

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R09-OAR-2015-0633; FRL-9934-94-Region 9]**

**PM<sub>10</sub> Plans and Redesignation Request; Truckee Meadows, Nevada; Deletion of TSP Area  
Designation**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve two revisions to the Nevada state implementation plan (SIP). The first revision provides a demonstration of implementation of best available control measures (BACM) for control of particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM<sub>10</sub>) within Truckee Meadows. The second revision is a plan that provides for the maintenance of the national ambient air quality standard for PM<sub>10</sub> in Truckee Meadows through 2030, includes an emissions inventory consistent with attainment, and establishes motor vehicle emissions budgets. In connection with these proposed approvals, the EPA is proposing to determine that major stationary sources of PM<sub>10</sub> precursors do not contribute significantly to elevated PM<sub>10</sub> levels in the area. Also, based in part on the proposed approvals of the BACM demonstration and maintenance plan and proposed determination regarding PM<sub>10</sub> precursors, the EPA is proposing to approve the State of Nevada's request for redesignation of the Truckee Meadows nonattainment area to attainment for the PM<sub>10</sub> standard. Lastly, the EPA is proposing

to delete the area designation for Truckee Meadows for the revoked national ambient air quality standard for total suspended particulate (TSP). The EPA is proposing these actions because the SIP revisions meet the applicable statutory and regulatory requirements for such plans and related motor vehicle emissions budgets and because the area meets the Clean Air Act requirements for redesignation of nonattainment areas to attainment.

**DATES:** Comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Submit your comments, identified by Docket ID Number EPA-R09-OAR-2015-0633, by one of the following methods:

1. <http://www.regulations.gov>: Follow the on-line instructions for submitting comments.
2. Email: [ungvarsky.john@epa.gov](mailto:ungvarsky.john@epa.gov)
3. Mail or deliver: John Ungvarsky (AIR-2), U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901. Deliveries are only accepted during the Regional Office's normal hours of operation.

*Instructions:* All comments will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through <http://www.regulations.gov> or email. <http://www.regulations.gov> is an anonymous access system, and the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send email directly to EPA, your email address will be automatically captured and included as part of the public comment. If the EPA cannot read your

comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment.

*Docket:* The index to the docket and documents in the docket for this action are generally available electronically at [www.regulations.gov](http://www.regulations.gov) and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed at [www.regulations.gov](http://www.regulations.gov), some information may be publicly available only at the hard copy location (e.g., copyrighted material, large maps), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

**FOR FURTHER INFORMATION CONTACT:** John Ungvarsky, Air Planning Office (AIR-2), U.S. Environmental Protection Agency, Region IX, (415) 972-3963, [ungvarsky.john@epa.gov](mailto:ungvarsky.john@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document, whenever “we,” “us,” or “our” is used, we mean the EPA. This supplementary information section is arranged as follows:

## **Table of Contents**

I. Background

II. The State’s Submittals

III. Procedural Requirements for Adoption and Submittal of SIP Revisions

IV. Clean Air Act Requirements for Redesignation to Attainment

V. Evaluation of the State’s Redesignation Request for Truckee Meadows

A. The Area has Attained the PM<sub>10</sub> NAAQS

B. The Area Has Met All Applicable Requirements for Purposes of Redesignation Under Section 110 and Part D of the CAA and Has a Fully Approved Applicable Implementation Plan Under Section 110(k) of the CAA

1. Basic SIP Requirements Under CAA Section 110

2. SIP Requirements Under Part D

a. Emissions Inventory

b. Permits for New and Modified Stationary Sources

c. Best Available Control Measures

d. Control Requirements for PM<sub>10</sub> Precursors

e. Transportation Conformity

3. Conclusion with respect to Section 110 and Part D Requirements

C. The Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions

D. The Area Has a Fully-Approved Maintenance Plan, Including a Contingency Plan, Under CAA Section 175A

1. Attainment Inventory

2. Maintenance Demonstration

3. Monitoring Network

4. Verification of Continued Attainment

5. Contingency Plan

6. Transportation Conformity and Motor Vehicle Emissions Budgets

7. Conclusion

VI. Proposed Deletion of TSP Designation for Truckee Meadows

## A. General Considerations

## B. Deletion of TSP Nonattainment Area Designation for Truckee Meadows

## VII. Proposed Actions and Request for Public Comment

## VIII. Statutory and Executive Order Reviews

### **I. Background**

On April 30, 1971 (36 FR 8186), pursuant to section 109 of the Clean Air Act (CAA), as amended in 1970, the EPA promulgated the original national ambient air quality standards (NAAQS or “standards”) for the “criteria” pollutants, which included carbon monoxide, hydrocarbons, nitrogen dioxide, photochemical oxidant, sulfur dioxide, and particulate matter<sup>1</sup>. The NAAQS are set at concentrations intended to protect public health and welfare. The original NAAQS for particulate matter were defined in terms of a reference method that called for measuring particulate matter up to a nominal size of 25 to 45 micrometers or microns. This fraction of total ambient particulate matter is referred to as “total suspended particulate” or TSP. Within nine months of promulgation of the original NAAQS, each state was required under section 110 of the 1970 amended Act to adopt and submit to the EPA a plan, referred to as a SIP, which provides for the implementation, maintenance, and enforcement of each of the NAAQS within each State. The State of Nevada submitted its SIP on January 28, 1972, and the EPA took action on it later that year. 37 FR 10842 (May 31, 1972).

Generally, SIPs were to provide for attainment of the NAAQS within three years after EPA approval of the plan. However, many areas of the country did not attain the NAAQS within

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<sup>1</sup> Particulate matter is the generic term for a broad class of chemically and physically diverse substances that exist as discrete particles (liquid droplets or solids) over a wide range of sizes. Particles originate from a variety of anthropogenic stationary and mobile sources as well as from natural sources. Particles may be emitted directly or form in the atmosphere by transformations of gaseous emissions such as sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOC). The chemical and physical properties of particulate matter vary greatly with time, region, meteorology, and source category. SO<sub>x</sub>, NO<sub>x</sub>, and VOC are referred to as PM<sub>10</sub> precursors. As discussed later in this proposed rule, precursor emissions do not contribute significantly to elevated ambient PM<sub>10</sub> concentrations in Truckee Meadows.

the statutory period. In response, Congress amended the Act in 1977 to establish a new approach, based on area designations, for attaining the NAAQS. Under section 107(d) of the 1977 amended Act, states were to make recommendations for all areas within their borders as attainment, nonattainment, or unclassifiable for each of the NAAQS, including TSP, and the EPA was to designate areas based on those recommendations, as modified if appropriate. For the State of Nevada, the state recommended, and the EPA approved, the use of hydrographic areas as the geographic basis for designating air quality planning areas. 67 FR 12474 (March 19, 2002). For the TSP NAAQS, the EPA designated a number of areas in Nevada as “nonattainment,” including Truckee Meadows<sup>2</sup> (hydrographic area (HA) #87). 43 FR 8962, at 9012 (March 3, 1978). The area designations for air quality planning purposes within the State of Nevada are codified at 40 CFR 81.329.

As amended in 1977, the CAA required states to revise their SIPs by January 1979 for all designated nonattainment areas. The various local entities and the State of Nevada responded by developing and submitting attainment plans for the TSP nonattainment areas, including Truckee Meadows,<sup>3</sup> and in 1981, the EPA approved these plans on condition that the State submit, within a prescribed period of time, revisions to correct certain deficiencies. 46 FR 21758 (April 14, 1981). In 1982, we found that the state had submitted the required revisions correcting the

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<sup>2</sup> Truckee Meadows, also referred to as the “Reno planning area,” lies in the far southern part of Washoe County. Washoe County is located in the northwestern portion of Nevada and is bordered by the State of California to the west and the State of Oregon to the north. Within the State of Nevada, the counties of Humboldt, Pershing, Storey, Churchill, Lyon, and the city of Carson City bound Washoe County to the east and south. Located at an average elevation of 4,500 feet above sea level, Truckee Meadows encompasses a land area of approximately 200 square miles and is surrounded by mountain ranges, which can lead to persistent wintertime temperature inversions where a layer of cold air is trapped in the valley. Warmer air above the inversion acts as a lid, containing and concentrating air pollutants at ground level. Approximately two-thirds of Washoe County’s population lives in the Truckee Meadows area. Anthropogenic activities, such as automobile use and residential wood combustion, are also concentrated here. Washoe County has experienced significant growth in population since 1990, with an increase in population from approximately 257,000 in 1990 to approximately 422,000 in 2011, an increase of 64 percent over that 21-year period. The two major cities in Truckee Meadows are Reno and Sparks.

<sup>3</sup> The reference here is to the TSP portions of the *Truckee Meadows Air Quality Implementation Plan* (December 6, 1978).

identified deficiencies, and we revoked the conditions placed on our approval of the TSP plans. 47 FR 15790 (April 13, 1982).

In 1987, the EPA revised the NAAQS for particulate matter, eliminating TSP as the indicator for the NAAQS and replacing it with the “PM<sub>10</sub>” indicator. 52 FR 24634 (July 1, 1987). PM<sub>10</sub> refers to particles with an aerodynamic diameter less than or equal to a nominal 10 microns. At that time, EPA established two PM<sub>10</sub> standards: A 24-hour standard of 150 micrograms per cubic meter (µg/m<sup>3</sup>) and an annual standard of 50 µg/m<sup>3</sup>.<sup>4</sup> We indicated in the preamble to our regulations implementing the then-new PM<sub>10</sub> NAAQS that we would consider deletion of TSP area designations once the EPA had reviewed and approved revised SIPs that include control strategies for the PM<sub>10</sub> NAAQS and once the EPA had promulgated PM<sub>10</sub> increments for the prevention of significant deterioration (PSD) program. 52 FR 24672, at 24682 (July 1, 1987).

Under our regulations for implementing the revised particulate matter NAAQS (i.e., the PM<sub>10</sub> NAAQS), the EPA did not designate areas as nonattainment, attainment, or unclassifiable but categorized areas into three groups, referred to as Group I, Group II, or Group III. Group I areas were those that had a probability of not attaining the PM<sub>10</sub> NAAQS (based on existing TSP data) of at least 90%. Group I areas were required to submit SIP revisions that contain full PM<sub>10</sub> control strategies including a demonstration of attainment. 52 FR 24672, at 24681 (July 1, 1987). We identified the Las Vegas (HA #212) and Reno (HA #87, i.e., Truckee Meadows) planning areas as Group I areas. 52 FR 29383 (August 7, 1987) and 55 FR 45799 (October 31, 1990).

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<sup>4</sup> In 2006, the EPA retained the 24-hour PM<sub>10</sub> standard but revoked the annual PM<sub>10</sub> standard. 71 FR 61144 (October 17, 2006). More recently, as part of the Agency’s periodic review of the NAAQS, EPA reaffirmed the 24-hour PM<sub>10</sub> NAAQS. 78 FR 3086 (January 15, 2013). See 40 CFR 50.6 (“National primary and secondary ambient air quality standards for PM<sub>10</sub>”).

The CAA was significantly amended in 1990. Under the 1990 amended Act, Congress replaced the PM<sub>10</sub> regulatory approach established by the EPA in 1987 with the area designation concept and designated former “Group I” areas and certain other areas as nonattainment areas for PM<sub>10</sub> by operation of law. *See* CAA section 107(d)(4)(B). As former “Group I” areas, the Reno planning area (i.e., Truckee Meadows) was designated as a nonattainment area for PM<sub>10</sub> by operation of law. 56 FR 11101 (March 15, 1991). Truckee Meadows was initially classified as a “Moderate” PM<sub>10</sub> nonattainment area with an applicable attainment date of December 31, 1994, but despite improvements in ambient particulate conditions, Truckee Meadows was later reclassified by operation of law to “Serious” upon the EPA’s determination that the area had failed to attain the standard by the “Moderate” area attainment date (i.e., based on ambient PM<sub>10</sub> data for the 1992-1994 period). 66 FR 1268 (January 8, 2001). States with “Serious” PM<sub>10</sub> nonattainment areas were required under the CAA, as amended in 1990, to submit revisions to their SIPs to, among other things, demonstrate attainment of the PM<sub>10</sub> standard as expeditiously as practicable, but no later than December 31, 2001. *See* CAA section 188(c). Despite further improvements, Truckee Meadows failed to attain the December 31, 2001 attainment date based on ambient PM<sub>10</sub> data for the 1999-2001 period. Such areas are required to submit an attainment plan under CAA section 189(d) (referred to as a “Five Percent” plan), but the SIP submittal requirement for a Five Percent plan for Truckee Meadows was suspended by a “clean data” determination by the EPA based on ambient PM<sub>10</sub> data for the 2007-2009 period. 76 FR 21807 (April 19, 2011).

The 1990 Act Amendments also provided for the continued transition from TSP to PM<sub>10</sub>. Specifically, section 107(d)(4)(B) states in relevant part: “Any designation for particulate matter (measured in terms of total suspended particulates) that the Administrator promulgated pursuant

to this subsection (as in effect immediately before November 15, 1990) shall remain in effect for purposes of implementing the maximum allowable increases in concentrations of particulate matter (measured in terms of total suspended particulates) pursuant to section 163(b) of this title, until the Administrator determines that such designation is no longer necessary for that purpose.” Section 166(f) of the 1990 amended Act authorizes the EPA to replace the TSP increments with PM<sub>10</sub> increments, and in 1993, the EPA promulgated the PM<sub>10</sub> increments and revised the PSD regulations accordingly. 58 FR 31622 (June 3, 1993). In our June 1993 final rule, we indicated that the replacement of the TSP increments with PM<sub>10</sub> increments negates the need for the TSP *attainment or unclassifiable* area designations to be retained. We also indicated that we would delete such TSP designations in 40 CFR part 81 upon the occurrence of, among other circumstances, the EPA’s approval of a State’s or local agency’s revised PSD program containing the PM<sub>10</sub> increments. 58 FR 31622, at 31635 (June 3, 1993).

