintenance of the NAAQS for carbon monoxide for the Colorado Springs area. However, the State has not performed the air quality modeling necessary to justify removal such control measures. Therefore, the State cannot use the second option at this time. The rule change is supported by a maintenance plan that is based on the first option. Such a maintenance plan must include all of the control measures that were included in the attainment SIP in order to comply with federal requirements. EPA has concurred with the Division's and the Pikes Peak Area Council of Governments' inventory and supplemental modeling was adequate to support the removal of the RIDEFINDERS and Clean Air Campaigns from the Colorado Springs carbon monoxide maintenance SIP because these control strategies will not impact maintenance of the NAAQS.

### **Statutory Authority**

Specific statutory authority for the redesignation of the Colorado Springs area as an attainment area is provided in §25-7-107(1).

### **Findings pursuant to §25-7-110.8**

The rule change adopted by the Commission on January 15, 1998 does not include the adoption of any additional control measures intended to reduce air pollution. The Commission's action merely changes the status of the Colorado Springs nonattainment area, and allocates a portion of the safety margin in the year 2010 to the mobile source sector.

The redesignation of the area was based on reasonably available, validated, reviewed and sound scientific methodologies, which are described in the maintenance plan narrative and the Final Emission Inventories for the Colorado Springs, Colorado, Carbon Monoxide Nonattainment Area Redesignation Plan. Such documents have been available for public review in draft form for several months, and have been revised in response to comments and review. Final documents were available thirty days prior to the hearing.

The redesignation of the Colorado Springs area as an attainment area is the most cost-effective alternative. Such redesignation provides the regulated community with flexibility, yet maintains the National Ambient Air Quality Standard (NAAQS) for carbon monoxide.

### **Contested issues**

The maintenance plan associated with the rule change does not include two control measures (RIDEFINDERS and the Clean Air Campaign) that were previously included in the State Implementation Plan (SIP). Several parties to the hearing objected to the removal of these measures from the SIP. The Commission voted to remove the RIDEFINDERS and the Clean Air Campaign from the mandatory sections of the SIP in deference to the request of the Pikes Peak Area Council of Governments, the lead air quality-planning agency for the Colorado Springs area, pursuant to CRS §25-7-105(1)(a)(II). These measures are not necessary to maintain the NAAQS and are not otherwise federally required. Therefore, pursuant to §25-7-105.1, these measures should not be included in the maintenance plan. Furthermore, these control measures were not implemented by rule. Accordingly no rule change is necessary to remove such measures from the SIP.

As indicated above, the Commission chose to redesignate the area by comparing the base-year and future-year inventories, and the Division did not perform air quality modeling adequate to justify the removal of the oxygenated fuels program from the SIP. Several parties urged the removal of the oxygenated fuels program from the plan. However, such revision of the plan would have delayed the redesignation of the area pending further air quality analysis, and would have required substantial revisions to the maintenance plan. The Colorado Springs area would remain a nonattainment area in the meantime. The Commission has initiated a process for evaluating whether control measures such as the oxygenated fuels program and the Automobile Inspection and Readjustment (I/M) Program are still necessary to maintain the NAAQS for CO in the Colorado Springs area and other communities in Colorado. For these reasons, the Commission has decided to approve of the maintenance plan and to redesignate the area, but also agrees that the evaluation of the need for the control measures should be expedited. PPACG has proposed that the Air Pollution Control Division expedite analyses of whether oxygenated fuels program is necessary to demonstrate maintenance of the carbon monoxide NAAQS in the Colorado Springs area. This evaluation is consistent with the Division's ongoing consideration of future carbon monoxide control strategies for Colorado's Front Range, and PPACG suggests that an expedited Colorado Springs evaluation could provide valuable information and experience for other areas eligible for redesignation to attainment status. This evaluation shall include both 1990 and 1993 base-years.

The APCD will report its progress to the PPACG and the Air Quality Control Commission in writing in March and June 1998, and will submit the results of said analyses to PPACG and other interested parties.

The PPACG has agreed to review the information, and will make an initial determination regarding whether oxygenated fuels are necessary to maintain the federal carbon monoxide NAAQS within 90 days of receipt of the technical analysis. If the oxygenated fuels program is not necessary to maintain the federal CO standards, PPACG has agreed to petition the Commission for revision of Regulation 13 and the Colorado Springs maintenance plan to reduce the oxygen content requirement or recategorize that program as a "contingency measure," as appropriate in light of the analyses. Similarly, the Division and other interested persons may petition for revisions to the I/M program, or removal of such program from the State Implementation Plan.

Based on this schedule, the Technical Secretary to the Commission has agreed to amend the Commission's long-term schedule and tentatively to set a hearing date as requested by the PPACG as early as practical.

Several parties also objected to the process used by Pikes Peak Area Council of Governments (PPACG) to develop the maintenance plan. The procedure used by the PPACG to develop the maintenance plan complied with the minimum requirements of the Intergovernmental Coordination and Public Involvement process ("the ICPI") contained in the 1982 Colorado Springs Element of the Carbon Monoxide State Implementation Plan (Including the 1993 and 1994 revisions) ("the Colorado Springs attainment SIP").

The primary complaint lodged by the parties is that the PPACG did not adequately consult with the Air Quality Technical Committee (AQTC). However, it appears that the staff of the PPACG consulted with the AQTC, and did so most recently on October 22, 1997 and November 18, 1997. In addition, members of the AQTC presented their complaints to the PPACG in September 1997. Pursuant to the Colorado Springs Attainment SIP, the PPACG is the lead agency for air quality planning and the AQTC is merely an advisory committee. The PPACG is not required to heed the advice of the AQTC. The consultation with AQTC complied with the minimum requirements of the ICPI.

The parties also complain that the maintenance plan had to be approved by the Urban Area Planning Council (UAPC), rather than the PPACG's Board of Directors. However, nothing in the Colorado Springs Attainment SIP implies that the PPACG Board of Directors does not have the authority to develop the maintenance plan. The Colorado Springs Attainment SIP identifies the PPACG as the lead air quality-planning agency, and identifies the UAPC as the Metropolitan Planning Agency for transportation matters, unless objected to by the PPACG. Colorado Springs Attainment SIP, Appendix A. The UAPC is advisory to the PPACG on all other matters, including air quality planning. Id.

Furthermore, according to Ken Prather of PPACG, the UAPC recommended approval of the maintenance plan and redesignation request.

The agreements and schedules set out in this Statement of Basis, Specific Statutory Authority, and Purpose shall not be included in the SIP, and this statement of basis, specific statutory authority and purpose shall not be construed to create enforceable requirements.

