Revised PM10 Maintenance Plan for the

Steamboat Springs Attainment/Maintenance Area

Colorado Department
of Public Health
and Environment

10-year Revision:
December 15, 2011

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- Colorado Air Quality Control Commission, November 15, 2001

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SECTION 1: INTRODUCTION

This document is the second PM10 Maintenance Plan for the Steamboat Springs Attainment/Maintenance Area. The U.S. Environmental Protection Agency (EPA) first approved a PM10 redesignation request and maintenance plan for the Steamboat Springs area on October 25, 2004 (69 FR 62210), which became effective on November 24, 2004. The redesignation request and maintenance plan was adopted by the Colorado Air Quality Control Commission on November 15, 2001.

This second maintenance plan was prepared to meet the provisions of section 175A(b) of the Clean Air Act and contains the same emission control strategies as the first maintenance plan that was adopted by the commission in 2001. The 2011 plan includes updated emission inventories and projections using the latest EPA-approved tools. This plan establishes a new PM10 motor vehicle emission budget (MVEB) of 1,103 pounds per day in 2024.

The City of Steamboat Springs, Routt County, and the state of Colorado request continuation of "attainment/maintenance" status for the Steamboat Springs PM10 Attainment/Maintenance Area. The Steamboat Springs area originally was designated as nonattainment for the National Ambient Air Quality Standard (NAAQS) for particulate matter with an aerodynamic diameter of ten microns or less (PM10) in 1993 (effective January 20, 1994). The area presently is demonstrating attainment with the PM10 NAAQS. The Maintenance Plan section of this document has been updated and will demonstrate that the area will be able to maintain compliance with the NAAQS through the year 2024. The benefits of maintaining attainment/maintenance status include:

1. Areas that maintain attainment/maintenance status no longer carry the stigma associated with nonattainment of the NAAQS.
2. Attainment areas will not become "serious" nonattainment areas even if a violation of the NAAQS occurs in the future. This means that specific control measures can be applied to address a violation without going through a rigorous federal process, where serious areas must implement mandatory control measures and be subject to numerous administrative activities.
3. Prevention of Significant Deterioration (PSD) permitting requirements continue to replace New Source Review (NSR) permitting requirements for new and modified major stationary sources. These permitting requirements are important for large industrial facilities that currently are not located, nor likely to locate, in the Steamboat Springs area.

This plan is designed to document and ensure continuing attainment and maintenance of the NAAQS for PM10 in the Steamboat Springs area. This document is intended to comply with requirements of the federal Clean Air Act (CAA), and with relevant procedures and policies of the U.S. Environmental Protection Agency (EPA).

A. BACKGROUND

1. PM10 National Ambient Air Quality Standard (NAAQS)

In 1971, the EPA set NAAQS for several air pollutants, including total suspended particulates (TSP), defined as particles with an aerodynamic diameter of less than 40 microns. In 1987, the EPA changed the TSP standards by setting NAAQS for PM10, defined as particles with an aerodynamic diameter of ten microns or less (PM10). The current PM10 NAAQS allow for a maximum 24-hour average concentration of 150 ug/m3. The 24-hour PM10 NAAQS may not be exceeded more than once per year on average over any three-year period.

There are both primary and secondary air quality standards. The primary standards are set to protect human health with a margin of safety to protect the more sensitive persons in the population like the very young, elderly and the ill. Secondary standards are set to protect property, materials, aesthetic values and general welfare. For PM10, the national primary and secondary standards are the same. The numerical levels of the standards are subject to change, based on new scientific evidence summarized in air quality criteria documents. In 2006, the EPA revoked the annual PM10 standard but retained the 24-hour average of 150 ug/m3 (71 FR 61144) for both the primary and secondary NAAQS.

In general, demonstrating attainment requires collecting representative air monitoring data and using approved measuring instruments and procedures, with adequate quality assurance and quality control. Air quality measurements in the Steamboat Springs area satisfy this requirement, as shown in Section 2 (Table 1 – Steamboat Springs PM10 Monitoring Record).