In November 2002, we deleted the TSP attainment or unclassifiable area designations throughout the State of Nevada, except for those in Clark County. 67 FR 68769 (November 13, 2002). In April 2013, we deleted the TSP attainment or unclassifiable area designations within Clark County and also deleted the TSP *nonattainment* area designations for all of the Nevada TSP nonattainment areas, except for Las Vegas Valley and Truckee Meadows.<sup>5</sup> 78 FR 22425 (April 16, 2013). In July 2014, we deleted the TSP nonattainment area designation for Las Vegas Valley, and in today’s proposed rule, we are proposing to delete the TSP nonattainment area designation for Truckee Meadows.

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<sup>5</sup> In June 1992, the State of Nevada requested that we reclassify the eight existing TSP nonattainment areas in Nevada to “unclassifiable” status. *See* letter from L.H. Dodgion, Administrator, NDEP, to Daniel W. McGovern, Regional Administrator, EPA Region IX, dated June 15, 1992. We believe that deletion of the TSP nonattainment designations is administratively more efficient than redesignation of the area to unclassifiable. As noted above, we have already deleted seven of the TSP nonattainment area designations and are proposing to delete the one for Truckee Meadows herein.

## II. The State's Submittals

The Nevada Division of Environmental Protection (NDEP) is the state agency with overall responsibility for the Nevada SIP and is the designated agency for submitting SIPs and SIP revisions to the EPA for approval. The Washoe County District Board of Health ("Health District"), which administers air quality programs through the Health District's Air Quality Management Division ("WCAQMD"), is empowered under state law to develop air quality plans within Washoe County. The Health District is also empowered under state law to regulate stationary sources within Washoe County with the exception of certain types of power plants, which lie exclusively within the jurisdiction of the NDEP. After it adopts an air quality plan for Washoe County, the Health District submits the plan to NDEP for adoption as part of the Nevada SIP and then for submittal to the EPA for approval.

As noted above, the Health District adopted, and the EPA approved, an air quality plan in the 1970s to provide for attainment of the TSP standard in Truckee Meadows. Another plan was required for Truckee Meadows in response to the area's classification as a "Moderate" nonattainment area for  $PM_{10}$  under the Clean Air Act Amendments of 1990. On April 15, 1991, the NDEP submitted certain District regulations intended to reduce  $PM_{10}$  emissions in Truckee Meadows to the EPA. On October 30, 1991, the state submitted "Nevada State Implementation Plan for the Truckee Meadows Air Basin, Particulate Matter ( $PM_{10}$ )" ("1991  $PM_{10}$  Attainment Plan"), a  $PM_{10}$  plan for the Truckee Meadows area to address the requirements in CAA section 189(a) for "Moderate"  $PM_{10}$  nonattainment areas. The 1991  $PM_{10}$  Attainment Plan included a demonstration that the attainment deadline for the Truckee Meadows moderate nonattainment area (December 31, 1994) was not practicably achievable, and carried forward the District regulations that had been submitted previously on April 15, 1991. On March 7, 1994, the NDEP

submitted amended District regulations that were intended to address deficiencies that the EPA had identified through its review of the regulations submitted in April 1991 and the 1991 PM<sub>10</sub> Attainment Plan submitted in October 1991.

As noted above, in 2001, the EPA reclassified the Truckee Meadows area to “Serious” nonattainment for the PM<sub>10</sub> NAAQS, triggering the requirement for a new attainment plan, and on August 5, 2002, the NDEP submitted a PM<sub>10</sub> plan for Truckee Meadows to address the requirements in CAA section 189(b) for “Serious” PM<sub>10</sub> nonattainment areas. *See* “Revisions to the Nevada Particulate Matter (PM<sub>10</sub>) State Implementation Plan for the Truckee Meadows Air Basin,” August 2002 (“2002 PM<sub>10</sub> Attainment Plan”). Generally, each subsequent air quality plan builds upon the foundation established by earlier plans, and, in this instance, the 2002 PM<sub>10</sub> Attainment Plan built upon and superseded the earlier “Moderate” area plans. The 2002 PM<sub>10</sub> Attainment Plan included an analysis of BACM for the Truckee Meadows area and regulations to control PM<sub>10</sub> emissions from all significant PM<sub>10</sub> sources identified in that BACM analysis – i.e., street sanding and sweeping operations, fugitive dust-generating activities, and residential wood combustion. The District Regulations submitted as part of the 2002 PM<sub>10</sub> Attainment Plan superseded those that had been submitted in April 1991 and those submitted in March 1994. The EPA has approved the various District regulations submitted in connection with the 2002 PM<sub>10</sub> Attainment Plan, but has not otherwise taken action on the “Moderate” or “Serious” area attainment plans.

In 2009, based on ambient PM<sub>10</sub> monitoring data showing that the area had attained the PM<sub>10</sub> NAAQS, the WCAQMD developed a maintenance plan, and the NDEP submitted the plan to the EPA for approval along with a request to redesignate Truckee Meadows from nonattainment to attainment for the PM<sub>10</sub> standard. *See* “Redesignation Request and

Maintenance Plan for the Truckee Meadows 24-Hour PM<sub>10</sub> Non-Attainment Area,” May 28, 2009 (“2009 PM<sub>10</sub> Maintenance Plan”). The 2009 PM<sub>10</sub> Maintenance Plan included motor vehicle emissions budgets (MVEBs) for the Truckee Meadows area, and the EPA found that MVEBs for PM<sub>10</sub> contained in the 2009 PM<sub>10</sub> Maintenance Plan were adequate for transportation conformity purposes. 75 FR 27776 (May 18, 2010). The WCAQMD subsequently revised the 2009 PM<sub>10</sub> Maintenance Plan in response to the EPA’s review of the plan, and on November 7, 2014, the NDEP submitted a new maintenance plan, “Redesignation Request and Maintenance Plan for the Truckee Meadows 24-Hour PM<sub>10</sub> Non-Attainment Area,” August 28, 2014 (“2014 PM<sub>10</sub> Maintenance Plan” or “Plan”) for EPA approval. The 2014 PM<sub>10</sub> Maintenance Plan supersedes the 2009 PM<sub>10</sub> Maintenance Plan, and includes a revised maintenance plan under CAA section 175A, an updated emissions inventory under CAA section 172(c)(3), and revised MVEBs for the Truckee Meadows area.

In this proposed rule, we are proposing to approve the 2014 PM<sub>10</sub> Maintenance Plan, including the emissions inventory, maintenance demonstration, and related MVEBs.

Additionally, we are proposing to approve the BACM demonstration from the 2002 PM<sub>10</sub> Attainment Plan but consider the rest of the 2002 PM<sub>10</sub> Attainment Plan to be superseded by the 2014 PM<sub>10</sub> Maintenance Plan.

### **III. Procedural Requirements for Adoption and Submittal of SIP Revisions**

Section 110(l) of the CAA requires states to provide reasonable notice and public hearing prior to adoption of SIP revisions. In this action, we are proposing action on the NDEP’s submittal of the 2014 PM<sub>10</sub> Maintenance Plan as a revision to the Nevada SIP. The 2014 PM<sub>10</sub> Maintenance Plan contains evidence that reasonable notice of a public hearing was provided to the public (via newspaper advertisement) and that a public hearing was conducted prior to

adoption by the Health District. More specifically, the Plan provides evidence that the Health District published a notice of the availability of the draft 2014 PM<sub>10</sub> Maintenance Plan and of a public hearing to be held on August 28, 2014 in the Reno Gazette-Journal on July 25, August 11, and August 22, 2014. Following adoption by the Health District on August 28, 2014, the Health District forwarded the 2014 PM<sub>10</sub> Maintenance Plan to the NDEP. The NDEP then submitted the SIP revision to the EPA for approval on November 7, 2014.

In this action, we also proposed to approve an element (i.e., the BACM demonstration) of the 2002 PM<sub>10</sub> Attainment Plan, and it too contains evidence that reasonable notice of a public hearing was provided to the public (via newspaper advertisement) and that a public hearing was conducted. Following adoption by the Health District on July 26, 2002, the Health District forwarded the 2002 PM<sub>10</sub> Attainment Plan to the NDEP, which then submitted the SIP revision to the EPA for approval. Thus, we find that both the 2014 PM<sub>10</sub> Plan and the 2002 PM<sub>10</sub> Plan satisfy the procedural requirements of section 110(l) of the Act for revising SIPs.

#### **IV. Clean Air Act Requirements for Redesignation to Attainment**

The CAA establishes the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) allows for redesignation provided that the following criteria are met: (1) the EPA determines that the area has attained the applicable NAAQS; (2) the EPA has fully approved the applicable implementation plan for the area under section 110(k); (3) the EPA determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP, applicable Federal air pollution control regulations, and other permanent and enforceable reductions; (4) the EPA has fully approved a maintenance plan for the area as meeting the

requirements of CAA section 175A; and (5) the State containing such area has met all requirements applicable to the area under section 110 and part D of title I of the CAA.

The EPA provided guidance on redesignations in the form of a General Preamble for the Implementation of Title I of the CAA Amendments of 1990 published in the **Federal Register** on April 16, 1992 (57 FR 13498), as supplemented on April 28, 1992 (57 FR 18070) (“General Preamble”). Other relevant EPA guidance documents include: “Procedures for Processing Requests to Redesignate Areas to Attainment,” Memorandum from John Calcagni, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards, September 4, 1992 (“Calcagni Memo”); “Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment,” Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994 (“Nichols Memo”); and “State Implementation Plans for Serious PM<sub>10</sub> Nonattainment Areas, and Attainment Date Waivers for PM<sub>10</sub> Nonattainment Areas Generally; Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,” 59 FR 41998 (August 16, 1994) (“PM<sub>10</sub> Addendum”).

For the reasons set forth below in section V of this document, we are proposing to approve the NDEP's request for redesignation of the Truckee Meadows nonattainment area to attainment for the PM<sub>10</sub> NAAQS based on our conclusion that all of the criteria under CAA section 107(d)(3)(E) have been satisfied.

## **V. Evaluation of the State's Redesignation Request for Truckee Meadows**

### *A. The Area Has Attained the PM<sub>10</sub> NAAQS*

Section 107(d)(3)(E)(i) of the CAA states that for an area to be redesignated to attainment, the EPA must determine that the area has attained the applicable NAAQS. In this

case, the applicable NAAQS is the PM<sub>10</sub> NAAQS. As noted above, in 2011 (76 FR 21807, April 19, 2011), the EPA determined that Truckee Meadows had attained the PM<sub>10</sub> standard based on 2007-2009 ambient data; however, to redesignate the area to attainment, it is necessary to update that determination based on the most current information to ensure that the area continues to attain the standard.

We generally determine whether an area's air quality meets the PM<sub>10</sub> standard based upon the most recent period of complete, quality-assured data gathered at established State and Local Air Monitoring Stations (SLAMS) in the nonattainment area and entered into the EPA Air Quality System (AQS) database. Data from air monitors operated by state/local agencies in compliance with EPA monitoring requirements must be submitted to the EPA AQS database. Heads of monitoring agencies annually certify that these data are accurate to the best of their knowledge. Accordingly, the EPA relies primarily on data in its AQS database when determining the attainment status of areas. *See* 40 CFR 50.6; 40 CFR part 50, appendix J; 40 CFR part 53; 40 CFR part 58, appendices A, C, D and E. All data are reviewed to determine the area's air quality status in accordance with 40 CFR part 50, appendix K.

The PM<sub>10</sub> standard is attained when the expected number of days per calendar year with a 24-hour concentration in excess of the standard (referred to herein as "exceedance"),<sup>6</sup> as determined in accordance with 40 CFR part 50, appendix K, is equal to or less than one.<sup>7</sup> *See* 40 CFR 50.6 and 40 CFR part 50, appendix K. For purposes of redesignation, the most recent three

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<sup>6</sup> An exceedance is defined as a daily value that is above the level of the 24-hour standard (i.e., 150 µg/m<sup>3</sup>) after rounding to the nearest 10 µg/m<sup>3</sup> (i.e., values ending in 5 or greater are to be rounded up). Thus, a recorded value of 154 µg/m<sup>3</sup> would not be an exceedance since it would be rounded to 150 µg/m<sup>3</sup> whereas a recorded value of 155 µg/m<sup>3</sup> would be an exceedance since it would be rounded to 160 µg/m<sup>3</sup>. *See* 40 CFR part 50, appendix K, section 1.0.

<sup>7</sup> The comparison with the allowable expected exceedance rate of one per year is made in terms of a number rounded to the nearest tenth (fractional values equal to or greater than 0.05 are to be rounded up; e.g., an exceedance rate of 1.05 would be rounded to 1.1, which is the lowest rate for nonattainment). *See* 40 CFR part 50, appendix K, section 2.1(b).

consecutive years of complete air quality data are necessary to show attainment of the 24-hour standard for PM<sub>10</sub>. *See* 40 CFR part 50, appendix K. A complete year of air quality data, as referred to in 40 CFR part 50, appendix K, includes all four calendar quarters with each quarter containing data from at least 75 percent of the scheduled sampling days. *Id.*

The WCAQMD currently operates five SLAMS within the Truckee Meadows PM<sub>10</sub> nonattainment area, but operated six such stations over most of the 2012-2014 period. The locations of the five current PM<sub>10</sub> monitors in Truckee Meadows are as follows. In the City of Reno, the “Reno3” monitoring site is located in downtown Reno just south of Interstate 80; the “Plumb-Kit” site is in a graveled area close to residences, about half a mile west of Interstate 580 and the Reno-Tahoe International Airport; and the “Toll” site is located along State Route 341, at the corner of the Washoe County School District parking lot. In South Reno, the “South Reno” monitoring site is located in an unpaved, vegetated area at the northeast corner of the Nevada Energy campus. In the City of Sparks, the “Sparks” monitoring site is located along a paved parking lot about half a mile north of Interstate 80. The sixth monitoring site, the “Galletti” site, which was closed in mid-November 2014, was located in downtown Reno just south of Interstate 80.<sup>8</sup> The locations of the monitoring sites are illustrated in figure 2-1 in the 2014 PM<sub>10</sub> Maintenance Plan, and are described in more detail in “Washoe County Health District, Air Quality Management Division, 2015 Ambient Air Monitoring Network Plan,” submitted to EPA Region IX July 1, 2015. All of the PM<sub>10</sub> monitor sites operate on a daily schedule using continuous monitors. *Id.* at 3. Despite the closure of the “Galletti” site, the WCAQMD PM<sub>10</sub>

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<sup>8</sup> The WCAQMD closed the “Galletti” site in mid-November 2014 as a result of emergency construction at the location of the site. The EPA has approved WCAQMD’s request to close the Galletti site, due to lease issues beyond their control as well as siting issues. *See* letter from Meredith Kurpius, Manager, Air Quality Analysis Office, EPA Region IX, to Daniel Inouye, Chief, Monitoring and Planning, WCAQMD, April 22, 2015.

network continues to meet minimum monitoring requirements per appendix D to 40 CFR part 58.