#### **VIII.H. Total Suspended Particulate Matter Revocation Adopted: September 17, 1998**

The Commission revoked the Colorado ambient air quality standard for Total Suspended Particulate matter to conform Colorado's standards to the current National Ambient Air Quality Standards for Particulate Matter adopted by the U.S. Environmental Protection Agency.

#### **Federal Requirements**

The State ambient standard for TSP is based on the National Ambient Air Quality Standard (NAAQS) for TSP that the Environmental Protection Agency ("EPA") repealed in 1987 in favor of the NAAQS for particulate matter less than ten microns in diameter (PM<sub>10</sub>). The NAAQS for PM<sub>10</sub> is less stringent than the State ambient standard for TSP. The repeal of the TSP standard will ensure that Colorado's ambient air quality standards for particulate matter meet, but do not exceed, federal requirements.

The federal government no longer has an ambient air quality standard for particulate matter as TSP. Standards for the PM<sub>10</sub> and PM<sub>2.5</sub> size ranges have been adopted instead. EPA believes that PM<sub>10</sub> and PM<sub>2.5</sub>, the smaller diameter particles, can travel deeper into the lungs than TSP, and has found that the NAAQS for PM<sub>10</sub> and PM<sub>2.5</sub> adequately protect public health. The federal Clean Air Act requires Colorado to adopt the new federal standards, which regulate particulate matter as PM<sub>10</sub> and PM<sub>2.5</sub>. Retention of the state TSP standard would regulate particulate matter in all three-size ranges. The regulation of particulate matter in all three-size ranges is not necessary, and is not cost-effective.

The repeal of the ambient air quality standard for TSP shall be submitted to EPA as a SIP revision.

#### **Statutory Authority**

Section 25-7 108, C.R.S., authorizes the Commission to revoke the TSP ambient air quality standard. This section allows the Commission "to adopt, promulgate, amend, and modify such standards for the quality of ambient air as may be appropriate or necessary."

#### **Findings Pursuant to Colorado Revised Statutes 25-7-110.8**

This rule change does not include the adoption of any additional control measures intended to reduce air pollution. The Commission's action merely revokes an ambient air quality standard that is not federally required.

#### **VIII.I. Denver metropolitan nonattainment area redesignation as an attainment area for carbon monoxide Adopted: January 10, 2000**

The amendments to the "Ambient Air Quality Standards for the State of Colorado" Regulation adopted by the Commission change the air quality classification of the Denver area for carbon monoxide. The purpose of this rule change is to implement the direction in Section 25-7-107 (2.5), C.R.S. to take expeditious action to redesignate the area as attainment for carbon monoxide (CO).

The amendments also revise the mobile source emissions budget used to determine whether transportation plans and projects conform to the State Implementation Plan.

## **Federal Requirements**

42 USC Section 7407(d)(3) provides that the State may request redesignation to attainment status for areas of the State that qualify for such redesignation based on air quality data, and planning and control considerations. In order for the EPA to approve of such a redesignation request, 42 USC Sections 7407(d)(3)(E) and 7505a require the State to submit a maintenance plan that will provide for maintenance of the standard for ten years following the approval of the redesignation request. The federal requirements for preparation, adoption and submittal of implementation plans, including the maintenance plan, are set out at 40 CFR, Part 51.

The maintenance plan adopted by the Commission includes an oxygenated fuels program and an Automobile Inspection and Readjustment Program as necessary to maintain the National Ambient Air Quality Standards (NAAQS) for carbon monoxide through the year 2013. The year 2013 is approximately ten years following the anticipated date of EPA approval of the maintenance plan.

The federal requirements for emissions budgets are set out at 42 USC Section 7506(c) and 40 CFR 93.124. The emissions budget establishes a test for determining whether transportation plans or projects may cause or contribute to a violation of the NAAQS. The emissions budget contained in the maintenance plan is based on the mobile source emission inventories supporting the maintenance demonstration.

The maintenance plan does not include any provisions that are not required by provisions of the federal act or that are otherwise more stringent than requirements of the federal act.

## **Statutory Authority**

Specific statutory authority for the redesignation of the Denver area as an attainment area is provided in Section 25-7-107, C.R.S. (1999).

## **Findings pursuant to § 25-7-110.8**

The mobile source emissions budget is the only control included in the amendments that will operate to reduce air pollution. The emissions budget establishes a cap on mobile source emissions and is administered through the transportation conformity regulations. Air Quality Control Commission Regulation Number 10, Part B; 40 CFR Part 93. The December 16, 1999 rule amendments reduced the mobile source emissions budget from 825 tons per day to 800 tons per day.

The revisions are based on the computer model currently approved by the EPA. The computer model used to develop the revised rule overstates the air quality benefits of some of the control programs in the SIP. The EPA is currently updating and improving the computer model but the revised computer model has not been approved by EPA and may not be used for federal regulatory purposes. In spite of the problems with the computer model used to develop this regulation, the regulation is based on the most reasonably available, validated, reviewed and sound scientific methodologies currently available under federal law. All methodologies and information made available by interested parties have been considered.

The alternative to the redesignation of the Denver area to an attainment area is to for the Denver area to remain a nonattainment area for carbon monoxide. Redesignation to attainment is the more cost-effective alternative. Redesignation provides the regulated community with more flexibility and achieves the reductions in air pollution necessary to maintain the NAAQS. There is no viable alternative to limiting mobile source emissions to 800 tons per day in the year 2013. Mobile source emissions can be effectively controlled using the measures described in the maintenance plan to keep mobile source emissions below the emissions budget. Thus, the revision to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

#### **VIII.J. Colorado Springs Adopted: February 17, 2000**

The amendments to the “Ambient Air Quality Standards for the State of Colorado” Regulation adopted by the Commission revise the mobile source emissions budgets for the Colorado Springs area. The emissions budget is to determine whether transportation plans and projects conform to the State Implementation Plan.

#### **Federal Requirements**

The federal requirements for emissions budgets are set out at 42 USC 7506(c) and 40 CFR 93.124. The emissions budget establishes a test for determining whether transportation plans or projects may cause or contribute to a violation of the national ambient air quality standard (NAAQS). The emissions budget for Colorado Springs is based on the mobile source inventory for the year 1990. The previous emissions budget, which was adopted in January 1998, was based on the mobile source inventory for the year 1993. Some parties to the January 1998 hearing urged the Commission to adopt an emissions budget based on 1990, rather than 1993, mobile source emissions. The Commission did not have sufficient data or evidence at the January 1998 hearing to establish an emissions budget based on the 1990 base year. Therefore, the Commission adopted an emissions budget based on the 1993 base year and directed the Division to evaluate the request to establish an emissions budget based on 1990 mobile source emissions. Colorado Springs was in attainment of the national standard in both 1990 and 1993 but mobile source emissions were significantly higher in 1990 than in 1993. As authorized by federal regulations, this revision establishes a higher emissions budget for mobile sources based on the 1990 mobile source inventory.