2. Health and Welfare Effects of PM10

Particulate matter is the term given to tiny particles of solid or semi-solid material suspended in the atmosphere. PM10 refers to a subset of particulate matter 10 micrometers in diameter and smaller. PM10 is inhalable. In the Steamboat Springs area, PM10 is created primarily from re-entrained road dust, carbon black (from automobile and diesel engines) and soot (from fireplaces and woodstoves). PM10 from these combustion sources contains a large percentage of elemental and organic carbon, which contributes to atmospheric haze and to health problems.

Additional PM10 sources, to a lesser degree, include restaurant grills and aircraft.

Epidemiological studies and laboratory studies of humans and animals indicate that particulate matter can be inhaled deeply into the respiratory system, resulting in aggravation of existing respiratory and heart diseases, damage to lung tissue, impairment of breathing and respiratory functions, alterations to the body's physical and immune system defenses, and even premature death. Many particles also are composed of compounds that are known or suspected human carcinogens. People

most sensitive to particulate matter are the elderly, children, and those with chronic lung disease, cardiovascular disease, influenza, and asthma.

The welfare effects of particulate air pollution are widespread. Chemical and photochemical reactions involving the particles may occur in the air, or once they have been deposited on environmental media or structures. Such soiling and acid deposition cause visibility degradation, climate changes, and damage to crops, natural vegetation, water bodies, and aquatic life. In addition, sculpture and architecture may be damaged or destroyed by particulate soiling and acid deposition.

3. Steamboat Springs Nonattainment Area Classification History

Because of observed problems with air particles, monitoring for PM10 began in 1985. Based upon numerous exceedances of the 24-hour PM10 NAAQS, the Steamboat Springs area was designated by the EPA as a "moderate" nonattainment area in 1993 pursuant to section 107(d)(3)(B) of the Clean Air Act.

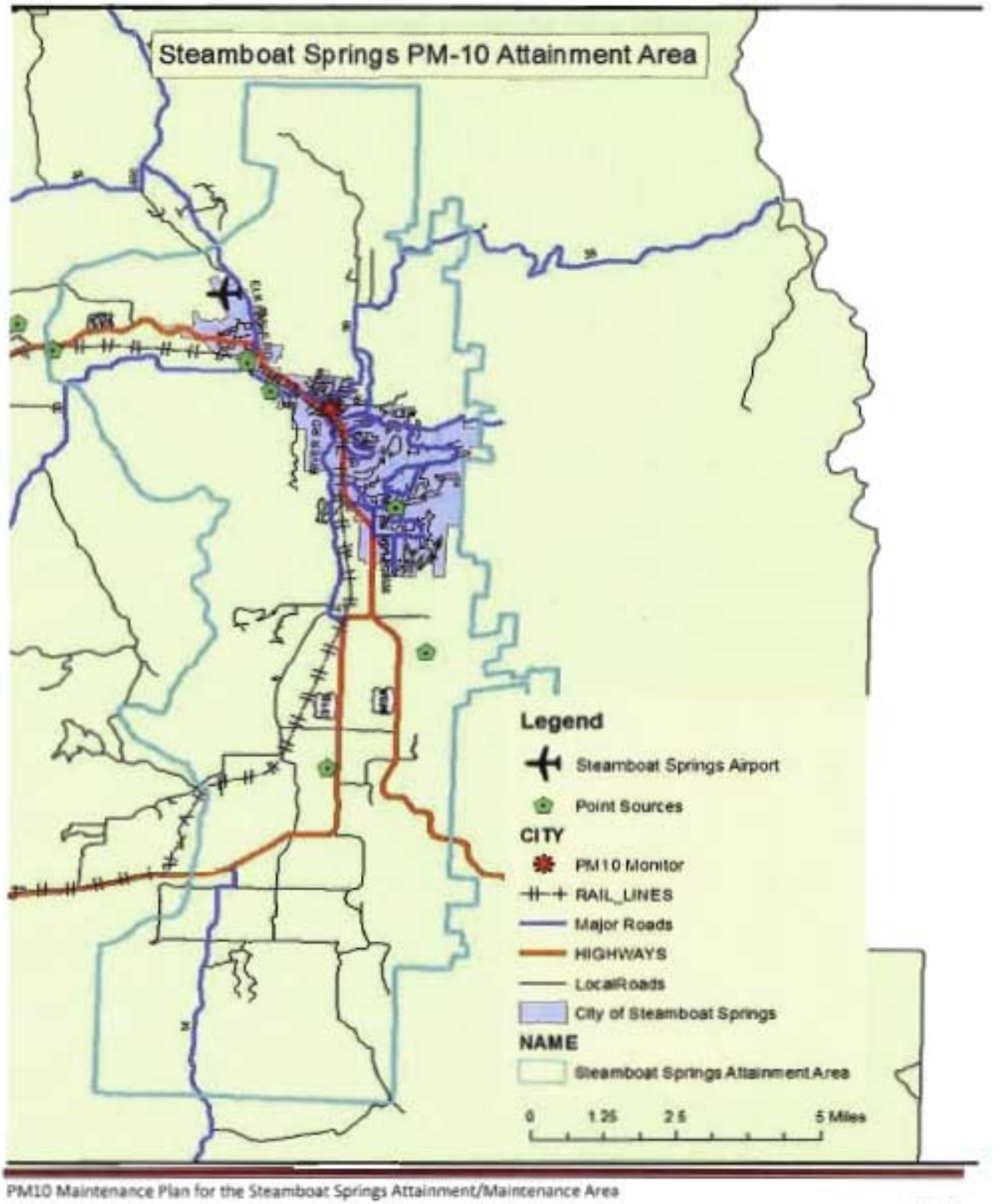
4. Steamboat Springs Attainment/Maintenance Area Boundary