WCAQMD reports the PM<sub>10</sub> data from its monitors to AQS on a quarterly basis as required under the EPA's monitoring regulations. The EPA has approved the WCAQMD's monitoring network as satisfying the network design and data adequacy requirements of 40 CFR part 58.<sup>9</sup> The EPA's most recent audit of WCAQMD's ambient air monitoring program found, generally, that the program is robust and meets EPA requirements.<sup>10</sup> As with any audit, the EPA uncovered some program areas that can be improved, but none are cause for data invalidation. The WCAQMD annually certifies that the data it submits to AQS are complete and quality-assured. *See, e.g.*, letter dated April 30, 2015, from Daniel Inouye, Branch Chief, Monitoring and Planning, WCAQMD, to Jared Blumenfeld, Regional Administrator, EPA Region IX, "Re: CY2014 Ambient Air Monitoring Data Certification."

Table 1 provides the highest measured PM<sub>10</sub> concentrations and the number of expected exceedances in Truckee Meadows during the 2010-2014 period. Table 1 shows generally that Truckee Meadows has continued to attain the PM<sub>10</sub> standard since the EPA made the determination of attainment in 2011 based on 2007-2009 data; however, a determination of attainment requires a more detailed examination of the data for the most recent three-year period. For the purposes of this action, we are focusing our evaluation on the most recent three-year period for which data is available, i.e., 2012-2014.

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<sup>9</sup> *See* letter from Meredith Kurpius, Manager, Air Quality Analysis Office, EPA Region IX, to Daniel Inouye, Director, WCAQMD, October 29, 2014.

<sup>10</sup> *See* letter from Deborah Jordan, Director, Air Division, EPA Region IX, to Charlene Albee, Director, WCAQMD, August 19, 2014 and enclosed report titled "Technical System Audit Report, Washoe County Health District Air Quality Management Division, Ambient Air Monitoring Program (September 4-6, 2013)," dated August 2014.



**Table 1 - Monitored PM<sub>10</sub> Concentrations and Expected Exceedances (2010 – 2014)**

Monitoring site name and AQS number	Maximum 24-hour (µg/m <sup>3</sup> )					Expected exceedances (calendar year)					Expected exceedances (3-year averages)		
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010-2012	2011 - 2013	2012 - 2014
Reno3 (32-031-0016)	142	64	46	121	134	0	0	0	0	0	0	0	0
South Reno (32-031-0020)	52	63	61	133	106	0	0	0	0	0	0	0	0
Galletti (32-031-0022)	87	113	77	131	<b>159*</b>	0	0	0	0	1**	0	0	0.3**
Toll (32-031-0025)	34	121	85	144	121	0	0	0	0	0	0	0	0
Plumb-Kit (32-031-0030)	77	71	92	127	136	0	0	0	0	0	0	0	0
Sparks (32-031-1005)	55	76	100	100	135	0	0	0	0	0	0	0	0

Source: EPA AQS database. August 7, 2015. Values shown in **bold** type represent exceedances of the PM<sub>10</sub> standard.

\* The exceedance occurred on September 18, 2014 and has been flagged by WCAQMD as an exceptional event. While the EPA has not concurred on the exceedance as an exceptional event nor excluded it from our proposed determination of attainment, the Agency recognizes that the exceedance was monitored during a period when a significant regional wildfire (the King Fire) burned tens of thousands of acres in the Sierra Nevada Mountains east of Sacramento, generally upwind of Truckee Meadows.

\*\* The Galletti site closed in mid-November 2014 as a result of emergency construction at the location of the site. The EPA approved the closure of the site in April 2015. The 2014 data is incomplete, however; the EPA has determined that the data remains valid for NAAQS comparison purposes.

For the 2012-2014 period, with one exception, the AQS database contains complete, quality-assured and certified data from the six PM<sub>10</sub> monitoring sites operating during this period within Truckee Meadows. The one exception relates to the “Galletti” site, which, as noted above, was closed in mid-November 2014 due to emergency construction at the site, and for which the fourth quarter’s 2014 data is incomplete. However, we find that the data from the “Galletti” site, while incomplete in one quarter of one year of the 2012-2014 period, remain valid for PM<sub>10</sub> NAAQS comparison purposes based on the statistical analysis prepared by the WCAQMD in its March 5, 2015 request for approval for closure of the “Galletti” site. The WCAQMD’s statistical analysis demonstrates, using the annual maximum 24-hour concentrations from 2009-2013, that there is just over a 10 percent probability of exceeding 80 percent of the PM<sub>10</sub> NAAQS at the “Galletti” site during the next three years (2014-2016), and the EPA cited this statistical analysis in its approval of the closure of the Galletti site.<sup>11</sup>

Based on our review of the quality-assured, certified, and complete (or otherwise validated) PM<sub>10</sub> data for the six PM<sub>10</sub> monitoring sites, we find that the expected number of days per calendar year with an exceedance is less than 1.0 at all six sites over the most recent three-year period (2012-2014). See table 1 above. Preliminary data for calendar year 2015 indicate that there has been only one measured exceedance of the PM<sub>10</sub> standard (on February 6, 2015 at the Toll site), but this exceedance does not result in a violation of the standard at that site given that it has no other recorded exceedances since 2002. See table 1, above, and our proposed determination of attainment at 76 FR 10817 (February 28, 2011). Thus, we find that preliminary 2015 data is consistent with continued attainment. As such, we find that Truckee Meadows is

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<sup>11</sup> See letter from Meredith Kurpius, Manager, Air Quality Analysis Office, EPA Region IX, to Daniel Inouye, Chief, Monitoring and Planning, WCAQMD, April 22, 2015, page 2.

attaining the PM<sub>10</sub> standard and thereby meets the criterion for redesignation in CAA section 107(d)(3)(E)(i).

*B. The Area Has Met All Applicable Requirements for Purposes of Redesignation Under Section 110 and Part D of the CAA and Has a Fully Approved Applicable Implementation Plan Under Section 110(k) of the CAA*

Section 107(d)(3)(E)(ii) and (v) require the EPA to determine that the area has a fully-approved applicable SIP under section 110(k) that meets all applicable requirements under section 110 and part D for the purposes of redesignation. The EPA may rely on prior SIP approvals in approving a redesignation request, Calcagni Memo at 3; *Wall v. EPA*, F.3d 416 (6th Cir. 2001), *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-990 (6th Cir. 1998), as well as any additional measure it may approve in conjunction with a redesignation action. See 68 FR 25426 (May 12, 2003) and citations therein. In this instance, we are proposing to approve several part D elements as part of this action [i.e., emissions inventory under CAA section 172(c)(3) and the BACM demonstration under CAA section 189(b)(1)(B)]. With full approval of those two elements, the Truckee Meadows portion of the Nevada SIP will be fully approved under section 110(k) of the Act with respect to all SIP elements that are applicable for the purposes of redesignation of the area to attainment.

1. Basic SIP Requirements Under CAA Section 110

The general SIP elements and requirements set forth in section 110(a)(2) include, but are not limited to, the following: submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements for Prevention of Significant

Deterioration (PSD); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

We note that SIPs must be fully approved only with respect to applicable requirements for purposes of redesignation in accordance with CAA section 107(d)(3)(E)(ii). The section 110 and part D requirements that are linked to a particular nonattainment area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. Requirements that apply regardless of the designation of any particular area in the state are not applicable requirements for purposes of redesignation, and the state will remain subject to these requirements after the nonattainment area is redesignated to attainment.

Thus, for example, CAA section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state, known as "transport SIPs." Because the section 110(a)(2)(D) requirements for transport SIPs are not linked to a particular nonattainment area's designation and classification but rather apply regardless of attainment status, these are not applicable requirements for purposes of redesignation under CAA section 107(d)(3)(E). This policy is consistent with EPA's existing policy on applicability of the conformity SIP requirement (i.e., for redesignations). *See* discussion in 75 FR 36023, 36026 (June 24, 2010) (proposed rule to redesignate Coso Junction, California, to attainment for the PM<sub>10</sub> NAAQS) and related citations.

On numerous occasions over the past 40 years, NDEP has submitted, and we have approved, provisions addressing the basic CAA section 110 provisions for Truckee Meadows. *See, e.g.,* 37 FR 15080 (July 27, 1972); 77 FR 60915 (October 5, 2012); and 77 FR 64737 (October 23, 2012). The Truckee Meadows portion of the Nevada SIP contains enforceable emission limitations; requires monitoring, compiling and analyzing of ambient air quality data;

requires preconstruction review of new or modified stationary sources; provides for adequate funding, staff, and associated resources necessary to implement its requirements; and provides the necessary assurances that the state maintains responsibility for ensuring that the CAA requirements are satisfied in the event that the Health District is unable to meet its CAA obligations.<sup>12</sup> Based on our review of the Nevada SIP, we have concluded that it meets the general SIP requirements under section 110(a)(2) of the CAA to the extent they are applicable for purposes of redesignation of Truckee Meadows to attainment for the PM<sub>10</sub> standard.

## 2. SIP Requirements Under Part D

Subparts 1 and 4 of part D, title I of the CAA contain air quality planning requirements for PM<sub>10</sub> nonattainment areas. Subpart 1 contains general requirements for all nonattainment areas of any pollutant, including PM<sub>10</sub>, governed by a NAAQS. The subpart 1 requirements include, in relevant part, provisions for implementation of reasonably available control measures (RACM), a demonstration of reasonable further progress (RFP), emissions inventories, a program for preconstruction review and permitting of new or modified major stationary sources, contingency measures, conformity, and, for areas that fail to attain the standard by the applicable attainment date, a plan meeting the requirements of section 179(d).

Subpart 4 contains specific SIP requirements for PM<sub>10</sub> nonattainment areas. The requirements set forth in CAA section 189(a), (c), and (e) apply specifically to “Moderate” PM<sub>10</sub> nonattainment areas and include, in relevant part: (1) provisions for implementation of reasonably available control measures (RACM); (2) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date; and (3) provisions to ensure that the control requirements applicable to major stationary sources of PM<sub>10</sub> also apply to major stationary sources of PM<sub>10</sub> precursors except where the EPA has determined that such sources do not

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<sup>12</sup> The applicable Nevada SIP can be found at <http://yosemite.epa.gov/r9/r9sips.nsf/allsips?readform&state=Nevada>.

contribute significantly to PM<sub>10</sub> levels that exceed the NAAQS in the area. Under CAA section 189(b), “Serious” PM<sub>10</sub> nonattainment areas, such as Truckee Meadows, must meet the subpart 1 and “Moderate” area requirements discussed above and, in addition, must develop and submit provisions to assure the implementation of BACM for the control of PM<sub>10</sub>. In addition, under CAA section 189(d), “Serious” PM<sub>10</sub> nonattainment areas that fail to attain the standard by the applicable attainment date, such as Truckee Meadows, must develop and submit plan revisions which provide for attainment of the PM<sub>10</sub> standard, and from the date of such submission until attainment, for an annual reduction in PM<sub>10</sub> within the area of not less than 5 percent of the amount of such emissions.

However, we have determined that, in accordance with our Clean Data Policy, the obligation to submit the following CAA requirements for Truckee Meadows is not applicable for so long as the area continues to attain the PM<sub>10</sub> standard: The part D, subpart 4 obligations to provide the RACM provisions of section 189(a)(1)(C), the RFP provisions of section 189(c), the requirement for a section 189(d) plan, the attainment demonstration, RACM, RFP and contingency measure provisions of part D, subpart 1 contained in section 172 of the Act, and requirements for additional plan provisions in section 179(d) of the Act. 76 FR 21807 (April 19, 2011). As discussed above in section V.A, Truckee Meadows has continued to attain the PM<sub>10</sub> standard since the EPA’s 2011 determination of attainment, which was based on 2007-2009 data, and we are specifically proposing to determine that the area currently meets the standard based on the most recent three-year period (2012-2014). As such, the part D SIP submittal requirements suspended by our 2011 “clean data” determination do not apply for the purposes of evaluating Truckee Meadows’ eligibility for redesignation under CAA section 107(d)(3)(E)(v).<sup>13</sup>

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<sup>13</sup> The suspended SIP planning requirements will cease to apply to the Truckee Meadows area upon the effective date of redesignation to attainment for the PM<sub>10</sub> standard. For another rulemaking action citing the “clean data

Moreover, in the context of evaluating the area's eligibility for redesignation, there is a separate and additional justification for finding that requirements associated with attainment are not applicable for purposes of redesignation. Prior to and independently of the Clean Data Policy, and specifically in the context of redesignations, the EPA interpreted attainment-linked requirements as not applicable for purposes of redesignation. In the General Preamble, the EPA stated:

[t]he section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date. These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans \* \* \* provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas. General Preamble, 57 FR 13498 at 13564 (April 16, 1992).

*See also* Calcagni memorandum at 6 (“The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard.”). Thus, even if the requirements associated with attainment had not previously been suspended, they would not apply for purposes of evaluating whether an area that has attained the standard qualifies for redesignation. The EPA has enunciated this position since the General Preamble was published more than twenty years ago, and it represents the Agency's interpretation of what constitutes applicable requirements under section 107(d)(3)(E). The Courts have recognized the scope of EPA's authority to interpret “applicable requirements” in the redesignation context. *See Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004).