The regulatory revisions do not include any provisions that are not required by provisions of the federal act or that are otherwise more stringent than requirements of the federal act.

#### **Statutory Authority**

The authority to establish emissions budgets is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (1999).

#### **Findings pursuant to Section 25-7-110.8**

The emissions budget establishes a cap on mobile source emissions and will be administered through the transportation conformity regulations. Air Quality Control Commission Regulation Number 10, Part B; 40 CFR Part 93. The change increases the emissions budget, and thus increases the allowable emissions from mobile sources.

The carbon monoxide emissions budget is based on the computer model currently approved by the EPA. The computer model used to develop the revised rule overstates the air quality benefits of some of the control programs in the SIP. The EPA is currently updating and improving the computer model but the revised computer model has not been approved by EPA and may not be used for federal regulatory purposes. In spite of the problems with the computer model used to develop this regulation, the regulation is based on the most reasonably available, validated, reviewed and sound scientific methodologies currently available under federal law. All methodologies and information made available by interested parties have been considered.

The revisions to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

**VIII.K. Denver, Ozone Maintenance Plan Adopted: January 11, 2001**

The amendments to the Ambient Air Quality Standards for the State of Colorado revise the mobile source emissions budgets for ozone precursors in the Denver metropolitan area. The emissions budgets are used to determine whether transportation plans and projects conform to the State Implementation Plan.

**Federal Requirements**

The federal requirements for emissions budgets are set out at 42 USC 7506(c) and 40 CFR 93.124. The emissions budget establishes a test for determining whether transportation plans or projects may cause or contribute to a violation of the national ambient air quality standard (NAAQS).

The maintenance plan must include emission budgets for ozone precursors, but the federal rules allow the State some discretion in setting the emissions budgets. The State may set an emission budget equal to the projected emissions from motor vehicles in the last year of the maintenance plan. Alternatively, the State may establish a higher emissions budget for mobile sources if the area could tolerate such higher emissions without exceeding the relevant NAAQS. 40 CFR 93.124. The Denver area can tolerate additional mobile source emissions of ozone precursors. The emissions budgets established in this rulemaking make this entire amount of additional emissions available to DRCOG and CDOT for conformity purposes. The rule revision is not more stringent than requirements of the federal act.

**Statutory Authority**

The authority to establish emissions budgets is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (1999).

**Findings pursuant to Section 25-7-110.8**

The emissions budgets are based on EPA-approved models and assumptions for estimating emissions from mobile sources. The Commission believes the EPA-approved model is inaccurate, but federal rules require the State to use such model to demonstrate the adequacy of the maintenance plan. Thus, the rule revision is based on the only scientific methodology authorized for use by federal law. All methodologies and information made available by interested parties have been considered.

The revisions to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

**VIII.L. Pagosa Springs and Telluride PM10 Adopted: March 16, 2001**

The amendments to the "Ambient Air Quality Standards" for the State of Colorado Regulation adopted by the Commission change the air quality classifications of the Pagosa Springs area and the Telluride area for particulate matter. The purpose of this rule change is to implement the direction in Section 25-7-107 (2.5), C.R.S. (1999) to take expeditious action to redesignate the areas as attainment for particulate matter less than ten microns in diameter (PM10). The Commission also adopted simultaneous revisions to the "State Implementation Plan Specific Regulations for Nonattainment - Attainment/Maintenance Areas" to repeal obsolete control measures, contingency measures, and reporting requirements.

The amendments to the "Ambient Air Quality Standards" for the State of Colorado also revise the mobile source emissions budgets for the Pagosa Springs and Telluride areas. The emissions budgets are used to determine whether transportation plans and projects conform to the State Implementation Plan.

## **Federal Requirements**

42 USC 7407(d)(3) provides that the State may request redesignation to attainment status for areas of the State that qualify for such redesignation based on air quality data, and planning and control considerations. In order for the EPA to approve such a redesignation request, 42 USC Sections 7407(d)(3)(E) and 7505a require the State to submit a maintenance plan that will provide for maintenance of the standard for ten years following the approval of the redesignation request. The federal requirements for preparation, adoption and submittal of implementation plans, including the maintenance plan, are set out at 40 CFR, Part 51. The maintenance plans adopted by the Commission will maintain the national standard for PM<sub>10</sub> in Pagosa Springs and Telluride for the requisite ten-year period.

The federal requirements for emissions budgets are set out at 42 USC 7506(c) and 40 CFR 93.124. The emissions budget establishes a test for determining whether transportation plans or projects may cause or contribute to a violation of the national ambient air quality standard (NAAQS). The emissions budgets for Telluride and Pagosa Springs are based on the roll-forward analyses that support the maintenance demonstrations.

The regulatory revisions do not include any provisions that are not required by provisions of the federal act or that are otherwise more stringent than requirements of the federal act.

## **Statutory Authority**

Specific statutory authority to redesignate areas to attainment is provided in Section 25-7-107, C.R.S. (1999). The authority to establish emissions budgets is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (1999).

## **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are the only control measures included in the amendments that will operate to reduce air pollution. The emissions budgets establish caps on mobile source emissions and are administered through the transportation conformity regulations. Air Quality Control Commission Regulation Number 10, Part B; 40 CFR Part 93. For Pagosa Springs, the change increases the emissions budget, and thus increases the allowable emissions from mobile sources. The rule revisions decrease the allowable mobile source emissions of PM<sub>10</sub> in Telluride.

The emissions budgets for PM<sub>10</sub> for Pagosa Springs and Telluride are also based on EPA-approved models and assumptions for estimating PM<sub>10</sub> emissions from mobile sources. The Commission believes the EPA-approved model is inaccurate, but federal rules require the State to use such model to demonstrate the adequacy of the maintenance plan. In spite of the problems with the computer model used to develop the regulation, the regulation is based on the most reasonably available, validated, reviewed and sound scientific methodologies currently available under federal law. All methodologies and information made available by interested parties have been considered.