The boundary for the Steamboat Springs PM10 Attainment/Maintenance Area is defined as follows:

On the East:	The Routt National Forest
On the South:	The southern border of sections 19, 20, 21, T4N, R84W of the 6th P.M. and the southern border of sections 23, 24, T4N, R85W of the 6th P.M.
On the West:	Beginning at the southwestern corner of section 23, T4N, R85W of the 6th P.M., north along the western border of sections 23, 14, 11, T4N, R85W. Thence, along the ridge which bisects sections 35, 36, 25, 24, 13, 14, 11, 12, 1, T5N, R85W, and sections 36, 25, 24, T6N, R85W. Thence, heading northwest along the ridge which bisects sections 23, 15, 10, 9, 4, T6N, R85W of 6th P.M. Thence heading northeast along the ridge which bisects sections 33, 34, 35, 36, 25 T7N, R85W and sections 30 and 19 of T7N, R84W. Thence, north along the N ½ of the western edge of section 19, to the NW corner of section 18, T7N, R84W.
On the North:	The northern boundary of sections 16, 17, 18 T7N, R84W of the 6th P.M.

A map illustrating the area boundary is shown in Figure 1.

Figure 1: Map of the Steamboat Springs Attainment/Maintenance Area



B. ORGANIZATIONS INVOLVED IN PREPARING/APPROVING PLAN

Preparation of this revised maintenance plan was a cooperative effort of the City of Steamboat Springs, Routt County, and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment. The EPA, through its regional office in Denver, provided policy advice and technical assistance, and is responsible for final approval of this revised maintenance plan.

SECTION 2: PM10 ATTAINMENT HISTORY

A. MONITORING HISTORY

Monitoring for PM10 in Steamboat Springs began in 1985. Numerous exceedances of the 24-hour PM10 NAAQS were the basis for the Steamboat Springs area being designated as a "moderate" nonattainment area in 1993 (effective January 20, 1994).

Table 1 lists the yearly maximum, yearly estimated exceedances and the 3-year average estimated exceedances for the Steamboat Springs monitoring site(s) for the 10-year period from 2001 through 2010. The state of Colorado maintains a PM10 monitor at 136 6th Street in Steamboat Springs.

Table 1: Steamboat Springs PM10 Monitoring Record

Year	Maximum Concentration (ug/m^3)	Yearly Estimated Exceedances	3-yr Average Estimated Exceedances
2001	100	0	0
2002	119	0	0
2003	149	0	0
2004	94	0	0
2005	86	0	0
2006	87	0	0
2007	99	0	0
2008	124	0	0
2009	83	0	0
2010	99	0	0

B. DESIGN VALUE DETERMINATION

The "design value" is the critical air quality value upon which the maintenance plan is based. The design value, and the conditions that occurred on the day which it was measured, are utilized to develop emission inventories and serve as a baseline for modeling ambient concentrations into the future. The selection of the design value used in this revised maintenance plan utilized the EPA's table look-up method from the EPA's "PM10 SIP Development Guideline" document.