The remaining applicable part D requirements for serious PM<sub>10</sub> nonattainment areas are:

(1) an emissions inventory under section 172(c)(3); (2) a permit program for the construction and

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policy” in the context of evaluating a redesignation request of a PM<sub>10</sub> nonattainment area under CAA section 107(d)(3)(E)(v), see 75 FR 36023, at 36027 (June 24, 2010) and 75 FR 54031 (September 3, 2010) (proposed and final redesignation for Coso Junction, California). *See also*, 40 CFR 51.918.

operation of new and modified major stationary sources of PM<sub>10</sub> under sections 172(c)(5) and 189(a)(1)(A), including a major source threshold of 70 tons per year as required by section 189(b)(3); (3) provisions to assure implementation of BACM for the control of PM<sub>10</sub> under section 189(b)(1)(B); (4) control requirements for major stationary sources of PM<sub>10</sub> precursors under section 189(e), except where the EPA determines that such sources do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in the area; and (5) provisions to ensure that Federally supported or funded projects conform to the air quality planning goals in the applicable SIP under section 176(c). We discuss each of these requirements below.

#### a. Emissions Inventory

Section 172(c)(3) of the Act requires the state to submit a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant(s) in the nonattainment area, including periodic updates as required by the EPA. We interpret the Act such that the emission inventory requirement of section 172(c)(3) is satisfied by the inventory requirement of the maintenance plan. *See* 57 FR 13498 at 13564 (April 16, 1992). In this action, the EPA is proposing to approve the 2011 attainment inventory submitted in the 2014 PM<sub>10</sub> Maintenance Plan as meeting the emission inventory requirement under section 172(c)(3). *See* discussion below in section V.D.1.

#### b. Permits for New and Modified Stationary Sources

Sections 172(c)(5) and 189(a)(1)(A) of the CAA require the state to submit SIP revisions that establish certain requirements for new or modified stationary sources in nonattainment areas, including provisions to ensure that major new or modified sources of nonattainment pollutants comply with the lowest achievable emission rate (LAER), and that increases in emissions from such stationary sources are offset so as to provide for reasonable further progress towards

attainment in the nonattainment area. For “Moderate” PM<sub>10</sub> areas that are reclassified as “Serious,” such as Truckee Meadows, the “major source” threshold is reduced from 100 to 70 tons per year of PM<sub>10</sub>. The process for reviewing permit applications and issuing permits for new major sources or major modifications to such sources in nonattainment areas is referred to as “nonattainment New Source Review” (“nonattainment NSR” or simply “NSR”).

EPA-approved District regulations include rules for the review of applications for new or modified stationary sources; however, the EPA has not approved District regulations specifically meeting the NSR requirements of sections 172(c)(5) and 189(a)(1)(A). However, the EPA interprets section 107(d)(3)(E)(v) of the CAA such that final approval of a NSR program is not a prerequisite to approving the state’s redesignation request. The EPA has determined in past redesignations that a NSR program does not have to be approved prior to redesignation, provided that the area demonstrates maintenance of the standard without part D NSR requirements in effect. *See generally* Nichols Memo; *see also* the more detailed explanations in the following redesignation rulemakings: Detroit, Michigan (60 FR 12467-12468, March 7, 1996); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, 53669, October 23, 2001); Grand Rapids, Michigan (61 FR 31831, 31836-31837, June 21, 1996); and San Joaquin Valley, California (73 FR 22307, 22313, April 25, 2008 and 73 FR 66759, 66766-67, November 12, 2008).

The demonstration of maintenance of the standard in the 2014 PM<sub>10</sub> Maintenance Plan relies on projections of future emissions based on various growth factors. For the types of stationary sources that are subject to District permitting requirements, future emissions are projected based on employment growth projections and do not take credit for future control technology requirements, such as LAER, or for imposition of emissions offsets. See appendix B

of the 2014 PM<sub>10</sub> Maintenance Plan. Thus, we find that the maintenance demonstration for the Truckee Meadows PM<sub>10</sub> nonattainment area does not rely on an NSR program, and that the area need not have a fully-approved nonattainment NSR program prior to approval of the PM<sub>10</sub> redesignation request.

Once Truckee Meadows has been redesignated to attainment, the requirements of the PSD program set forth at 40 CFR 52.21 will apply with respect to PM<sub>10</sub> (PSD already applies with respect to the other pollutants in Truckee Meadows). *See* 40 CFR 52.1485. Thus, new major sources of PM<sub>10</sub> emissions and major modifications at existing major sources, as defined in 40 CFR 52.21, will be required to obtain a PSD permit before constructing. Currently, the WCAQMD has full responsibility for implementing and enforcing the Federal PSD regulations in 40 CFR 52.21 for sources within its jurisdiction throughout Washoe County, including the Truckee Meadows area, under a delegation agreement with the EPA. *See* “Agreement for Delegation of the Federal Prevention of Significant Deterioration (PSD) Program by the United States Environmental Protection Agency, Region 9, to the Washoe County District Health Department,” dated March 13, 2008. The NDEP has permitting jurisdiction over certain types of power plants located anywhere within the State of Nevada, and if such a source were to locate within Truckee Meadows, the PSD regulations at 40 CFR 52.21 would still apply but would be implemented and enforced by the NDEP, which also administers the program through a delegation agreement with the EPA.

### c. Best Available Control Measures

Section 189(b)(1)(B) of the Act requires for any “Serious” PM<sub>10</sub> nonattainment area that the state submit provisions to assure that BACM for the control of PM<sub>10</sub> will be implemented no later than four years after the date the area is classified (or reclassified) as a “Serious” area. The

PM<sub>10</sub> Addendum (59 FR 41998, August 16, 1994) provides preliminary guidance on meeting this BACM requirement. Even though the EPA previously determined that Truckee Meadows is attaining the PM<sub>10</sub> 24-hour standard (76 FR 21807, April 19, 2011), the overall structure and purpose of title I of the CAA Amendments of 1990, the standard suggested by the word “best,” and the differences in the statute between the requirements for BACM as compared to those for RACM, lead the EPA to believe that, unlike RACM, BACM are to be established generally independent of an analysis of the attainment needs of the “Serious” area. PM<sub>10</sub> Addendum, at 42011. Thus, unlike RACM, BACM remains an applicable requirement for the purposes of evaluating a redesignation request even though the area is attaining the standard.

The EPA defines BACM as, among other things, the maximum degree of emissions reduction achievable for a source or source category, which is determined on a case-by-case basis considering energy, environmental, and economic impacts. *See id.* at 42010, 42013. BACM must be implemented for all categories of sources in a “Serious” PM<sub>10</sub> nonattainment area unless the state adequately demonstrates that a particular source category does not contribute significantly to nonattainment of the PM<sub>10</sub> standard. *See id.* at 42011, 42012. The PM<sub>10</sub> Addendum discusses the following steps for determining BACM:

- Inventory the sources of PM<sub>10</sub> and PM<sub>10</sub> precursors<sup>14</sup> and determine which source categories are significant;
- Evaluate alternative control techniques and their technological feasibility; and evaluate the costs of control measures or their economic feasibility.

*See* PM<sub>10</sub> Addendum, at 42012-42014.

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<sup>14</sup> As described further in section V.B.2.d of this document, we find that PM<sub>10</sub> precursors (NO<sub>x</sub>, SO<sub>x</sub>, and VOC) do not significantly impact ambient PM<sub>10</sub> concentrations in Truckee Meadows.

BACM must be applied to each significant (i.e., non-de minimis) source category. PM<sub>10</sub> Addendum at 42011. In guidance, we have established a presumption that a “significant” source category is one that contributes 5 µg/m<sup>3</sup> or more of PM<sub>10</sub> to a location of a violation of the 24-hour standard. PM<sub>10</sub> Addendum at 42011. However, whether the threshold should be lower than this in any particular area depends upon the specific facts of that area’s nonattainment problem. Specifically, it depends on whether requiring the application of BACM on source categories below a proposed de minimis level would meaningfully expedite attainment. Once these analyses are complete, the individual measures must then be converted into a legally enforceable vehicle (e.g., a regulation or permit process) to ensure BACM implementation. Also, the regulations or other measures should meet the EPA’s criteria regarding the enforceability of SIPs and SIP revisions. CAA sections 172(c)(6) and 110(a)(2)(A). We use these steps as guidelines in our evaluation of the BACM analysis in the 2002 PM<sub>10</sub> Attainment Plan.

The first step in the BACM analysis is to develop a detailed emissions inventory of PM<sub>10</sub> sources and source categories that can be used in modeling to determine their impact on ambient air quality. PM<sub>10</sub> Addendum at 42012. The second step is to use this inventory in air quality modeling to evaluate the impact on PM<sub>10</sub> concentrations over the standards of the various sources and source categories to determine which are significant.

The 2002 PM<sub>10</sub> Attainment Plan contains a detailed inventory of direct PM<sub>10</sub> sources and source categories and, based on the percent contributions of the various source categories to the design day inventory, divides the design day concentration (of 215 µg/m<sup>3</sup>) into source category components, as follows:

- Paved streets/reentrained dust/street sanding (142 µg/m<sup>3</sup>)
- Residential wood combustion (36 µg/m<sup>3</sup>)

- Fugitive dust from construction activities (15  $\mu\text{g}/\text{m}^3$ )
- Stationary/industrial processes (9  $\mu\text{g}/\text{m}^3$ )
- Mobile on-road (4  $\mu\text{g}/\text{m}^3$ )
- Mobile non-road (3  $\mu\text{g}/\text{m}^3$ )
- Unpaved streets (2  $\mu\text{g}/\text{m}^3$ )
- Other fuel combustion and miscellaneous Area (2  $\mu\text{g}/\text{m}^3$ )
- Charbroilers (1  $\mu\text{g}/\text{m}^3$ )

Based on the estimated contribution of the various source categories to the design-day concentration, the following source categories are considered significant, i.e., contribute 5  $\mu\text{g}/\text{m}^3$  or more to the exceedance: (1) paved streets/reentrained dust/street sanding, (2) residential wood combustion, (3) fugitive dust from construction activities, and (4) other stationary/industrial processes.<sup>15</sup> We believe that the 2002 PM<sub>10</sub> Attainment Plan presents an acceptable methodology to evaluate the impact of various PM<sub>10</sub> sources and source categories on PM<sub>10</sub> levels and to derive a comprehensive list of significant source categories.

In preparing the list of candidate BACM to reduce emissions from the various significant source categories, the WCAQMD reviewed our guidance documents on BACM, other EPA documents on PM<sub>10</sub> control, as well as PM<sub>10</sub> plans and measures from other “Serious” PM<sub>10</sub> areas in the United States. The WCAQMD also evaluated controls proposed during public comment, sought input from work groups (e.g., Road Sanding and Sweeping Working Group) and requested review and comment by the EPA on individual measures to help ensure that their adopted measures would constitute BACM. The processes that the WCAQMD used to identify BACM are described in section V of the 2002 PM<sub>10</sub> Attainment Plan. We believe that, based on

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<sup>15</sup> The stationary/industrial processes category includes a disparate group of source subcategories (e.g., concrete production, sand and gravel operations, asphalt production, etc.). For a complete list of the subcategories included in the stationary/industrial processes category, see table 1-2 in appendix B of the 2002 PM<sub>10</sub> Attainment Plan.

the description of the process in the 2002 PM<sub>10</sub> Attainment Plan, the WCAQMD appropriately screened the list of candidate BACM to eliminate certain measures and appropriately identified and evaluated potential BACM for the Truckee Meadows area consistent with our guidance.

Since 1988, the Health District has adopted and strengthened a number of regulations to reduce PM<sub>10</sub> emissions from the significant source categories in Truckee Meadows. *See* 2002 PM<sub>10</sub> Attainment Plan at 10-17. The District PM<sub>10</sub> regulations were originally submitted to the EPA in 1991, but in the wake of the reclassification of Truckee Meadows to “Serious,” the Health District strengthened them to assure implementation of BACM. *See id.* Each of the Health District regulations intended to implement BACM was effective in Truckee Meadows on or before February 7, 2005 (*i.e.*, within four years of the area’s reclassification to serious nonattainment on February 7, 2001), and the EPA has approved all of these regulations as satisfying BACM control requirements.

Specifically, we have approved the following Health District regulations as satisfying BACM control requirements:

- District Regulation 040.005 (“Visible Air Contaminants”)(72 FR 33397 (June 18, 2007)(stationary/industrial processes);
- District Regulation 040.030, “Dust Control” (72 FR 25969, May 8, 2007)(fugitive dust from construction activities and stationary/industrial processes);
- District Regulation 040.031, “Street Sanding Operations” (71 FR 14386, March 22, 2006)(paved streets/reentrained dust/street sanding);
- District Regulation 040.032, “Street Sweeping Operations” (71 FR 14386, March 22, 2006)(paved streets/reentrained dust/street sanding);

- District Regulation 040.051, “Wood Stove/Fireplace Insert Emissions” (72 FR 33397, June 18, 2007)(residential wood combustion); and
- District Regulation 050.001, “Emergency Episode Plan,” (72 FR 33397, June 18, 2007)(residential wood combustion).<sup>16</sup>

Based on our prior approval of these regulations and our conclusion that they cover all significant PM<sub>10</sub> source categories in the Truckee Meadows nonattainment area, we propose approval of the WCAQMD’s demonstration in Section V (“Control Strategies”) of the 2002 PM<sub>10</sub> Attainment Plan as satisfying the requirement to assure implementation of BACM under CAA section 189(b)(1)(B).<sup>17</sup>

#### d. Control Requirements for PM<sub>10</sub> Precursors

Section 189(e) of the CAA requires that the control requirements applicable under part D (of title I of the CAA) for major stationary sources of PM<sub>10</sub> also apply to major stationary sources of PM<sub>10</sub> precursors, except where the EPA determines that such sources do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in the area. In general, a major stationary source in a PM<sub>10</sub> “Serious” area includes any stationary source that emits, or has the potential to emit, 70 tons per year of PM<sub>10</sub>.

The 1991 PM<sub>10</sub> Attainment Plan concluded that major stationary sources of PM<sub>10</sub> precursors do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in Truckee Meadows based on technical study conducted by the Desert Research Institute (DRI) intended to

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<sup>16</sup> On August 22, 2013, the WCAQMD amended regulation 040.051, and the amendment was submitted to the EPA on November 26, 2013. The EPA is currently reviewing the submittal and preparing to act on it. The 2014 PM<sub>10</sub> Maintenance Plan does not rely on emissions reductions from the amendments to the rule.