The alternative to the redesignation of the Pagosa Springs and Telluride areas to attainment is for them to remain PM<sub>10</sub> nonattainment areas. Redesignation to attainment is the more cost-effective alternative. Redesignation provides the regulated community with more flexibility and achieves the reductions in air pollution necessary to maintain the NAAQS. The revisions to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

#### **VIII.M. Denver Metropolitan Area, Redesignation to Attainment for PM10 Adopted: April 19, 2001**

The amendments to the “Ambient Air Quality Standards for the State of Colorado” Regulation adopted by the Commission change the air quality classification of the Denver metropolitan area for particulate matter. The purpose of this rule change is to implement the direction in Section 25-7-107 (2.5), C.R.S. (1999) to take expeditious action to redesignate the area as attainment for particulate matter less than ten microns in diameter (PM10). In conjunction with this redesignation, the Commission revised Regulation Number 16, “Street Sanding Emissions” to implement the control measures necessary to maintain the national standard for PM10 for at least ten years.

The change in the classification of the Denver area affects the regulatory requirements applicable to stationary sources. For most types of sources, the threshold for determining whether or not a source is a “major stationary source” for PM, NO<sub>x</sub> or SO<sub>2</sub> increases from 100 tons-per-year to 250 tons-per-year. Similarly, the requirements for new major stationary sources to use the lowest achievable emissions rate, and to obtain offsets, are relaxed. The rule change adopted by the Commission, however, maintains existing requirements in Regulation Number 3 for minor sources in the Denver area to use reasonably available control technology. The Commission intends, however, to review this requirement when it reviews Regulation Number 3.

The amendments to the “Ambient Air Quality Standards for the State of Colorado” also revise the PM10 mobile source emissions budget for the Denver metropolitan area. The emissions budget is used to determine whether transportation plans and projects conform to the State Implementation Plan.

#### **Federal Requirements**

42 USC 7407(d)(3) provides that the State may request redesignation to attainment status for areas of the State that qualify for such redesignation based on air quality data, and planning and control considerations. In order for the EPA to approve such a redesignation request, 42 USC Sections 7407(d)(3)(E) and 7505a require the State to submit a maintenance plan that will provide for maintenance of the standard for ten years following the approval of the redesignation request. The federal requirements for preparation, adoption and submittal of implementation plans, including the maintenance plan, are set out at 40 CFR, Part 51. The maintenance plans adopted by the Commission will maintain the national standard for PM10 for the requisite ten-year period.

The federal requirements for emissions budgets are set out at 42 USC 7506(c) and 40 CFR 93.124. The emissions budget establishes a test for determining whether transportation plans or projects may cause or contribute to a violation of the national ambient air quality standard (NAAQS). The emissions budget is based on the analysis that supports the maintenance demonstration.

The regulatory revisions do not include any provisions that are not required by provisions of the federal act or that are otherwise more stringent than requirements of the federal act.

#### **Statutory Authority**

Specific statutory authority to redesignate areas to attainment is provided in Section 25-7-107, C.R.S. (1999). The authority to establish emissions budgets is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (1999).



### **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are the only control measures included in the amendments to the Ambient Air Quality Standards rule that will operate to reduce air pollution. The reference to Regulation Number 3 added to the Ambient Air Quality Standards merely maintains the *status quo*; it does not establish any new requirement. The emissions budgets establish caps on mobile source emissions and are administered through the transportation conformity regulations. Air Quality Control Commission Regulation Number 10, Part B; 40 CFR Part 93. By capping mobile source emissions at a prescribed limit, the emission budget could result in a demonstrable reduction in air pollution.

The emissions budgets are based on EPA-approved models and assumptions for estimating PM<sub>10</sub> emissions from mobile sources. The Commission believes the EPA-approved models are inaccurate, but federal rules require the State to use such models to demonstrate the adequacy of the maintenance plan. Thus, the emissions budgets are based on the only methodologies authorized for use by federal law. All methodologies and information made available by interested parties have been considered.

The alternative to redesignation is for the Denver area to remain a PM<sub>10</sub> nonattainment area. Redesignation to attainment is the more cost-effective alternative. Redesignation provides the regulated community with more flexibility and achieves the reductions in air pollution necessary to maintain the NAAQS. The revisions to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

### **VIII.N. Lamar and Steamboat Springs, Redesignation to Attainment for PM<sub>10</sub> Adopted: November 15, 2001**

The amendments to the "Ambient Air Quality Standards for the State of Colorado" Regulation adopted by the Commission change the air quality classifications of the Steamboat Springs and Lamar areas to attainment/maintenance for particulate matter, and revise the mobile source emissions budgets for these areas. The Commission adopted simultaneous revisions to the "State Implementation Plan-Specific Regulation for Nonattainment Areas" to repeal obsolete contingency measures.

### **Federal Requirements**

The relevant federal requirements are described in detail in the statement of basis, specific statutory authority and purpose for Pagosa Springs and Telluride published in Section VIII.L. of the ambient air quality standards regulation. Nothing in this rule change exceeds the minimum requirements of the federal act.

### **Statutory Authority**

Specific statutory authority to redesignate areas to attainment is provided in Section 25-7-107, C.R.S. (1999). The authority to establish emissions budgets is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (1999).

### **Findings pursuant to Section 25-7-110.8**

The mobile source emission budget is the only control measures included in the amendments that will operate to reduce air pollution. The emissions budget is based on EPA-approved models and assumptions for estimating PM<sub>10</sub> emissions from mobile sources. The Commission believes the EPA-approved model is inaccurate, but federal rules require the State to use such model to demonstrate the adequacy of the maintenance plan. All methodologies and information made available by interested parties have been considered.

The alternative to the redesignation of the areas to attainment is for these areas to remain PM10 nonattainment areas. Redesignation to attainment is the more cost-effective alternative. Redesignation provides the regulated community with more flexibility and achieves the reductions in air pollution necessary to maintain the NAAQS. The revisions to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

#### **VIII.O. Fort Collins Adopted: July 18, 2002**

The amendments to the "Ambient Air Quality Standards for the State of Colorado" Regulation adopted by the Commission change the air quality classification of the Fort Collins area to attainment/maintenance for carbon monoxide and establish a mobile source emissions budget for the area. The Commission adopted simultaneous revisions to Regulation Number 11, Regulation Number 13 and the "State Implementation Plan-Specific Regulation for Nonattainment Areas."

The Commission also repealed Section V.B, "Requirement Regarding Enforceability." Section V.B established criteria for emission reduction credit in transportation conformity determinations. Federal regulations already establish such criteria. 40 CFR 93.122. Although Section V.B. was similar to the federal criteria set out at 40 CFR 93.122, Section V.B did not expressly authorize the option of taking credit for a control measure based on a SIP commitment to implement such a program. Thus, Section V.B appeared to deny transportation agencies an option that is available under the federal rules. The maintenance plan adopted by the Commission in conjunction with these changes to the Ambient Air Quality Standards regulations includes a commitment to implement an automobile testing program in the year 2026. Under the federal rules, such a commitment will allow the Colorado Department of Transportation to take emission reduction credit for the inspection program when it makes transportation conformity determinations that extend beyond 2026. The Commission repealed Section V.B so that the rules for taking credit during transportation conformity determinations are identical to the federal rules on the subject. Elsewhere, in Regulation Number 10, Part B, the Commission has already passed a state regulation requiring transportation agencies to comply with the federal rules when performing transportation conformity determinations. Therefore, Section V.B was confusing and unnecessary, and may have exceeded the minimum federal requirements. Finally, the Commission made several minor housekeeping changes and repealed obsolete provisions.