Based on the number of samples collected during the 2008 - 2010 period (999), the third highest concentration is the design value, according to this guidance. The three highest concentrations measured during the period 2008 -2010 are as follows:

** 124 ug/m3 – February 18, 2008

** 111 ug/m3 – February 20, 2008

** 99 ug/m3 – February 3, 2010

Consequently, the design value used for this revised maintenance plan is 99 ug/m3.

SECTION 3: STATE IMPLEMENTATION PLAN APPROVAL

The following presents a brief summary of the development and the approval of the Steamboat Springs PM10 Nonattainment State Implementation Plan (SIP) Element.

A. 1995 SIP ELEMENT

The first Steamboat Springs SIP Element was adopted by the Colorado Air Quality Control Commission (AQCC) in September 1995. The control measures included: 1) local restrictions on woodburning devices, 2) specifications for street sanding materials (no more than 1% fines allowed), and 3) street sweeping requirements on Lincoln Avenue (once after each sanding event). The plan also included monitoring data, emission inventories, and dispersion modeling which demonstrated attainment of the PM10 NAAQS by December 1999 and continuing through Decernber 2002. The EPA did not approve this SIP Element at the request of the state due to revisions to control measures and modeling that occurred before EPA could take action on the plan.

B. 1996 SIP ELEMENT

A new Steamboat Springs PM10 SIP Element was adopted by the AQCC in October 1996. The control measures were revised to include: 1) local restrictions on woodburning devices, 2) specifications for street sanding materials (no more than 2% fines allowed), 3) street sweeping requirements on Lincoln Avenue (four times after each sanding event), and 4) street sand reductions of 10% on state highways. The plan also included revised monitoring data, emission inventories, and dispersion modeling which demonstrated attainment of the PM10 NAAQS by December 1999 and continuing through December 2002. In addition, contingency measures (additional street sweeping if the area violated the NAAQS and an emergency episode plan (suspension of open burning, voluntary wood and coal burning curtailment, and voluntary driving reductions if a NAAQS exceedance was expected) were adopted. This SIP Element was approved by the EPA on December 31, 1997 (62 FR 68188).

C. PM10 MAINTENANCE PLAN

The Colorado Air Quality Control Commission approved the Steamboat Springs PM10 Maintenance Plan on November 15, 2001. The EPA subsequently approved the plan on October 25, 2004, which became effective on November 24, 2004.

SECTION 4: PERMANENT AND ENFORCEABLE IMPROVEMENT IN AIR QUALITY

The state of Colorado must demonstrate, based on Section 107(d)(3)(E) of the Clean Air Act, that the improvement in air quality leading to attainment and continued compliance with the NAAQS is based on permanent and enforceable measures, and that the reductions are not the result of temporary reductions in emissions or unusually favorable meteorology.

A. OVERVIEW

It is reasonable to attribute the continued attainment of the PM10 NAAQS in the Steamboat Springs Attainment/Maintenance Area to emission reductions that are permanent and enforceable. These emission reductions are the result of local, state, and federal actions, not economic factors or unusual meteorology.

Economic conditions are not responsible for improved ambient levels in the Steamboat Springs Attainment/Maintenance Area. It is assumed that growth in population and tax revenue are indicators of increased activities that cause increased PM10 emissions and the potential for elevated PM10 concentrations. Information obtained for the City of Steamboat Springs shows that, during the period 2000 through 2007, general sales and use revenues increased by 71.21 percent, while Routt County population increased by 16.85 percent over the same period. During this period, attainment of the PM10 NAAQS was demonstrated with no exceedances recorded.