<sup>17</sup> After BACM is applied to the significant source categories, the significant categories still account for approximately 75 percent of the WCAQMD’s remaining 2011 attainment year inventory of daily emissions during the PM<sub>10</sub> season (November, December, and January). *See* 2014 PM<sub>10</sub> Maintenance Plan at Appendix C (“Truckee Meadows Projected PM<sub>10</sub> Seasonal Emissions (lbs/day)”). Based on a review of the remaining source categories in the 2011 inventory, no new significant source categories (i.e., above the de minimis threshold) were identified, and, therefore, no additional sources are subject to BACM requirements.

identify the sources of ambient PM<sub>10</sub> in Truckee Meadows. In its February 1988 report, *PM<sub>10</sub> Source Apportionment the Truckee Meadows, Nevada, for State Implementation Plan Development, Volume I: Modeling Methods and Results, Final Report* (“DRI Report”), submitted as appendix B to the 1991 PM<sub>10</sub> Attainment Plan, the DRI performed over 300 chemical mass balance source apportionments on fine and coarse particle fractions from three sites within the Truckee Meadows nonattainment area. The source apportionments found that that the PM<sub>10</sub> contribution from precursors (i.e., ammonium nitrates and ammonium sulfates) was very small (i.e., approximately 5-6%) compared to the contributions from wood/vegetative burning (i.e., residential wood stoves and fireplaces), mobile source exhaust (e.g., diesel powered vehicles), and geologic materials (e.g., road dust, sand/salt used for deicing).

We also note that more recent stationary source inventory data and ambient PM<sub>2.5</sub> speciation data for Truckee Meadows continue to support the WCAQMD’s 1991 conclusion regarding the (less-than-significant) contribution to elevated ambient PM<sub>10</sub> concentrations from major stationary sources of PM<sub>10</sub> precursors. First, based on the *2011 Periodic Emissions Inventory*, there are no stationary sources in Truckee Meadows that emit more than 100 tons per year of NO<sub>x</sub> or SO<sub>2</sub>, and only two such sources that emit more than 100 tons per year of VOC. Second, ammonium nitrate and ammonium sulfate contributed only about 11% to the total ambient PM<sub>10</sub> based on the averages for the five highest PM<sub>10</sub> measurements collected during the winter of 2013 at the Reno3 monitoring site (which is the only site operated by the WCAQMD with speciation capability).

Based on the DRI Report and the more recent inventory and monitoring data, we propose to make the finding authorized under CAA section 189(e) and to determine that major sources of

PM<sub>10</sub> precursor emissions do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in the Truckee Meadows area.

#### e. Transportation Conformity

Under the Clean Air Act, as amended in 1990, section 176(c) of the CAA required the states to revise their SIPs to establish criteria and procedures to ensure that federally supported or funded projects in nonattainment and formerly nonattainment areas subject to a maintenance plan (referred to as “maintenance” areas) “conform” to the air quality planning goals in the applicable SIP. SIP revisions intended to meet the conformity requirement in section 176(c) are referred to as “conformity SIPs.” The requirement to determine conformity applies to transportation plans, programs and projects developed, funded or approved under Title 23 U.S.C. and the Federal Transit Act (“transportation conformity”) as well as to other federally supported or funded projects (“general conformity”). In 2005, Congress amended section 176(c), and under the amended conformity provisions, states are no longer required to submit conformity SIPs for “general conformity,” and the conformity SIP requirements for “transportation conformity” have been reduced to include only those relating to consultation, enforcement and enforceability. CAA section 176(c)(4)(E).

On July 31, 1995, the NDEP submitted the general and transportation conformity procedures and criteria for Truckee Meadows as a revision to the Nevada SIP. Given the 2005 amendments to the CAA, the NDEP has withdrawn the earlier conformity SIP submittal, and on March 21, 2013, submitted the *Washoe County Transportation Conformity Plan* as a replacement for the earlier submittal. We have not taken action on the March 21, 2013 SIP revision submittal. However, the EPA believes it is reasonable to interpret the conformity SIP requirements as not applying for purposes of a redesignation request under section 107(d)(3)(E)(v) because state

conformity rules are still required after redesignation and Federal conformity rules apply where state rules have not been approved. *See Wall v. EPA*, 265 F. 3d 426 (6th Cir. 2001), upholding this interpretation. *See also* 60 FR 62748 (December 7, 1995).

### 3. Conclusion with respect to Section 110 and Part D Requirements.

Therefore, based on the evaluation presented above, and based on our proposed approval of the 2011 emissions inventory submitted as part of the 2014 PM<sub>10</sub> Maintenance Plan (see section V.D.1 of this document), our proposed approval of the BACM demonstration submitted as part of the 2002 PM<sub>10</sub> Attainment Plan, and in light of our proposed determination that major stationary sources of PM<sub>10</sub> precursors do not contribute significantly to PM<sub>10</sub> exceedances in the area, we find that that the state has met all requirements applicable to the Truckee Meadows PM<sub>10</sub> nonattainment area under section 110 and part D (of title I) of the CAA and has therefore met the redesignation criterion set forth in CAA section 107(d)(3)(E)(v).

#### *C. The Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions*

Section 107(d)(3)(E)(iii) of the CAA requires the EPA, in order to approve a redesignation to attainment, to determine that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable Federal air pollution control regulations and other permanent and enforceable regulations. Improvement should not be a result of temporary reductions (*e.g.*, economic downturns or shutdowns) or unusually favorable meteorology. Calcagni Memo at 4.

PM<sub>10</sub> levels in Truckee Meadows are driven primarily by direct PM<sub>10</sub> emissions from re-entrained dust from paved roads, residential wood combustion, fugitive dust from construction activities, and emissions from industrial sources. *See* 2002 PM<sub>10</sub> Attainment Plan at 7; and

appendix C to the 2014 PM<sub>10</sub> Maintenance Plan. The peak PM<sub>10</sub> season in Truckee Meadows occurs during the winter months (i.e., November, December, and January), due in large part to increased residential wood combustion and application of sanding material to paved roads for wintertime traction control. In addition, because Truckee Meadows sits in a valley surrounded by mountain ranges, cold winter nights create temperature inversions that trap pollutants in a layer of cold air beneath a layer of warmer air above. 2014 PM<sub>10</sub> Maintenance Plan at 13.

The 2014 PM<sub>10</sub> Maintenance Plan describes long-term air quality improvements implemented in the Truckee Meadows area during the 1999 to 2011 time frame. The improvements in air quality occurred despite substantial growth in population, economic activity, and vehicle miles traveled (VMT) between 1990 and 2011, suggesting that the air quality improvements were not due to temporary reductions in emission rates or unusual meteorology but, instead, resulted from implementation of federally-enforceable PM<sub>10</sub> control measures. The Plan describes the significant source categories of PM<sub>10</sub> emissions in the Truckee Meadows area and the SIP-approved regulations that have significantly reduced PM<sub>10</sub> emissions from these and other emission sources. According to the 2014 PM<sub>10</sub> Maintenance Plan, SIP-approved regulations collectively reduced daily PM<sub>10</sub> emissions from residential wood combustion and street sanding and sweeping, and construction activities during the 2011 PM<sub>10</sub> season by approximately 68 percent. See table 4-1 of the 2014 PM<sub>10</sub> Maintenance Plan.

First, the 2014 PM<sub>10</sub> Maintenance Plan cites the Health District's residential wood combustion program (RWC) as a significant source of emissions reductions in Truckee Meadows. The program relies on two regulations as well as a public outreach program. District Regulation 040.051, "Wood Stove/Fireplace Insert Emissions," limits PM<sub>10</sub> emissions throughout Washoe County by, among other things: (1) establishing wood stove and fireplace

insert control areas; (2) requiring use of seasoned wood; (3) requiring the removal or upgrade of existing solid fuel combustion devices upon the sale of real estate; and (4) establishing a mandatory burning curtailment during Stage 1 episodes.<sup>18</sup> District Regulation 050.001, “Emergency Episode Plan,” requires that the WCAQMD take certain actions when 24-hour PM<sub>10</sub> concentrations reach or are predicted to reach “Stage 1” levels (154 µg/m<sup>3</sup>), such as: (1) implementing procedures to notify the public of potential health problems; (2) prohibiting all open and prescribed burning; (3) prohibiting the use of permitted incinerators, crematoriums, and pathological incinerators; (4) prohibiting the use of solid fuel burning devices; and (5) activating control plans for the largest PM<sub>10</sub> sources in Washoe County. 2014 PM<sub>10</sub> Maintenance Plan at 11.

In addition, the WCAQMD implements a “Keep it Clean, Know the Code” public outreach program (formerly known as the “Green, Yellow, Red” program), which runs from November through February and which consists in part of a daily burn code that provides the community a recommendation on whether RWC will impact air quality in Washoe County. The program also commits the WCAQMD to conduct an RWC survey at least once every three years to track the effectiveness of the public outreach program. The EPA has approved District Regulations 040.051 and 050.001, and the commitment to conduct the RWC survey as revisions of the Nevada SIP, making them permanent and enforceable for the purposes of CAA section 107(d)(3)(E)(iii). See 72 FR 33397 (June 18, 2007) and 73 FR 38124, at 38127 (July 3, 2008). According to the 2014 PM<sub>10</sub> Maintenance Plan, District Regulations 040.051 and 050.001 (as implemented in part through the public outreach program) reduced PM<sub>10</sub> emissions in the Truckee Meadows area on a “typical PM<sub>10</sub> Season Day” during 2011 by approximately 800

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<sup>18</sup> Regulation 040.051 defines “Stage 1 alert” by reference to the Health District’s Emergency Episode Plan (i.e., District Regulation 050.001), which establishes a “Stage 1 (alert)” episode criteria level of 154 µg/m<sup>3</sup>. See District Regulation 040.051 at Section E.5 and Regulation 050.001 at Table 1.

lbs/day and approximately 4,300 lbs/day, respectively. 2014 PM<sub>10</sub> Maintenance Plan at 10, 12 (Table 4-1).

Second, the 2014 PM<sub>10</sub> Maintenance Plan cites the Health District's street sanding and sweeping program as a source of significant emissions reductions in Truckee Meadows. PM<sub>10</sub> emissions from street sanding and sweeping are generated directly from application of traction control material (i.e., sand, salt, and chlorides) and indirectly from increased silt loading on paved streets. Motor vehicle traffic grinds and re-entrains the material into the ambient air. 2014 PM<sub>10</sub> Maintenance Plan at 11. The Health District adopted Regulation 040.031, "Street Sanding Operations," and Regulation 040.032, "Street Sweeping Operations," to limit PM<sub>10</sub> emissions from street sanding and sweeping activities throughout the urbanized portions of Washoe County south of Township 22N, which includes the cities of Reno and Sparks. *See* 2014 PM<sub>10</sub> Maintenance Plan at 11; 2002 PM<sub>10</sub> Attainment Plan at 12-16.

These regulations require, among other things, that municipalities: (1) use a harder and cleaner type of sand on paved roads following snow storms; (2) reduce the sand application rate by 50 percent compared to 1999 rates; (3) remove the sand within four days after a storm event; and (4) only purchase new sweepers that are PM<sub>10</sub> certified. The EPA approved District Regulations 040.031 and 040.032 as revisions of the Nevada SIP in 2006, making them permanent and enforceable for the purposes of CAA section 107(d)(3)(E)(iii). 71 FR 14386 (March 22, 2006). According to the 2014 PM<sub>10</sub> Maintenance Plan, District Regulations 040.031 and 040.032 reduced PM<sub>10</sub> emissions in the Truckee Meadows area on a "typical PM<sub>10</sub> Season Day" during 2011 by approximately 1,600 lbs/day. 2014 PM<sub>10</sub> Maintenance Plan at 11, 12 (Table 4-1).

Third, the 2014 PM<sub>10</sub> Maintenance Plan cites District Regulation 040.030, “Dust Control,” as another source of significant emissions reductions in Truckee Meadows. District Regulation 040.030 limits emissions of fugitive dust from a variety of dust generating activities, including, but not limited to, public or private construction; mining; processing of sand, gravel, or dirt; and operation and use of unpaved parking facilities. See section A of District Regulation 040.030. Specifically, District Regulation 040.030 establishes (1) stabilization requirements for unpaved parking lots/staging areas, unpaved haul/access roads, and open, vacant, or disturbed areas, and open storage piles; (2) work practice requirements for bulk material hauling, and spillage, carry-out, erosion and/or trackout; and (3) dust control permit requirements for dust generating activities. The EPA approved District Regulation 040.030 as a revision of the Nevada SIP in 2007 making it permanent and enforceable for the purposes of CAA section 107(d)(3)(E)(iii). 72 FR 25969 (May 8, 2007). According to the 2014 PM<sub>10</sub> Maintenance Plan, District Regulation 040.030 reduced PM<sub>10</sub> emissions in the Truckee Meadows area on a “typical PM<sub>10</sub> Season Day” during 2011 by approximately 400 lbs/day. 2014 PM<sub>10</sub> Maintenance Plan at 11, 12 (Table 4-1).

The 2014 PM<sub>10</sub> Maintenance Plan also provides an analysis of economic and meteorological conditions in Washoe County during the 1990 to 2011 period to demonstrate that the emission reductions in the Truckee Meadows area did not result from temporary reductions (e.g., economic downturns or shutdowns) or unusually favorable meteorology. According to the plan, demographic and economic indicators such as population, full-time employment, total industry earnings, and VMT demonstrated steady, positive growth during this period. *See* 2014 PM<sub>10</sub> Plan at 13, Table 4-2 (“Washoe County Demographic and Economic Indicators (1990-2011)”). For example, during the 1990-2011 period in Washoe County, growth in several key

economic indicators (i.e., population 64%, full-time employment 41%, total industry earnings 158%, and VMT<sup>19</sup> 86%) coincided with improved air quality. *Id.* With respect to meteorological conditions, the 2014 PM<sub>10</sub> Maintenance Plan presents data from the 1990-2011 period that indicate that wintertime precipitation, wind speed, and barometric pressure levels fluctuated above and below historic averages throughout that period. *Id.* at 14-16.