#### **Federal Requirements**

The federal requirements relevant to the redesignation and the emission budget are described in detail in the statement of basis, specific statutory authority and purpose for Pagosa Springs and Telluride published in Section VIII.L of the ambient air quality standards regulation. The federal regulation establishing criteria for taking credit in transportation conformity determinations is set out at 40 CFR 93.122. Nothing in this rule change exceeds the minimum requirements of the federal act.

#### **Statutory Authority**

Specific statutory authority to redesignate areas to attainment is provided in Section 25-7-107, C.R.S. (1999). The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (1999).

#### **Findings pursuant to Section 25-7-110.8**

The mobile source emission budget is the only control measures included in the amendments that will operate to reduce air pollution. The emissions budget is based on EPA's recently released MOBILE6. Federal rules require the State to use a model approved by EPA. The Commission believes that the MOBILE6 model is superior to the MOBILE5 model that was used to develop earlier SIPs. All methodologies and information's made available by interested parties have been considered.

The alternative to the redesignation of the areas to attainment is for the Fort Collins area to remain a nonattainment area for carbon monoxide. Redesignation to attainment is the more cost-effective alternative. Redesignation provides the regulated community with more flexibility and maintains the reductions in air pollution necessary to maintain the NAAQS. In particular, it allowed the Commission to repeal the oxygenated fuels program for the Fort Collins area, and to remove the automobile testing program from the SIP. The removal of the automobile testing program from the SIP gives the State the flexibility to amend or repeal the program later without the delay of the SIP amendment and approval process. For these reasons, the revisions to the ambient air quality standard will maximize the air quality benefits of the Commission's regulations in the most cost-effective manner.

#### **VIII.P. Greeley**

Adopted: December 19, 2002

The amendments to the "Ambient Air Quality Standards for the State of Colorado" Regulation adopted by the Commission establish mobile source emissions budgets for the Greeley area. The Commission adopted simultaneous revisions to Regulation Number 13 so that this rule no longer applies in the Greeley area.

#### **Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

#### **Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (2001).

#### **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOBILE6 emissions model, as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. The rule allocates the margin of safety to mobile sources, thus providing the transportation community with maximum flexibility authorized by federal law. In adopting this rule, the Commission chose the most cost-effective alternative.

#### **VIII.Q Denver Carbon Monoxide**

Adopted: June 19, 2003

The carbon monoxide emissions budget for the Denver area has been revised to reflect a new computer model (mobile6) issued by EPA for use in estimating emissions from motor vehicles. Federal law requires transportation agencies to use such budgets to make transportation conformity determinations on transportation plans and programs. 40 CFR 93.118. Transportation agencies must use mobile6 for transportation conformity determinations that begin after January 2004.

### **Federal Requirements**

The revision to the emission budget follows EPA policy established in *Policy Guidance On The Use of Mobile6 For Sip Development and Transportation Conformity* (U.S. EPA, Jan. 18, 2002). The Commission's regulation does not allocate the entire safety margin to mobile sources, as authorized by federal regulations. Instead, the Commission reserved a portion of the safety margin in order to preserve a cushion for growth in other source categories. The reservation of a portion of the safety margin does not mean that the rule exceeds minimum federal requirements. Instead, the rule merely preserves a margin of safety for growth in other sources.

### **Statutory Authority**

The Commission adopts this change under its general authority to promulgate and adopt a state implementation plan, as set out in Section 25-7-105(1)(a), C.R.S.

### **Findings pursuant to Section 25-7-110.8. C.R.S.**

The purpose of this rule change is to make sure that transportation agencies will use mobile6-based emissions budgets when making mobile6-based transportation conformity determinations. The rule change is not intended to reduce air pollution. The requirements of 25-7-110.8 do not apply.

### **VIII.R Longmont and Colorado Springs Carbon Monoxide**

Adopted: December 18, 2003

The carbon monoxide emission budgets for the Longmont and Colorado Springs areas have been revised to reflect a new computer model (mobile6) issued by EPA for use in estimating emissions from motor vehicles. Federal law requires transportation agencies to use such budgets to make transportation conformity determinations on transportation plans and programs. 40 CFR 93.118. Transportation agencies must use mobile6 for transportation conformity determinations that begin after January 2004.

### **Federal Requirements**

The revisions to the emission budgets follow EPA policy established in *policy guidance on the use of mobile6 for sip development and transportation conformity* (u.s. EPA, Jan. 18, 2002). The Commission's regulation allocates the entire safety margin to mobile sources, as authorized by federal regulations.

### **Statutory Authority**

The Commission adopts this change under its general authority to promulgate and adopt a state implementation plan, as set out in Section 25-7-105(1)(a), C.R.S.

### **Findings pursuant to Section 25-7-110.8. C.R.S.**

The purpose of this rule change is to make sure that transportation agencies will use mobile6-based emissions budgets when making mobile6-based transportation conformity determinations. The rule change is not intended to reduce air pollution. The requirements of 25-7-110.8 do not apply. Statutory authority

The Commission adopts this change under its general authority to promulgate and adopt a state implementation plan, as set out in Section 25-7-105(1)(a), C.R.S.

**Findings pursuant to Section 25-7-110.8, C.R.S.**

The purpose of this rule change is to make sure that transportation agencies will use mobile6-based emissions budgets when making mobile6-based transportation conformity determinations. The rule change is not intended to reduce air pollution. The requirements of 25-7-110.8 do not apply.

**VIII.S Denver 8-Hour Ozone**

Adopted: March 11, 2004

The purpose of this rule change is to define the geographic scope of the Denver 8-hour Ozone Nonattainment Area for purposes of State Law and Commission regulations. This definition is not to be included in the state implementation plan.

The Commission adopted this definition in conjunction with the Ozone Action Plan and certain revisions to of Regulation Number 7 to reduce emissions of volatile organic compounds from oil and gas operations and from stationary and portable reciprocal internal combustion engines. Such control measures in Sections XVI, XVI, and XVII VI of Regulation Number 7 apply in the Denver 8-hour Ozone Nonattainment Area, as defined in the Ambient Air Quality Standards Regulation.