Favorable meteorology also is an unlikely reason. Although winter and spring meteorological conditions are highly variable in mountain settings, there is no evidence to suggest that meteorological conditions experienced in the 2000s have not been "typical" (though it is difficult to make concrete conclusions based on short-term meteorological records). Because there has not been a violation of the PM10 NAAQS in Steamboat Springs since 1996, the Air Pollution Control Division concludes that the good air quality in the Steamboat Springs area is the result of the implementation of emission reduction measures, not meteorological fluctuations.

B. CONTROL MEASURES

The following control measures resulted in the area's attainment of the PM10 NAAQS, and these measures should ensure continued maintenance of the PM10 NAAQS through the year 2024, which is the duration of the maintenance period.

1. Woodburning Emission Controls

The City of Steamboat Springs and Routt County have adopted local ordinances and resolutions that limit the number and types of woodburning devices in new construction in the Steamboat Springs area. Installation of new solid fuel burning devices is limited to one approved device for any building. These requirements were adopted locally in the late 1980s and early 1990s and included in state regulation in 1995 {Section VIII.E. of the "State Implementation Plan-Specific Regulations for Nonattainment-Attainment/Maintenance Areas (Local Elements)}. The rule was approved by the U.S. EPA in 1997. The requirements will remain part of state regulation and the federal State Implementation Plan (SIP).

2. Street Sanding Controls

There is a requirement that any user that applies street sanding materials in the Steamboat Springs Attainment/Maintenance Area must use materials containing less than two percent fines, except on U.S. Highway 40 from the junction of U.S. Highway 131 toward Rabbit Ears Pass. This requirement was adopted in 1996 and approved by the U.S. EPA in 1997, and is defined in detail in Section VIII.B. of the {State Implementation Plan-Specific Regulations for Nonattainment-Attainment/Maintenance Areas (Local Elements)}. The requirement will remain part of state regulation and the federal SIP.

3. Street Sweeping Requirements

There are street sweeping requirements for a defined section of Lincoln Avenue (Highway 40 in Steamboat Springs). Beginning with the effective date of the U.S. EPA's approval of the initial maintenance plan (November 24, 2004), street cleaning using vacuum sweepers or any other sweepers with equal efficiency must occur two times within the four-day period of the roadways becoming free and clear of snow and ice following each sanding deployment use. These requirements are defined in detail in Section VIII.D. of the {State Implementation Plan-Specific Regulations for Nonattainment-Attainment/Maintenance Areas (Local Elements)}. The requirements will remain part of state regulation and the federal SIP.

4. Control of Emissions from Stationary Sources

The state's comprehensive permit rules limit emissions from any new source that may, in the future, locate in the Steamboat Springs area. These rules include: 1) CAQCC Regulation No. 3, "Air Pollution Emission Notices, Construction Permits and Fees, Operating Permits, and Including the Prevention of Significant Deterioration," 2) the "Common Provisions" regulation, and 3) CAQCC Regulation No. 6, "standards for Performance for New Stationary Sources."

The Common Provisions, and Parts A and B of CAQCC Regulation No. 3, already are included in the SIP. CAQCC Regulation No. 6 implements the federal standards of performance for new stationary sources. As was the case with the initial maintenance

plan, this revised maintenance plan makes no changes to these regulations. This reference to CAQCC Regulation No. 6 shall not be construed to mean that this regulation is included in the SIP.

Emissions of PM10 from new or modified major stationary sources are controlled under CAQCC Regulation No. 3's nonattainment area New Source Review (NSR) permitting requirements. The NSR provisions require all new and modified major stationary sources to apply emission control equipment that achieves the "lowest achievable emission rate" (LAER) and to obtain emission offsets from other stationary sources of PM10. The PSD requirements are a relaxation from the NSR requirements, as LAER becomes the less stringent "Best Available Control Technology" (BACT), and offsets are not required. The application of these provisions is possible, but not foreseen, in the Steamboat Springs area.

It should be noted that significant additional controls at both the Tri-State Generation and Transmission Association's Craig Generating Station and the Xcel Energy Hayden Generating Station that are part of the Colorado Visibility and Regional Haze State Implementation Plan will be installed during the effective period of this revised plan.