Thus, we find that the improvements in PM<sub>10</sub> air quality during the 1990-2011 period resulted from implementation of permanent and enforceable control measures that significantly reduced PM<sub>10</sub> emissions in the Truckee Meadows area, rather than from temporary emission reductions or unusually favorable meteorology. During the 2011 PM<sub>10</sub> season, implementation of these SIP-approved measures reduced daily PM<sub>10</sub> emission levels by approximately 68 percent, indicating that these SIP control measures countered the emissions increases that otherwise would have occurred due to steady growth in the area during this period. As such, we find that the criterion for redesignation in CAA section 107(d)(3)(E)(iii) has been met.

*D. The Area Has a Fully-Approved Maintenance Plan, Including a Contingency Plan, Under CAA Section 175A*

Section 107(d)(3)(E)(iv) of the CAA requires the EPA, in order to approve a redesignation to attainment, to fully approve a maintenance plan for the area as meeting the requirements of section 175A of the Act. Section 175A sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. We interpret this section of the Act to require, in general, the following core elements:

- An attainment emissions inventory to identify the level of emissions in the area sufficient to attain the NAAQS;

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<sup>19</sup> The VMT data in this table are expressed in miles per day and represent only the Truckee Meadows portion of Washoe County. *See* 2011 PM<sub>10</sub> Maintenance Plan at 13, Table 4-2 (“Washoe County Demographic and Economic Indicators (1990-2011)”).

- A demonstration of maintenance of the NAAQS for at least 10 years after redesignation;
- Provisions for continued operation of an air quality monitoring network;
- Provisions to verify continued attainment; and
- Contingency provisions that the EPA deems necessary to assure that the state will promptly correct any violation of the NAAQS that occurs after redesignation of the area.

See Calcagni Memo at 7-12. We discuss below how each of these core elements is addressed in the 2014 PM<sub>10</sub> Maintenance Plan.

### 1. Attainment Inventory

A maintenance plan for the PM<sub>10</sub> standard must include an inventory of emissions of PM<sub>10</sub> in the area to identify a level of emissions sufficient to attain the PM<sub>10</sub> NAAQS.<sup>20</sup> This inventory must be consistent with the EPA's most recent guidance on emissions inventories for nonattainment areas available at the time and should represent emissions during the time period associated with the monitoring data showing attainment. The inventory must also be comprehensive, including emissions from stationary sources, area sources, nonroad mobile sources and on-road mobile sources, and must be based on actual emissions during the appropriate season or episode, if applicable. See CAA section 172(c)(3). EPA's primary guidance for developing PM<sub>10</sub> emissions inventories is a document titled, "PM<sub>10</sub> Emissions Inventory Requirements," EPA-454/R-94-033 (September 1994).

The 2014 PM<sub>10</sub> Maintenance Plan provides an emissions inventory of actual emissions from all direct PM<sub>10</sub> sources within Truckee Meadows on an average day during the winter season during year 2011. See table 2 below. The WCAQMD developed this inventory based on

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<sup>20</sup> PM<sub>10</sub> precursor emissions may also be required depending upon the contribution of secondarily-formed particulate matter to ambient PM<sub>10</sub> concentrations. As discussed above, a 1988 DRI study concluded that the PM<sub>10</sub> contribution from precursors (i.e., ammonium nitrates and ammonium sulfates) was very small (i.e., approximately 5-6%) compared to the contributions of other direct PM<sub>10</sub> sources in Truckee Meadows. As such, we find that the absence of PM<sub>10</sub> precursors from the attainment inventory in the 2014 PM<sub>10</sub> Maintenance Plan to be acceptable.

the methods and assumptions presented in detail in the WCAQMD's *2011 Periodic Emissions Inventory* (November 2012), with the following adjustments:

- Paved road fugitive dust was re-calculated based on the most recent VMT estimates provided by the Regional Transportation Commission of Washoe County (RTC) and the most recent version of EPA emission factors published in AP-42,<sup>21</sup> section 13.2.1 ("Paved Roads"), dated January 2011, whereas the corresponding estimates in the *2011 Periodic Emissions Inventory* relied on earlier VMT estimates and an earlier version of AP-42 section 13.2.1 (dated November 2006);
- Unpaved road fugitive dust was re-calculated based on the most recent VMT estimates provided by the RTC and updated silt loading factors; and
- On-road mobile source emissions (combustion, brake and tire wear) were re-calculated based on the most recent VMT estimates provided by the RTC and a different traffic demand model.

In addition to showing the estimated actual emissions in 2011, table 2 below also the baseline maintenance plan inventory used by the 2014 PM<sub>10</sub> Maintenance Plan to demonstrate maintenance through 2030. The only difference between the 2011 actuals and the maintenance plan baseline is in the wildfire source category. An unusually high number of wildfires occurred during the winter of 2011, which greatly increased the contribution of wildfires to the overall 2011 PM<sub>10</sub> inventory, and thus, for the purposes of developing a baseline attainment inventory for maintenance plan purposes, the WCAQMD replaced the actual PM<sub>10</sub> emissions from wildfires in 2011 with the average of wildfire emissions from the four previous inventory years (1999, 2002, 2005, and 2008). 2014 PM<sub>10</sub> Maintenance Plan at 25. We find that adjustment to be

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<sup>21</sup> AP-42, *Compilation of Air Pollutant Emission Factors*, is a document published by the EPA as the primary collection of EPA approved emission factor information. The emission factors have been developed and compiled from source test data, material balance studies, and engineering estimates.

reasonable. Even with the adjustment for wildfires, over 85 percent of direct PM<sub>10</sub> emissions is attributed to nonpoint sources.

<b>Table 2 - Truckee Meadows 2011 Winter-Season Emission Inventory for Direct PM<sub>10</sub> (lbs/day)</b>			
<b>Category</b>	<b>Subcategory</b>	<b>Estimated Actual Emissions</b>	<b>Maintenance Plan Baseline</b>
Point Sources	<i>All</i>	25	25
Nonpoint Sources:	<i>Fuel Combustion</i>	111	111
	<i>Residential Wood Combustion</i>	5,888	5,888
	<i>Construction<sup>a</sup></i>	460	460
	<i>Non-Construction Industrial Processes</i>	929	929
	<i>Paved Roads - Fugitive Dust</i>	1,453	1,453
	<i>Paved Road - Sanding and Salting</i>	339	339
	<i>Unpaved Roads - Fugitive Dust</i>	2,623	2,623
	<i>Wildfires</i>	10,947	21
	<i>All Other Nonpoint</i>	<u>61</u>	<u>61</u>
	Subtotal - Nonpoint	22,812	11,885
Non-road Mobile	<i>All</i>	606	606
Onroad Mobile	<i>All</i>	1,183	1,183
Totals		24,626	13,700
<sup>a</sup> Construction-related emissions represents a sum of several different types of construction. One such type, road construction (178 lbs/day), is included in the motor vehicle emissions budget (MVEB) discussed in section V.D.6 of this proposed rule (along with paved road fugitive dust, unpaved road fugitive dust, and on-road mobile sources).			

Source: 2014 PM<sub>10</sub> Maintenance Plan, appendix C.

Totals may not add up due to rounding.

The EPA believes that the selection of 2011 as the attainment year inventory is appropriate given that it represents emissions from an attainment year and the year for which the most recent emissions inventory information was available at the time of preparation of the maintenance plan. Moreover, preparation of a seasonal (winter) inventory in this instance is

appropriate given that winter is typically the season when the highest ambient PM<sub>10</sub> concentrations are monitored in Truckee Meadows. We find that the WCAQMD's 2011 emissions inventory for direct PM<sub>10</sub> is based upon reasonable assumptions and methodologies, as described in the 2014 PM<sub>10</sub> Maintenance Plan and 2011 Periodic Emissions Inventory,<sup>22</sup> and that the inventory is comprehensive, current and accurate. We therefore propose to approve the inventory of actual emissions in 2011 as meeting the requirements of CAA section 172(c)(3) and find the 2011 inventory, as adjusted to discount 2011 wildfire emissions, acceptable for use in demonstrating maintenance of the PM<sub>10</sub> standard in the future.

## 2. Maintenance Demonstration

Section 175A of the CAA requires a demonstration of maintenance of the NAAQS for at least 10 years after redesignation. A state may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future anticipated mix of sources and emission rates will not cause a violation of the NAAQS. *See* Calcagni Memo at 9-11.

The 2014 PM<sub>10</sub> Maintenance Plan demonstrates that the Truckee Meadows area will maintain the PM<sub>10</sub> NAAQS through 2030 by comparing the adjusted 2011 attainment inventory (also referred to as the maintenance plan baseline) against the projected emissions for 2015, 2020, 2025, and 2030. *See* 2014 PM<sub>10</sub> Maintenance Plan at 26-28 (Tables 6-4 and 6-5) and Appendix C ("Truckee Meadows Projected PM<sub>10</sub> Seasonal Emissions (lbs/day)"). Using the

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<sup>22</sup> The WCAQMD's 2011 Periodic Emissions Inventory, dated November 2012 and submitted to the EPA for purposes of meeting the AERR requirements, provides significant detail regarding the assumptions and methodologies used to develop the 2011 PM<sub>10</sub> inventory used in the 2014 PM<sub>10</sub> Maintenance Plan. The 2011 Periodic Emissions Inventory also includes emissions inventories for VOCs, NO<sub>x</sub>, SO<sub>x</sub>, and ammonia. AERR requires state, local and tribal agencies to collect and submit emissions data for criteria pollutants to EPA's Emissions Inventory System.

adjusted 2011 emissions inventory as a baseline and appropriate growth factors described in appendix B of the 2014 PM<sub>10</sub> Maintenance Plan, the WCAQMD projected emissions inventories for 2015, 2020, 2025, and 2030. These projections were based on Washoe County’s forecasts of population, employment, and VMT (see 2014 PM<sub>10</sub> Maintenance Plan at appendix B, table B-2), consistent with the forecasts used by the local metropolitan planning organization (MPO); the EPA nonroad and on-road emissions models (i.e., NONROAD2008a and MOVES2010a) that the WCAQMD used to calculate the 2011 emissions inventory; and a survey of RWC activities that the WCAQMD conducts at least once every three years. See 2014 PM<sub>10</sub> Plan at appendix B (“Growth Factors for 2015, 2020, 2025, and 2030 Projections”). The WCAQMD’s projected PM<sub>10</sub> emission levels for 2015, 2020, 2025, and 2030 are shown in table 3.

<b>Table 3 - Truckee Meadows PM<sub>10</sub> Maintenance Plan Projections for 2015, 2020, 2025, and 2030 (average winter day, lbs/day)</b>					
<b>Category</b>	<b>Maintenance Plan Baseline - 2011</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Point Sources	25	28	32	37	42
Nonpoint Sources	11,885	11,510	11,379	11,361	11,512
Non-road Mobile	606	501	386	328	307
Onroad Mobile	1,183	953	839	828	883
Totals	13,700	12,992	12,637	12,554	12,744

Source: 2014 PM<sub>10</sub> Plan at 27, Table 6-4.

Despite expected growth in the area, the maintenance plan’s projected PM<sub>10</sub> emissions in Truckee Meadows for 2015, 2020, 2025, and 2030 are below the 2011 maintenance inventory of 13,700 lbs/day. The downward trend in PM<sub>10</sub> emissions reflects the offsetting effects of the WCAQMD’s RWC program and the gradual replacement over time of older motor vehicle and nonroad equipment with newer models that are designed to meet more stringent emissions standards than had applied to the older models. Based on our review, we find that the methods,

growth factors, and assumptions used by the WCAQMD to project emissions to 2015, 2020, 2025 and 2030 levels are reasonable. Given that the projections (summarized in table 3 above) show future emissions in 2015, 2020, 2025, and 2030 to be below those in 2011 (and that reflect attainment conditions), we find that the projections provide an adequate basis to demonstrate maintenance of the PM<sub>10</sub> standard within Truckee Meadow through 2030. Also, as described further in section V.D.6 of this document, the WCAQMD has chosen to include “safety margins” in the motor vehicle emissions budgets for 2015 (708 lbs/day), 2020 (1,063 lbs/day), 2025 (1,146 lbs/day), and 2030 (955 lbs/day), but we find that the overall emissions projections, including the safety margins, continue to demonstrate maintenance because they do not exceed the emissions in 2011, and thus, the safety margins are consistent with maintenance through 2030.

Section 175A requires that the EPA approve a plan providing for maintenance in the area for at least ten years after redesignation. If this redesignation becomes effective in 2015, the projected 2030 inventory demonstrates that Truckee Meadows will maintain the PM<sub>10</sub> NAAQS for more than 10 years beyond redesignation. Moreover, the projected emissions inventories for 2015, 2020, and 2025, i.e., milestone years between the attainment inventory and the maintenance plan horizon year, sufficiently demonstrate that Truckee Meadows will maintain the standard *throughout* the period from redesignation through 2030. As such, the EPA concludes that the 2014 PM<sub>10</sub> Maintenance Plan adequately demonstrates maintenance of the standard through 2030.

### 3. Monitoring Network

Continued ambient monitoring within an area is required over the maintenance period. *See* Calcagni Memo at 11. In the 2014 PM<sub>10</sub> Maintenance Plan, the WCAQMD indicates its intention to continue to operate an air quality monitoring network consistent with 40 CFR part 58

to verify the attainment status. 2014 PM<sub>10</sub> Maintenance Plan at 29. The plan also notes that Washoe County's PM<sub>10</sub> monitoring network will be reviewed annually pursuant to 40 CFR 58.10 to ensure the network meets the monitoring objectives defined in 40 CFR part 58, appendix D. As discussed above in section V.A, the WCAQMD operates an EPA-approved air quality monitoring network. The WCAQMD obtains funding to meet the requirements of part 58 primarily from CAA section 105 grants and from the Nevada Department of Motor Vehicles. For these reasons, we find that the 2014 PM<sub>10</sub> Maintenance Plan provides adequately for continued ambient PM<sub>10</sub> monitoring through the maintenance period.