The U.S. EPA will also define the geographic scope of the Denver 8-hour Ozone Nonattainment Area. The Commission intends for its State definition of such area to be identical to the federal definition. The Commission would ordinarily incorporate the federal definition by reference but the Commission cannot do that in this case because EPA has not yet adopted a final rule defining the Denver 8-hour Ozone Nonattainment Area and will not do so until April 15, 2004 at the earliest. Section 24-4-103(12.5), C.R.S. prohibits the Commission from adopting a later edition of the federal rule. In the event the area defined by the federal rule is smaller than the area defined by this rule, the Commission will promptly revise this rule to conform to the federal rule.

The statutory authority to define the nonattainment area is set out in Sections 25-7-105(1)(a) and (1)(b); 25-7-106(1)(b)(viii), (1)(c) and (5); and 25-7-109(1)(a) and (2), C.R.S.

**VIII.T Denver 8-Hour Ozone**

Adopted: December 16, 2004

The purpose of this rule change is to revise the geographic scope of the Denver 8-hour Ozone Nonattainment Area for purposes of State law and Commission regulations.

The revision to the boundaries for the Denver 8-hour ozone control area match the boundaries promulgated by the Environmental Protection Agency on April 15, 2004. The initial boundaries matched EPA's proposed boundaries for the area.

The revisions also include minor, nonsubstantive changes to simplify the language.

The statutory authority to define the nonattainment area is set out in Sections 25-7-105(1)(a) and (1)(b); 25-7-106(1)(b)(VIII), (1)(c) and (5); and 25-7-109(1)(a) and (2), C.R.S.

**VIII.U Denver and Longmont Carbon Monoxide Carbon Monoxide, and Denver PM10**

Adopted: December 15, 2005

The Commission revised the emissions budgets for carbon monoxide and PM10 for Denver, as well as the carbon monoxide emissions budget for Longmont. The changes update the emissions budgets using the latest EPA computer models.

The Commission has assigned the safety margin for both carbon monoxide and particulate matter to the mobile source emissions budget, reserving a portion of the carbon monoxide safety margin in case of additional growth in other sectors beyond the growth anticipated in the maintenance demonstration. The rule also provides some flexibility to trade between the NOx and primary particulate budgets for purposes of transportation conformity determinations. The federal rules allow, but do not require, assignment of some or the entire safety margin to the transportation conformity budget. The reservation of a portion of the carbon monoxide safety margin allows for additional growth in other sectors, but does not make the rule more stringent than the federal requirements.

The authority to establish emissions budgets is included in the general authority to adopt a state implementation plan set out in Section 25-7-105(1), C.R.S.

The mobile source emissions budgets are based on EPA-approved computer models, as required by federal regulations. All methodologies and information made available by interested parties have been considered. The rule allocates most of the margin of safety to mobile sources, but maintains a reasonable margin for accommodation of uncertainty and future growth in other sectors. The allocation of most of the safety margin to mobile sources provides flexibility for the transportation community. In adopting this rule, the Commission chose the most cost-effective option.

#### **VIII.V Canon City PM10**

Adopted: November 20, 2008

The amendments to the “Ambient Air Quality Standards for the State of Colorado” Regulation adopted by the Commission establish mobile source emissions budgets for the Canon City area.

#### **Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

#### **Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (2001).

#### **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOBILE6 emissions model and EPA-approved methods for calculating fugitive dust emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative.

Further, these revisions include any typographical, grammatical and formatting errors throughout the regulation.

#### **VIII.W Denver Metro Area/North Front Range 8-Hour Ozone Emissions Budgets**

Adopted December 11, 2008

The amendments to the “Ambient Air Quality Standards for the State of Colorado” Regulation adopted by the Commission establish mobile source emissions budgets for the Denver Metro Area/North Front Range 8-Hour Ozone area.

### **Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

### **Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1) and in 25-7-107(1), C.R.S.

### **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOBILE6 emissions model and EPA-approved methods for calculating fugitive dust emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative.

### **VIII.X Pagosa Springs PM10**

Adopted November 19, 2009

The amendments to the "Ambient Air Quality Standards for the State of Colorado" Regulation adopted by the Commission establish mobile source emissions budgets for the Pagosa Springs PM10 attainment area.

### **Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

### **Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (2001).

### **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOBILE6 emissions model and EPA-approved methods for calculating fugitive dust emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative.

Further, these revisions will include any typographical, grammatical and formatting errors throughout the regulation.

### **VIII.Y Telluride PM10**

Adopted November 19, 2009

The amendments to the "Ambient Air Quality Standards for the State of Colorado" Regulation adopted by the Commission establish mobile source emissions budgets for the Telluride PM10 attainment area.

## **Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

## **Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (2001).

## **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOBILE6 emissions model and EPA-approved methods for calculating fugitive dust emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative.

Further, these revisions will include any typographical, grammatical and formatting errors throughout the regulation.

## **VIII.Z. Ambient Air Quality Standards Regulation Update**

Adopted March 18, 2010

The Commission intends to maintain and update its Ambient Air Quality Standards Regulation.

## **Statutory Authority**

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedures Act, C.R.S. § 24-4-103, and the Colorado Air Pollution Prevention and Control Act, C.R.S. § 25-7-110, 110.5, and 110.8. Specifically, C.R.S. § 25-7-108 authorizes the Commission to adopt standards for the quality of ambient air. C.R.S. § 25-7-201 and 25-7-209 provide that increases in pollution concentrations above baseline concentration shall be the same as those provided for in the federal Clean Air Act.

## **Basis**

Colorado's Ambient Air Quality Standards Regulation is outdated and unclear.

## **Purpose**

The Commission intends to revise the Ambient Air Quality Standards Regulation by: 1) removing the ambient air quality standards in the Ambient Air Table in Section II.; 2) removing the state-only PSD SO<sub>2</sub> increments in Section I.B.; and 3) making administrative changes, including typographical, grammatical and formatting corrections, as necessary.

### ***Remove Section II. (Ambient Air Table)***

The Commission removes the Ambient Air Table in Section II., as it is unnecessary. The National Ambient Air Quality Standards (NAAQS) are set by EPA. Citizens can get more current data from EPA. The EPA maintains a readily available and accessible summary table of these NAAQS on the internet (see <http://epa.gov/air/criteria.html>), and the details of the NAAQS are codified in 40 C.F.R. Part 50, which is also readily available and accessible on the internet. For these reasons, the Commission removes this Section II., and references where the information can be found.