5. Federal Motor Vehicle Emission Control Program

The Federal Motor Vehicle Emission Control Program has reduced PM10 emissions through a continuing process of requiring diesel engine manufacturers to produce new vehicles that meet tighter and tighter emission standards. As older, higher-emitting diesel vehicles are replaced with newer vehicles, PM10 emissions in the Steamboat Springs area will be reduced.

SECTION 5: MAINTENANCE PLAN

A. REQUIREMENTS

Section 107(d)(3)(E) of the Clean Air Act (CAA) provides that, for an area to be redesignated to an attainment classification, the U.S. EPA must fully approve a maintenance plan which meets the requirements of CAA Section 175A. The maintenance plan will constitute a SIP revision and must provide for maintenance of the relevant NAAQS in the area for at least ten years after redesignation. The EPA first approved a PM10 redesignation request and maintenance plan for the Steamboat Springs area on October 25, 2004 (69 FR 62210), which became effective on November 24, 2004.

An additional requirement (Section 175A(b)) is the submittal of a SIP revision eight years after the original redesignation request/maintenance plan is approved that provides for maintenance of the NAAQS for an additional ten years following the first ten-year period. The state of Colorado has satisfied this commitment by submitting this revised maintenance plan as required by the CAA and EPA requirements.

Section 175A further states that the plan shall contain such additional control measures as necessary to ensure maintenance. All current nonattainment area control measures shall remain in place, except for the most stringent NSR stationary source permitting requirements (see Section 4.B.4.). This maintenance plan revision shall contain a contingency plan to ensure the prompt correction of any unforeseen violation of the PM10 NAAQS. Failure to maintain the NAAQS and triggering of the contingency plan will not necessitate a revision of the SIP Element, unless required by the EPA Administrator, as stated in CAA Section 175A(d).

The provisions that are addressed in this maintenance plan revision include emission inventories (for a base year, an interim year and a maintenance year), a maintenance demonstration, an emission budget, an approved monitoring network, verification of continued attainment, and a contingency plan.

B. EMISSION INVENTORIES

The emission inventories below include the 2008 base year, the 2016 interim year and the 2024 maintenance year. These inventories reflect the base and projected conditions in the Steamboat Springs Attainment/Maintenance Area, and account for the emission control measures that were adopted as part of the original redesignation request and the previous 10-year maintenance plan. Unlike the previous Steamboat Springs plan where the emission inventories were based on a grid system of the attainment/maintenance area, the updated emission inventories for 2008, 2016 and 2024 are based on a number of EPA-approved emission modeling methods that are detailed in the Technical Support Document. Consequently, there are significant differences between the emission inventories in the previous plan and this revised and updated PM10 maintenance plan.

1. 2008 Base Year Emission Inventory

The 2008 Base Year Emission Inventory for the Steamboat Springs Attainment/Maintenance Area is presented below. This updated emission inventory incorporates the most current estimates for the following 10 source categories:

- Commercial Cooking
- Construction
- Fuel Combustion
- Highway Vehicles
- Non-Road
- Paved/Unpaved Road Dust
- Point Sources
- Railroad
- Structure Fires
- Woodburning

The mobile source inventory (paved/unpaved road dust and highway vehicles) has been updated to reflect the following:

- Latest traffic (VMT) estimates from the Colorado Department of Transportation
- Revised emission factors and methods for determining paved road emissions
- Road paving of unpaved roads that has occurred in the area
- Vehicle exhaust emissions based on most up-to-date fleet mix

All emission estimates were prepared by using EPA-approved methods and assigned to the area comprising the Steamboat Springs Attainment/Maintenance Area.

Table 2 presents the 2008 PM10 Base Year emission estimates for each source category in tons per year and pounds per average day.

Table 2: 2008 PM10 Base Year Emission Inventory (Steamboat Springs Attainment/Maintenance Area)

Source Category	2008 PM10 [tons/year]	2008 PM10 [lbs/day]
Commercial Cooking	2.92	16.6
Construction	640.58	3509.7
Fuel Combustion	1.46	8.6
Highway Vehicles	25.55	140.5
Non-Road	16.43	89.6
Point Sources	33.95	185.1
Railroad	0.73	3.6
Road Dust	121.18	663.4
Structure Fires	0.00	0.7
Woodburning	87.24	478.0
Totals:	**930.02**	**5095.9**

2. 2016 Interim Year Emission Inventory

Table 3 presents the 2016 PM10 Interim Year emission estimates for each source category in tons per year and pounds per average day.