#### 4. Verification of Continued Attainment

Each state should ensure that it has the legal authority to implement and enforce all measures necessary to attain and maintain the NAAQS, including the acquisition of ambient and source emission data to demonstrate attainment and maintenance, pursuant to CAA sections 110(a)(2)(B) and (F). *See* Calcagni Memo at 11. The NDEP and the WCAQMD have the legal authority to implement and enforce the requirements of the 2014 PM<sub>10</sub> Maintenance Plan. This includes the authority to adopt, implement and enforce any emission control contingency measures determined to be necessary to correct PM<sub>10</sub> NAAQS violations. As noted above, to implement the maintenance plan, the WCAQMD will continue to monitor PM<sub>10</sub> levels in Truckee Meadows. The WCAQMD will also continue to use three existing mechanisms to track emissions levels to screen for significant increases in actual PM<sub>10</sub> emissions.

First, the WCAQMD will continue to prepare and submit to the EPA comprehensive periodic PM<sub>10</sub> emissions inventories on a triennial schedule. Second, the WCAQMD will continue to submit regular updates of stationary and area sources within Washoe County, consistent with the requirements of EPA's Consolidated Emissions Reporting Rule (CERR) and

AERR. Finally, the WCAQMD remains committed to conducting its residential wood use surveys at least once every three years, to estimate the number of devices (fireplaces, woodstoves, and pellet stoves), amounts of wood burned, and PM<sub>10</sub> emissions from these activities in Washoe County. *See* 2014 PM<sub>10</sub> Maintenance Plan at 29-30.

We find that the WCAQMD's commitments to verify continued attainment of the PM<sub>10</sub> NAAQS through continued ambient air monitoring and emissions tracking are acceptable.

## 5. Contingency Plan

Section 175A(d) of the CAA requires that maintenance plans include such contingency provisions as the EPA deems necessary to promptly correct any violations of the NAAQS that occur after redesignation of the area. These contingency measures are distinguished from those generally required for nonattainment areas under section 172(c)(9) in that they are not required to be fully adopted measures that will take effect without further action by the state. However, the contingency plan is an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered by a specified event. The maintenance plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific timeline for action by the state. Contingency provisions should also identify indicators or triggers which will be used to determine when the contingency measures need to be implemented. The EPA evaluates contingency measures on a case-by-case basis.<sup>23</sup> Calcagni Memo at 12, 13.

The 2014 PM<sub>10</sub> Maintenance Plan contains a contingency plan that is triggered upon a violation of the PM<sub>10</sub> standard, that requires the WCAQMD to make certain recommendations to

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<sup>23</sup> Section 175A(d) also requires contingency provisions to include a requirement that the state will implement all measures with respect to the control of the air pollutant concerned which were contained in the SIP for the area before redesignation of the area to attainment. In this case, no SIP measures for the control of PM<sub>10</sub> in Truckee Meadows are being rescinded or relaxed, and thus, the contingency provisions in the 2014 PM<sub>10</sub> Maintenance Plan need not address this requirement.

the Health District within a certain time period after the triggering event, and that commits the Health District to adopting and implementing such recommendations as promptly and expediently as possible, but not later than the next PM<sub>10</sub> (i.e., winter) season. 2014 PM<sub>10</sub> Maintenance Plan at 30-32.

More specifically, the contingency plan is triggered when any monitor operated by the WCAQMD records a violation of the PM<sub>10</sub> NAAQS, as defined by 40 CFR part 50, Appendix K (i.e., when the expected number of exceedances at the monitoring site during the calendar year is greater than one).<sup>24</sup> If the contingency plan is triggered, the WCAQMD will provide recommendations for implementation of specific contingency measures to the Washoe County District Board of Health (referred to herein as the “Health District.”). The recommendations must occur at the next regularly scheduled meeting but no later than 45 days after the violation. The recommendations will include a timeline for adoption and implementation as expeditiously as possible, but no later than the next PM<sub>10</sub> season (November, December, and January). The WCAQMD maintains a list of potential contingency measures, focusing on significant PM<sub>10</sub> emission sources, for recommendation in such events. Table 4 presents the WCAQMD’s current list of potential contingency measures.

<b>Table 4 - 2014 PM<sub>10</sub> Maintenance Plan Contingency Measures</b>	
Category	Potential Contingency Measure
Paved Streets	<ul style="list-style-type: none"> <li>▪ Increase stringency of street sanding and sweeping programs</li> <li>▪ Improve unpaved shoulders</li> <li>▪ Transportation control measures to reduce VMT</li> </ul>
Unpaved Streets	<ul style="list-style-type: none"> <li>▪ Improve unpaved streets and shoulders</li> </ul>

<sup>24</sup> An exceedance is defined as a daily value that is above the level of the 24-hour standard (i.e., 150 µg/m<sup>3</sup>) after rounding to the nearest 10 µg/m<sup>3</sup> (i.e., values ending in 5 or greater are to be rounded up).

	<ul style="list-style-type: none"> <li>▪ Post speed limits to decrease vehicle speeds</li> <li>▪ Restrict access to decrease Average Daily Trips and VMT</li> </ul>
Dust Control	<ul style="list-style-type: none"> <li>▪ Phased mass grading</li> <li>▪ Mass grading allocation system</li> <li>▪ Stabilize projects during PM<sub>10</sub> season</li> <li>▪ Decrease one acre dust control permit exemption</li> </ul>
Residential Wood Combustion	<ul style="list-style-type: none"> <li>▪ Increase one acre lot size exemption</li> <li>▪ Mandatory curtailment at lower PM<sub>10</sub> concentrations</li> <li>▪ Change-out program to clean burning device</li> </ul>
Mobile Sources (Diesel)	<ul style="list-style-type: none"> <li>▪ Non-road diesel engine repowers and rebuilds</li> <li>▪ Non-road diesel tailpipe controls (i.e., filters and catalysts)</li> <li>▪ Truck Stop Electrification systems for heavy-duty vehicles</li> <li>▪ More stringent heavy-duty diesel vehicle idling limits</li> <li>▪ Fleet modernization</li> <li>▪ More stringent inspection &amp; maintenance program of light-duty, medium-duty, and heavy-duty vehicles</li> </ul>

Source: 2014 PM<sub>10</sub> Plan at 32, Table 6-7, “Potential PM<sub>10</sub> Contingency Measures.”

To address changes in growth and technology, which may alter the effectiveness of different measures over time, the WCAQMD will conduct a triennial review and reprioritization of these potential contingency measures in coordination with the periodic PM<sub>10</sub> emissions inventory. *See* 2014 PM<sub>10</sub> Plan at 31. The WCAQMD will notify EPA Region 9 within 30 days of implementation of a contingency measure. *Id.*

In addition to the contingency plan described above, the maintenance plan identifies a SIP-approved program that serves as an automatically triggered measure when 24-hour PM<sub>10</sub> concentrations reach or are predicted to reach “Stage 1” levels (154 µg/m<sup>3</sup>). Specifically, District Regulation 050.001, “Emergency Episode Plan,” is a SIP-approved program that requires the WCAQMD to take certain actions when 24-hour PM<sub>10</sub> concentrations reach or are predicted to reach “Stage 1” levels such as: (1) implementing procedures to notify the public of potential

health problems; (2) prohibiting all open and prescribed burning; (3) prohibiting the use of permitted incinerators, crematoriums, and pathological incinerators; (4) prohibiting the use of solid fuel burning devices; and (5) activating control plans for the largest PM<sub>10</sub> sources in Washoe County. 2014 PM<sub>10</sub> Maintenance Plan at 11. As such, implementation of District Regulation 050.001 acts to reduce the chances that the contingency plan set forth in the 2014 PM<sub>10</sub> Maintenance Plan will be triggered.

Based on our review of the contingency provisions in the 2014 PM<sub>10</sub> Maintenance Plan, as described above, we find that they are adequate to ensure that the Health District will promptly correct any violation of the PM<sub>10</sub> NAAQS that occurs after redesignation, as required by CAA section 175A(d).

#### 6. Transportation Conformity and Motor Vehicle Emissions Budgets

Transportation conformity is required by section 176(c) of the CAA. Our transportation conformity rule (codified in 40 CFR part 93, subpart A) requires that transportation plans, programs and projects conform to SIPs and establishes the criteria and procedures for determining whether or not they do so. Conformity to the SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS. In this context, “transportation activities” refers to plans, programs, and projects affecting the road network (paved and unpaved) and the public transit system in nonattainment areas and in former nonattainment areas that have been redesignated to attainment (commonly referred to as “maintenance” areas.).

PM<sub>10</sub> maintenance plan submittals must specify the maximum emissions of transportation-related PM<sub>10</sub> emissions<sup>25</sup> allowed in the last year of the maintenance period, i.e.,

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<sup>25</sup> Transportation-related emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NO<sub>x</sub>) emissions must also be specified in PM<sub>10</sub> areas if the EPA or the state finds that transportation-related emissions of

the motor vehicle emissions budgets (MVEBs). (MVEBs may also be specified for additional years during the maintenance period.) The MVEBs serve as a ceiling on emissions that would result from an area's planned transportation system. The MVEB concept is further explained in the preamble to the November 24, 1993, transportation conformity rule (58 FR 62188). The preamble describes how to establish MVEBs in the SIP and how to revise the MVEBs if needed.

The maintenance plan submittal must demonstrate that these emissions levels, when considered with emissions from all other sources, are consistent with maintenance of the NAAQS. In order for us to find these emissions levels or "budgets" adequate and approvable, the submittal must meet the conformity adequacy provisions of 40 CFR 93.118(e)(4) and (5). For more information on the transportation conformity requirement and applicable policies on MVEBs, please visit our transportation conformity Web site at:

*<http://www.epa.gov/otaq/stateresources/transconf/index.htm>*. EPA's process for determining adequacy of a MVEB consists of three basic steps: (1) Notifying the public of a SIP submission; (2) providing the public the opportunity to comment on the MVEB during a public comment period; and, (3) making a finding of adequacy or inadequacy. The process for determining the adequacy of a submitted MVEB is codified at 40 CFR 93.118(f).

On January 19, 2010, the EPA announced the availability of the Truckee Meadows 2009 PM<sub>10</sub> Maintenance Plan with MVEBs (for 2009, 2013, 2018, and 2020) and of a 30-day public comment period on the EPA's Adequacy Web site at:

*<http://www.epa.gov/otaq/stateresources/transconf/currrips.htm>*. The comment period for this notification ended on February 19, 2010, and the EPA received no comments from the public.

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one or both of these precursors within the nonattainment area are a significant contributor to the PM<sub>10</sub> nonattainment problem and has so notified the metropolitan planning organization (MPO) and the U.S. Department of Transportation (DOT), or if the applicable SIP revision or SIP revision submittal establishes an approved or adequate budget for such emissions as part of the RFP, attainment or maintenance strategy. 40 CFR 93.102(b)(2)(iii). Neither of these conditions apply to Truckee Meadows.

Later that year, the EPA found the MVEBs from the 2009 PM<sub>10</sub> Maintenance Plan adequate for transportation conformity purposes. 75 FR 27776 (May 18, 2010).

The 2014 PM<sub>10</sub> Maintenance Plan contains PM<sub>10</sub> MVEBs for Truckee Meadows for 2015, 2020, 2025, and 2030. The MVEBs are the on-road mobile source primary PM<sub>10</sub> emissions inventory plus a safety margin for the Truckee Meadows nonattainment area for 2015, 2020, 2025, and 2030. The MVEBs in the 2014 PM<sub>10</sub> Maintenance Plan are presented in table 5 below. The derivation of the MVEBs is discussed on page 28 of the 2014 PM<sub>10</sub> Maintenance Plan and further described below.

<b>Table 5 - 2014 PM<sub>10</sub> Maintenance Plan Motor Vehicle Emissions Budgets (average winter day, lbs/day)</b>	
<b>Budget Year</b>	<b>PM<sub>10</sub></b>
2015	5,638
2020	6,088
2025	6,473
2030	6,927

Source: 2014 PM<sub>10</sub> Maintenance Plan at table 6-6, page 28.

The WCAQMD developed the MVEBs in the 2014 PM<sub>10</sub> Maintenance Plan by using the on-road motor vehicle emission inventory factors in MOVES2010b and AP-42 and recent vehicle activity data from TransCAD, a travel demand model used by the RTC, which is the MPO for the area. The components of the MVEBs are shown in table 6 and are comprised of direct on-road mobile source emissions, road construction emissions, fugitive emissions from paved and unpaved roads, and safety margins.

<b>Table 6 - Source Categories and direct PM<sub>10</sub> Emissions Comprising the Motor Vehicle Emissions Budgets (lbs per day, average winter day) in the 2014 PM<sub>10</sub> Plan</b>				
<b>Category</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Diesel Idling	7	4	1	1

Paved Road - Fugitives	1,414	1,517	1,627	1,736
Unpaved Road - Fugitives	2,380	2,479	2,688	3,174
Road Construction	183	189	185	180
On-road Motor Vehicles <sup>a</sup>	946	835	825	880
Safety Margin	708	1,063	1,146	955
Totals	5,638	6,088	6,473	6,927
<sup>a</sup> On-road Motor Vehicles includes directly emitted PM <sub>10</sub> from combustion and also reflects tire and brake wear.				

Source: 2014 PM<sub>10</sub> Maintenance Plan at table 6-6, page 28.

A state may choose to apply a safety margin under our transportation conformity rule so long as such margins are explicitly quantified in the applicable plan and are shown to be consistent with attainment or maintenance of the NAAQS (whichever is relevant to the particular plan). See 40 CFR 93.124(a). As shown in table 7 below, each safety margin was calculated by subtracting a future inventory from the 2011 maintenance inventory. *Also, see* table 6-5 in the 2014 PM<sub>10</sub> Maintenance Plan. The safety margins equal the difference between the projected level of overall PM<sub>10</sub> emissions in Truckee Meadows in each of the maintenance years and the 2011 maintenance inventory. Each safety margin, when combined with its corresponding future-year inventory, is consistent with continued maintenance of the PM<sub>10</sub> NAAQS through 2030.

<b>Table 7 - Calculation of Safety Margins (lbs/day)</b>				
	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
2011 Maintenance Inventory	13,700	13,700	13,700	13,700
Future-Year Inventory	12,992	12,637	12,554	12,744
Safety Margin	708	1,063	1,146	955

Source: 2014 PM<sub>10</sub> Maintenance Plan at table 6-5, page 28.