*Remove Section I.B. (State-only PSD SO<sub>2</sub> Increments)*

The Commission removes the state-only incremental ambient air standards for SO<sub>2</sub>, as they are artifacts from 1970's rulemakings that cannot be fully applied per current rules. The following table compares Colorado's SO<sub>2</sub> increments to the federal SO<sub>2</sub> increments.

	<b>Colorado SO<sub>2</sub> Increments <sup>1</sup></b>	<b>Colorado SO<sub>2</sub> Increments <sup>1</sup></b>	<b>Colorado SO<sub>2</sub> Increments <sup>1</sup></b>	<b>Federal SO<sub>2</sub> Increments <sup>2</sup></b>	<b>Federal SO<sub>2</sub> Increments <sup>2</sup></b>	<b>Federal SO<sub>2</sub> Increments <sup>2</sup></b>
	Category I	Category II	Category III	Class I	Class II	Class III
Arithmetic Mean	2 ug/m3	10 ug/m3	15 ug/m3	2 ug/m3	20 ug/m3	40 ug/m3
24-Hour Maximum	5 ug/m3	50 ug/m3	100 ug/m3	5 ug/m3	91 ug/m3	182 ug/m3
3-Hour Maximum	25 ug/m3	300 ug/m3	700 ug/m3	25 ug/m3	512 ug/m3	700 ug/m3

Note the distinction between Colorado's SO<sub>2</sub> increment Category areas and the federal Class areas. When applicable, Colorado's Category I areas for SO<sub>2</sub> were essentially the same as EPA's Class I area, except that Colorado's Category I areas included some additional national monuments and forest service primitive areas that would otherwise be considered as Class II areas. While these former Category I areas for SO<sub>2</sub> were classified as Class II, they were given the protection of the Class I PSD increment for SO<sub>2</sub> only. The remainder of the state was then considered Category II, and now considered a Class II area. There are no Category III or Class III areas previously or currently designated in Colorado.

These state-only SO<sub>2</sub> increments no longer apply to any area in the state. Early versions of the Ambient Air Quality Standards Regulation identify Category I, II and III areas in the state, in which these Colorado SO<sub>2</sub> increments applied <sup>3</sup>. However in 1981, in preparation to adopt the federal Prevention of Significant Deterioration (PSD) rules, a Colorado Increment Task Force met and ultimately made recommendations on how to adopt the federal PSD Program in Colorado. Colorado's SO<sub>2</sub> increments were part of these recommendations. The Colorado Increment Task Force recommended the Commission review its authority to adopt more stringent increments than EPA <sup>4</sup>. Later in 1983, when the Commission adopted the federal PSD Program, industry identified similar concerns over authority to adopt more stringent increments than EPA <sup>5</sup>.

1 See Ambient Air Quality Standards Regulation, Section I.B.

2 See the Clean Air Act, section 163(b), and/or Colorado's State Implementation Plan – Regulation Number 3, Part D, Section X.A.

3 See Ambient Air Quality Standards Regulation versions adopted September 4, 1975 and October 27, 1977.

4 See the December 17, 1981 "Increment Task Force Recommendations and Background Material," prepared for the AQCC, page 4.

5 See Exhibit M to the 1983 Rulemaking Hearing adopting the PSD program into Regulation Number 3, "Summary of Party Comments and Division Evaluation," page 101.

Review of the supporting rulemaking documents indicates that the Commission intentionally abandoned the use of Category I, II and III areas, largely adhering to the federal PSD Program's Class I, II and III areas instead. In 1983, when the Commission did adopt the federal PSD program, those classifications were more appropriately moved to Regulation Number 3. Today, area classifications are found in Regulation Number 3, Part D, Section VIII. This section only mentions Class I and II areas, and not any Category I, II or III. The current classifications are the same as those adopted in 1983. Based on the authority issues raised by Colorado Increment Task Force and industry, the omission of "categories" in the adopted Regulation Number 3 appears to be intentional.

In the absence of clearly defined geographic “Category” areas in rule, the Colorado “Category I, II and III” incremental standards that remain in the Ambient Air Quality Standards Regulation cannot be applied in practice. While this proposal removes the state-only SO<sub>2</sub> incremental standards, this change does not undermine existing protection for Colorado Federal Class I and II areas, or for those additional Colorado national monuments and forest service primitive areas currently granted Class I protection in Regulation Number 3.

For these reasons, these state-only SO<sub>2</sub> PSD increments should be removed from regulation.

*Reorganize, Clarify and Make Typographical, Grammatical, and Formatting Corrections*

The remaining proposed revisions to reorganize and rename the regulation, identify existing standards as state-only, identify missing CO and PM<sub>10</sub> attainment/maintenance effective dates in tables, revise the 1-Hour Ozone Attainment/Maintenance Map title to clarify association with the 1-hour standard only, and make typographical, grammatical and formatting corrections, as necessary, are purely administrative in nature, and not believed to have any economic impact.

**Findings pursuant to C.R.S. § § 110.5(5)(a) and 110.8**

These revisions eliminate PSD SO<sub>2</sub> increments that would be more stringent than federal increments if they had been fully implemented. Because there are no currently designated areas to which the more stringent standards would apply, these standards cannot be implemented. Therefore, these revisions do not exceed or differ from the federal act or rules.

These revisions align the increments in question with federal increments. The federal increments are based on reasonably available, validated, reviewed and sound scientific methodologies. These revisions are not intended to reduce air pollution and do not result in a demonstrable reduction in air pollution. Public health and the environment are sufficiently protected by the national increments. These revisions benefit the government, regulated community and the public by eliminating confusion caused by differences between state and federal requirements.

**VIII.AA. Aspen PM<sub>10</sub>**

Adopted: December 16, 2010

The amendments to the “Ambient Air Quality Standards for the State of Colorado” Regulation adopted by the Commission establish mobile source emissions budgets for the Aspen area.

**Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

**Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (2001).

**Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOVES2010 emissions model and EPA-approved methods for calculating fugitive dust emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative.

## **VIII.BB. Steamboat Springs**

Adopted: December 15, 2011

### **Basis and Purpose**

The purpose of this amendment is to update the PM10 emission budget for the Steamboat Springs area in connection with the adoption of the Revised PM10 Maintenance Plan for the Steamboat Springs Attainment/Maintenance Area.

### **Specific Statutory Authority**

The Commission promulgates this regulatory change pursuant to its authority under Section 25-7-105(1)(a)(I), C.R.S. to adopt a comprehensive state implementation plan that meets the requirements of the federal Clean Air Act.

### **Findings Pursuant to Section 25-7-110.8**

The mobile source emission budgets are based on EPA-approved methods for calculating PM10 emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emission budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative.