Table 3: 2016 PM10 Interim Year Emission Inventory (Steamboat Springs Attainment/Maintenance Area)

Source Category	2016 PM10 [tons/year]	2016 PM10 [lbs/day]
Commercial Cooking	3.65	20.5
Construction	789.68	4326.4
Fuel Combustion	1.83	10.6
Highway Vehicles	31.94	175.1
Non-Road	12.60	68.6
Point Sources	41.80	228.2
Railroad	0.92	4.5
Road Dust	142.17	778.5
Structure Fires	0.19	0.85
Woodburning	107.50	589.3
Totals:	**1131.87**	**6202.4**

3. 2024 Maintenance Year Emission Inventory

Table 4 presents the 2024 PM10 Maintenance Year emission estimates for each source category in tons per year and pounds per average day.

Table 4: 2024 PM10 Maintenance Year Emission Inventory (Steamboat Springs Attainment/Maintenance Area)

Source Category	2024 PM10 [tons/year]	2024 PM10 [lbs/day]
Commercial Cooking	4.38	24.4
Construction	938.78	5143.1
Fuel Combustion	2.19	12.6
Highway Vehicles	38.33	209.6
Non-Road	8.76	47.5
Point Sources	49.64	271.3
Railroad	1.10	5.3
Road Dust	163.16	893.6
Structure Fires	0.37	1.0
Woodburning	127.75	700.5
Totals:	**1333.71**	**7308.8**

C. MAINTENANCE DEMONSTRATION

This maintenance plan revision provides for continued maintenance of the 24-hour PM10 NAAQS through the year 2024, the 20-year period after the original redesignation request and maintenance plan was approved by the U.S. EPA in 2004. Because there have never been any exceedances of the annual PM10 NAAQS in Steamboat Springs, an analysis for maintenance of the annual standard was not prepared for the original redesignation request and maintenance plan. The EPA subsequently revoked the annual standard in 2006.

A design day concentration of 99 ug/m3 has been selected as a conservative value that represents the third-highest 24-hour maximum PM10 value recorded in Steamboat Springs during 2008-2010. This 99 ug/m3 concentration occurred on February 3, 2010. No reduction for background values has been taken into account for the design day value, making the 99 ug/m3 a conservative estimate of PM10 ambient air concentrations in Steamboat Springs. The design value likely overstates the actual amount of PM10.

The emission inventory data presented in this document is used to determine the growth in PM10 emissions from the 2008 base year to the 2024 maintenance year. The emission inventory shows an increase in PM10 from 5,095.9 pounds per day in 2008 to 7,308.8 pounds per day in 2024.

This represents an increase of 43.4 percent in emissions:

7308.8/5095.9 = 1.434, or 43.4 percent.

The design day concentration of 99 ug/m3 of PM10 is then increased 43.4 percent to "roll forward" to the 2024 attainment year.

This roll-forward modeling results in a 2024 concentration of approximately 142 ug/m3:

99 ug/m3 x 1.434 = 142 ug/m3

Since 142 ug/m3 is below the 150 ug/m3 standard, maintenance is demonstrated through 2024.

D. PM10 EMISSION BUDGET

Federal "transportation conformity" regulations provide for the use of mobile source emission budgets in making conformity determinations in the area. The emission budget serves as a ceiling on mobile source emissions that federally funded or approved transportation projects must comply or conform.

This maintenance plan revision establishes a new PM10 motor vehicle emission budget (MVEB) for the Steamboat Springs Attainment/Maintenance Area of 1,103 lbs/day for 2024. This budget is the total of the 2024 mobile source PM10 emissions (see Section 5.B.3. above), which includes PM10 emissions from highways and paved/unpaved road dust.

This budget has been adopted in the AQCC's "Air Quality Standards - Air Quality Standards, Designations and Emissions Budgets" regulation.