With respect to the 2014 Plan and related MVEBs, we have evaluated the budgets against our adequacy criteria in 40 CFR 93.118(e)(4) and (5) as part of our review of the budgets' approvability and are completing the adequacy review of these budgets concurrent with our final

action on the 2014 Plan.<sup>26</sup> The details of the EPA's evaluation of the MVEBs for compliance with the budget adequacy criteria of 40 CFR 93.118(e) are provided in the TSD for this proposed rulemaking. On September 10, 2015, the EPA announced the availability of the 2014 Plan with MVEBs and a 30-day public comment period. This announcement was posted on EPA's Adequacy Web site at: <http://www.epa.gov/otaq/stateresources/transconf/reg9sips.htm#nv>.

The EPA is proposing to approve the MVEBs for 2015, 2020, 2025 and 2030, shown in table 5 above, as part of our approval of 2014 PM<sub>10</sub> Maintenance Plan. The EPA has determined that the MVEB emission targets are consistent with emission control measures in the SIP and are consistent with maintenance of the PM<sub>10</sub> standard in Truckee Meadows through 2030.<sup>27</sup> As noted above, we found the MVEBs (for years 2009, 2013, 2018, and 2020) in the 2009 PM<sub>10</sub> Maintenance Plan to be adequate for transportation purposes, and those are the PM<sub>10</sub> MVEBs in effect for transportation conformity purposes today. If we finalize today's action, as proposed, the PM<sub>10</sub> MVEBs (for years 2015, 2020, 2025, and 2030) from the 2014 PM<sub>10</sub> Maintenance Plan would replace the PM<sub>10</sub> MVEBs previously found adequate. Any and all comments on the adequacy and approvability of the MVEBs in the 2014 PM<sub>10</sub> Maintenance Plan should be submitted during the comment period stated in the **DATES** section of this document.

## 7. Conclusion

Based on the review presented above of the various elements of the state's submitted maintenance plan, we are proposing to approve the 2014 PM<sub>10</sub> Maintenance Plan as a revision to

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<sup>26</sup> Under the Transportation Conformity regulations, the EPA may review the adequacy of submitted motor vehicle emission budgets simultaneously with the EPA's approval or disapproval of the submitted implementation plan. 40 CFR 93.118(f)(2).

<sup>27</sup> On page 28 of the 2014 Plan, the WCAQMD explains "*For years beyond 2030, the MVEB will remain at the 2030 level of 6,927 bs/day.*" This sentence refers to the fact that if the SIP does not have a budget in a particular analysis year, the budget established for the most recent prior year is used as described in 40 CFR 93.118(b)(ii). The 2014 Plan does not establish budgets for any subsequent year after 2030. To avoid any ambiguity about the intent of the language on page 28 of the 2014 Plan, WCAQMD staff clarified that "For years beyond 2030" means "For analysis years beyond 2030." See September 16, 2015 email from Daniel Inouye, WCAQMD, to John Ungvasky, EPA Region 9.

the Nevada SIP. In so doing, we find that the 2014 PM<sub>10</sub> Maintenance Plan, adopted on August 28, 2014 by the Health District and submitted by the NDEP to the EPA on November 7, 2014, satisfies the requirements of section 175A of the Act. If finalized as proposed, our approval of the 2014 PM<sub>10</sub> Maintenance Plan will satisfy the criterion for redesignation under CAA section 107(d)(3)(E)(iv).

## **VI. Proposed Deletion of TSP Designation for Truckee Meadows**

### *A. General Considerations*

Consistent with CAA section 107(d)(4)(B), we have considered the continued necessity for retaining the remaining TSP area designation in Nevada, and as discussed below, we have decided that the TSP nonattainment designation for Truckee Meadows (HA #87) is no longer necessary. As a result, we are proposing to delete it from the TSP table in 40 CFR 81.329.

To evaluate whether the TSP area designation should be retained or can be deleted, we have relied upon the final rule implementing the PM<sub>10</sub> NAAQS (see 52 FR 24634, July 1, 1987), a policy memorandum on TSP redesignations (see memo dated May 20, 1992 from Joseph W. Paisie, Acting Chief, SO<sub>2</sub>/Particulate Matter Programs Branch, EPA Office of Air Quality Planning and Standards, to Chief, Air Branch, Regions I-X, entitled “TSP Redesignation Request”), and our proposed and final rules establishing maximum allowable increases in concentrations (also known as “increments”) for PM<sub>10</sub> (see the proposed rule at 54 FR 41218, October 5, 1989, and the final rule at 58 FR 31622, June 3, 1993).

Based on the above references, we believe that the relevant considerations for evaluating whether the necessity of retaining the TSP area designations depend upon the status of a given area with respect to TSP and PM<sub>10</sub>. For areas that are nonattainment for TSP but attainment for PM<sub>10</sub>, we generally find that the TSP designations are no longer necessary and can be deleted

when the EPA (1) approves a state's revised PSD program containing the PM<sub>10</sub> increments, (2) promulgates the PM<sub>10</sub> increments into a state's SIP where the State chooses not to adopt the increments on their own, or (3) approves a state's request for delegation of PSD responsibility under 40 CFR section 52.21(u). *See* 58 FR 31622, at 31635 (June 3, 1993).

For areas that are nonattainment for TSP and nonattainment for PM<sub>10</sub>, an additional consideration is whether deletion of the TSP designations would automatically relax any emissions limitations, control measures or programs approved into the SIP. If such a relaxation would occur automatically with deletion of the TSP area designations, then we will not delete the designations until we are satisfied that the resulting SIP relaxation would not interfere with any applicable requirement concerning attainment, reasonable further progress (RFP), or maintenance of the NAAQS or any other requirement of the Clean Air Act in the affected areas. *See* section 110(l) of the Act.

In the case of Truckee Meadows, we believe that the considerations for both types of areas described above are relevant because, although Truckee Meadows Valley is nonattainment for TSP and PM<sub>10</sub>, we are proposing to redesignate the area to attainment for PM<sub>10</sub> in today's action. Thus, we must take into account both the potential for relaxation that would be inconsistent with continued maintenance of the PM<sub>10</sub> NAAQS as well as protection of the PM<sub>10</sub> increments (as applies in areas designated attainment or unclassifiable).

#### *B. Deletion of TSP Nonattainment Area Designation for Truckee Meadows*

With respect to protection of the PM<sub>10</sub> increments, the TSP nonattainment designation is no longer necessary in Truckee Meadows because, even though the WCAQMD does not currently have an approved PSD program, if the EPA finalizes the actions in today's proposed rulemaking, the federal PSD requirements under 40 CFR 52.21 (including the PM<sub>10</sub>

increments) will apply to new major sources or major modifications to existing major sources of PM<sub>10</sub>. See 40 CFR 52.1485(b). The WCAQMD administers the PSD pre-construction permit program in 40 CFR 52.21 within Washoe County except for coal-fired power plants, which fall under the jurisdiction of NDEP. Both the WCAQMD and the NDEP administer the PSD permit program in 40 CFR 52.21 under delegation agreements with the EPA.

To ensure that deletion of the TSP nonattainment designation for Truckee Meadows would not result in any automatic relaxations in SIP emissions limitations, control measures or programs that would interfere with attainment, RFP or maintenance of the NAAQS (including PM<sub>10</sub>) or any other requirement of the Act, we reviewed the following portions of the Nevada SIP:

- The TSP portions of the Truckee Meadows Air Quality Implementation Plan (AQIP) adopted in response to the CAA, as amended in 1977;
- Washoe County stationary source rules, including section 040.005 (“Visible Air Contaminants”), section 040.010 (“Particulate Matter”), section 040.020 (“Dust and Fumes”), section 040.030 (“Dust Control”), section 040.031 (“Street Sanding Operations”), section 040.032 (“Street Sweeping Operations”), section 040.035 (“Open Fires”), section 040.040 (“Burning Permit Conditions”), section 040.045 (“Refuge Disposal”), section 040.050 (“Incinerator Emissions”), section 040.051 (“Wood Stove/Fireplace Insert Emissions”), and section 040.060 (“Sulfur Content of Fuel”).

Based on our review of the TSP provisions in the Truckee Meadows AQIP and the various rules cited above, we find that none are contingent upon continuation of the TSP nonattainment designation, and thus deletion of the TSP designation would not automatically relax any standard.

In summary, because upon redesignation the PSD PM<sub>10</sub> increments will apply in Truckee Meadows and because the deletion of the TSP nonattainment designation for Truckee Meadows would not automatically relax any emissions limitation or control measure in the Nevada SIP, we find that the TSP nonattainment designation is no longer necessary and can be deleted. Based on the above discussion and evaluation, therefore, we are proposing to delete the TSP nonattainment area designation for Truckee Meadows (HA #87) from the “Nevada-TSP” table in 40 CFR 81.329.<sup>28</sup>

## **VII. Proposed Actions and Request for Public Comment**

Under CAA section 110(k)(3), and for the reasons set forth above, the EPA is proposing to approve the BACM demonstration submitted by the NDEP on August 5, 2002 as part of the 2002 Truckee Meadows PM<sub>10</sub> Attainment Plan and the 2014 Truckee Meadows PM<sub>10</sub> Maintenance Plan submitted by the NDEP on November 7, 2014 as revisions of the Nevada SIP. In so doing, the EPA finds that the 2011 attainment inventory in the maintenance plan meets the requirements of CAA section 172(c)(3) and finds that the maintenance demonstration showing how Truckee Meadows will continue to attain the PM<sub>10</sub> standard through 2030, and the contingency provisions describing the actions that the WCAQMD will take in the event of a future monitored violation, meet all applicable requirements for maintenance plans and related contingency provisions in CAA section 175A. The EPA is also proposing to approve the motor vehicle emissions budgets in the 2014 PM<sub>10</sub> Maintenance Plan (and shown in table 5 above) because we find they meet the applicable adequacy criteria under 40 CFR 93.118(e).

In addition, under CAA section 107(d)(3)(D), we are proposing to approve the state’s request, which accompanied the submittal of the 2014 PM<sub>10</sub> Maintenance Plan, to redesignate the

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<sup>28</sup> Because the TSP area designation for Truckee Meadows is the last such designation for the State of Nevada in 40 CFR 81.329, we will delete the entire TSP table in 40 CFR 81.329 if we finalize our proposed deletion of the TSP area designation for Truckee Meadows.

Truckee Meadows PM<sub>10</sub> nonattainment area to attainment for the PM<sub>10</sub> standard. We are doing so based on our conclusion that the area has met, or will meet as part of this action, all of the criteria for redesignation under CAA section 107(d)(3)(E). More specifically, we propose to find that Truckee Meadows has attained the PM<sub>10</sub> standard based on the most recent three-year period (2012-2014) of quality-assured, certified, and complete (or otherwise validated) PM<sub>10</sub> data; that relevant portions of the Nevada SIP are, or will be as part of this action, fully approved; that the improvement in air quality is due to permanent and enforceable reductions in emissions; that Nevada has met all requirements applicable to the Truckee Meadows PM<sub>10</sub> nonattainment area with respect to section 110 and part D of the CAA if we finalize our approvals of the BACM demonstration in the 2002 PM<sub>10</sub> Attainment Plan and the attainment inventory in the 2014 PM<sub>10</sub> Maintenance Plan, as proposed herein; and that Truckee Meadows will have a fully approved maintenance plan meeting the requirements of CAA section 175A if we finalize our approval of it, also as proposed herein.

In connection with the above proposed approvals and determinations, and as authorized under CAA section 189(e), we are proposing to determine that major stationary sources of PM<sub>10</sub> precursors do not contribute significantly to PM<sub>10</sub> exceedances in the Truckee Meadows area based on the information in the 1988 DRI Report and more recent inventory and speciation data available from the WCAQMD.

Lastly, the EPA is proposing to delete the nonattainment area designation for Truckee Meadows for the revoked national standard for total suspended particulate because we have concluded that the designation is no longer necessary.<sup>29</sup>

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<sup>29</sup> If we finalize the proposed approval of the redesignation request for Truckee Meadows to attainment for the PM<sub>10</sub> standard and the proposed deletion of the TSP area designation for Truckee Meadows, as proposed, then all areas within the State of Nevada will be designated attainment or unclassifiable for all of the current NAAQS for particulate matter (i.e., PM<sub>10</sub> and PM<sub>2.5</sub>). At that point, the EPA's finding at 40 CFR 52.1476(a) ("The requirements

We are soliciting comments on these proposed actions. We will accept comments from the public on this proposal for 30 days following publication of this proposal in the **Federal Register**. We will consider these comments before taking final action.

### **VIII. Statutory and Executive Order Reviews**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. Redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, these actions merely propose to approve a State plan and redesignation request as meeting Federal requirements and do not impose additional requirements beyond those imposed by state law. For these reasons, these proposed actions:

- Are not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);

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of subpart G of this chapter are not met since the plan does not provide for the attainment and maintenance of the national standards for particulate matter in the Northwest Nevada and Nevada Intrastate Regions."), promulgated at 37 FR 10842, 10879 (May 31, 1972), will become obsolete, and therefore, we intend to delete 40 CFR 52.1476(a) if we finalize this proposed rule, as proposed.

- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- are not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and,
- Do not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the State plan for which the EPA is proposing approval does not apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule, as it relates to the maintenance plan, does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). However, the EPA has contacted the Reno-Sparks Indian Colony

and invited them to consult on today's action. The Reno-Sparks Indian Colony, which consists of members of three Great Basin Tribes – the Paiute, the Shoshone, and the Washo – and which has Indian country within the Truckee Meadows air quality planning area because the Indian country within the Truckee Meadows area would be redesignated to attainment along with State lands if the EPA were to finalize the proposed rules, as set forth herein.

**List of Subjects**

*40 CFR Part 52*

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

*40 CFR Part 81*

Environmental protection, Air pollution control, National parks, Wilderness areas.

**AUTHORITY:** 42 U.S.C. 7401 *et seq.*

Dated: September 18, 2015.

Jared Blumenfeld,  
Regional Administrator,  
Region IX.  
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