## **VIII.CC Lamar PM10**

Adopted: December 20, 2012

The amendments to the "Air Quality Standards for the State of Colorado" Regulation adopted by the Commission establish mobile source emissions budgets for the Lamar area.

### **Federal Requirements**

Nothing in this rule change exceeds the minimum requirements of the federal act.

### **Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan set out in Section 25-7-105(1), C.R.S. (2001).

### **Findings pursuant to Section 25-7-110.8**

The mobile source emissions budgets are based on EPA's MOVES2010a emissions model and EPA-approved methods for calculating fugitive dust emissions as required by federal regulations. All methodologies and information made available by interested parties have been considered. The emissions budgets reduce the potential for air pollution by capping emissions from mobile sources. In adopting this rule, the Commission chose the most cost-effective alternative

**VIII.DD. Revision to Emission Budgets for Nonattainment Areas in the State of Colorado**

Adopted: November 17, 2016

This Statement of Basis, Specific Statutory Authority and Purpose complies with the requirements of the Colorado Administrative Procedure Act Sections 24-4-103, C.R.S. and the Colorado Air Pollution Prevention and Control Act Sections 25-7-110 and 25-7-110.5, C.R.S. ("the Act").

**Basis**

The Commission revised the emission budgets contained in the Air Quality Standards, Designations and Emission Budgets Regulation to reflect emission budgets used in the 2008 Ozone SIP for the "Moderate" classification, consistent with federal requirements.

**Statutory Authority**

The authority to establish emissions budgets and to establish criteria for transportation conformity determinations is included in the general authority to adopt a State Implementation Plan ("SIP") set out in Section 25-7-105(1), C.R.S.

**Purpose**

**Ozone Reclassification**

In 2008, the U.S. Environmental Protection Agency ("EPA") revised the 8-Hour Ozone NAAQS. The Clean Air Act requires areas designated nonattainment a NAAQS to adopt or revise their Ozone SIP to make reasonable further progress towards attainment and attain the NAAQS. The Denver Metro/North Front Range nonattainment area ("DM/NFR") was classified as a Marginal Nonattainment Area for the 2008 8-Hour Ozone NAAQS in 2012, with an attainment date of July 20, 2015. The DM/NFR did not attain the 2008 8-Hour Ozone NAAQS in 2015; therefore, effective June 3, 2016, EPA reclassified the DM/NFR as a Moderate Nonattainment Area with an attainment date of July 20, 2018. See 81 Fed. Reg. 26714 (May 4, 2016). A Moderate Nonattainment Area classification requires that the associated SIP include an attainment demonstration, reasonably available control technology ("RACT") and reasonably available control measures ("RACM") requirements, reasonable further progress reductions in volatile organic compound ("VOC") and/or nitrogen oxides ("NOx") emissions in the area, contingency measures should the area fail to meet a milestone or to attain the standard, a vehicle inspection and maintenance program, and NOx and VOC emission offsets ratios for major source permits. As discussed more fully below, the proposed revisions to Section V. of the Air Quality Standards Regulation are necessary to meet reasonable further progress milestones and demonstrate attainment of the 2008 8-Hour Ozone NAAQS.

**Motor Vehicle Emission Budgets**

Section V. of the Air Quality Standards Regulation contains motor vehicle emission budgets for attainment/maintenance areas in Colorado. Motor vehicle emission budgets are utilized to assess conformity with Colorado's Ozone SIP. Section 176(c) of the Clean Air Act requires that transportation plans, transportation improvement programs ("TIPs"), and projects adopted by a metropolitan planning organization<sup>6</sup> are consistent with ("conform to") the appropriate SIP. Conformity with the appropriate SIP means that the transportation activities will not cause new violations of the NAAQS, worsen existing violations, or delay timely attainment of the NAAQS. Pursuant to EPA regulations implementing Section 176(c) (40 CFR Parts 51 and 93), mobile source emissions resulting from such plans and programs ultimately must be demonstrated to be consistent with the motor vehicle emission budgets set forth in the applicable SIP. See 40 CFR Part 93. Motor vehicle emission budgets are required by federal regulations which afford the State flexibility in determining what the budgets should be. See 40 CFR 51.390.

<sup>6</sup> In the DM/NFR Nonattainment Area, the metropolitan planning organization responsible for such projects is the Denver Regional Council of Governments or "DRCOG" and the North Front Range Metropolitan Planning Organization or "NFRMPO."

The Commission revised the motor vehicle emission budgets to reflect budgets used in the 2008 Ozone SIP for the "Moderate" classification. These emission budgets will supersede the emission budgets associated with the 1997 8-Hour Ozone NAAQS upon the effective date of EPA's determination of adequacy for transportation conformity purposes.

Specifically, the DM/NFR Nonattainment Area emissions budgets were revised as follows: the regional emissions budget for NOx was changed from 122.9 to 73 tons per day; the regional emissions budget for VOCs was changed from 109.2 to 55 tons per day; the southern sub-regional emissions budget for NOx was changed from 102.4 to 61 tons per day; the southern sub-regional emissions budget for VOCs was changed from 89.7 to 47 tons per day; the northern sub-regional emissions budget for NOx was changed from 20.5 to 12 tons per day, and; the northern sub-regional emissions budget for VOCs was changed from 19.5 to 8 tons per day.

#### **Finding pursuant to C.R.S. § 25-7-110.5(5)**

The emission budgets established in this rule support the attainment demonstration for the 2008 8-Hour Ozone NAAQS and therefore comply with, and do not exceed, federal requirements.

#### **Findings pursuant to C.R.S. § 25-7-110.8**

The motor vehicle emission budgets are based on EPA-approved methods for calculating VOC and NOx emissions as required by federal regulations. They reduce the potential for air pollution by capping emissions from mobile sources. All methodologies and information made available by interested parties have been considered. In proposing these revisions, the Division chose the most-cost-effective alternative.

Further, the Commission corrected any typographical, grammatical and formatting errors found within the regulation

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#### **Editor's Notes**

##### **History**

Rules V.A.1, V.A.4.g., VIII. V. and correction of typographical, grammatical and formatting errors throughout the entire rule eff. 12/30/2008.

Entire rule eff. 01/30/2009.

Rules V.A.1, V.A.4.f, V.A.4.g, V.A.4.j, VIII.X, VIII.Y eff. 12/30/2009.

Entire rule eff. 05/15/2010.

Rules V.A.1, VIII.AA eff. 03/01/2011.

Rules V.A.1, VIII.BB eff 01/30/2012.

Rules V.A.1, V.A.4.h, VIII.CC eff. 02/15/2013.

Rules V.A.1, VIII.DD eff. 01/14/2017.