E. MONITORING NETWORK/VERIFICATION OF CONTINUED ATTAINMENT

The Air Pollution Control Division has monitored ambient PM10 concentrations in the Steamboat Springs area since 1985. The division has operated, and will continue to operate, the Steamboat Springs PM10 monitoring network in full accordance with the federal provisions of 40 CFR Part 58 and the EPA-approved Colorado Monitoring SIP Element. The division also will analyze the monitoring data to verify continued attainment of the PM10 NAAQS. This information will provide the necessary information to determine whether the Steamboat Springs area continues to attain the PM10 NAAQS. Detailed information regarding the state's monitoring efforts and historical monitoring data can be found in Section 2 of this document.

F. CONTINGENCY PLAN

Section 175(A)(d) of the Clean Air Act requires that the maintenance plan contain contingency provisions to assure that the state will promptly correct any violation of the PM10 NAAQS that may occur after the redesignation of the area to attainment. The EPA's redesignation guidance notes that the state is not required to have fully adopted contingency measures that will take effect without further action by the state. However, the contingency plan should ensure that contingency measures are adopted expediently once the need is triggered. The primary elements of the contingency plan involve the tracking and triggering mechanisms to determine when contingency measures would be needed, and a process for implementing appropriate control measures.

1. Tracking

The tracking plan for the Steamboat Springs area will consist of monitoring and analyzing PM10 concentrations. In accordance with 40 CFR Part 58, Colorado will continue to operate and maintain the Steamboat Springs PM10 monitoring network.

2. Trigger and Response

Triggering of the contingency plan does not automatically require a revision of the SIP nor is the area necessarily redesignated once again to nonattainment. Instead, the state normally will have an appropriate timeframe to correct the violation with implementation of one or more adopted contingency measures. In the event that violations continue to occur, additional contingency measures will be adopted until the violations are corrected.

Upon notification of a PM10 NAAQS exceedance, the Air Pollution Control Division and local government staff in the Steamboat Springs area will develop appropriate contingency measure(s) intended to prevent or correct a violation of the PM10 standard. Information about historical exceedances of the standard, the meteorological conditions related to the recent exceedance(s), and the most recent estimates of growth and emissions will be reviewed. The possibility that an exceptional event occurred also will be evaluated (notification to the EPA and to the local governments in the Steamboat Springs area of any exceedance generally will occur within 30 days, but no later than 45 days). This process will be completed within six months of the exceedance notification.

If a violation of the PM10 NAAQS has occurred, a public hearing process at the state and local level will begin. If the AQCC agrees that the implementation of local measures will prevent further exceedances or violations, the AQCC may endorse or approve of the local measures without adopting state requirements. If, however, the AQCC finds locally-adopted contingency measures to be inadequate, the AQCC will adopt state-enforceable measures as deemed necessary to prevent additional exceedances or violations. Contingency measures will be adopted and fully implemented within one year of a PM10 NAAQS violation. Any state-enforceable measures will become part of another revised maintenance plan, submitted to the Colorado Legislature and the EPA for approval.

3. Potential Contingency Measures

The APCD and local government staff may choose one or more of the following contingency measures to recommend to local officials and the AQCC for consideration. Contingency measures will be selected that quickly bring the area back into compliance with the PM10 NAAQS and that specifically meet the needs of the Steamboat Springs area. It is likely that no federal or state monies will be available to fund the implementation of the selected contingency measure(s). Most, if not all, of the costs will be borne by local citizens and governments, local businesses, and state government agencies.

- Increased street sweeping requirements
- Road paving requirements
- More stringent street sand specifications
- Voluntary or mandatory woodburning curtailment
- Bans on all woodburning
- Expanded, mandatory use of alternative de-icers
- Re-establishing new source review permitting requirements for stationary sources
- Transportation control measures designed to reduce vehicle miles traveled
- Other emission control measures appropriate for the area based on the consideration of cost-effectiveness, PM10 emission reduction potential, economic and social considerations, or other factors that the state deems appropriate

G. SUBSEQUENT MAINTENANCE PLAN REVISIONS

This revised maintenance plan provides for continued maintenance of the PM10 NAAQS for an additional ten years beyond the original ten-year period. Consequently, no further maintenance plan updates are anticipated.