



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R09-OAR-2013-0686; FRL-9908-69-Region-9]

Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; State of Arizona; Redesignation of the Phoenix-Mesa Nonattainment Area to Attainment for the 1997 8-Hour Ozone Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Under the Clean Air Act, the Environmental Protection Agency (EPA) is proposing to approve, as a revision of the Arizona State Implementation Plan, the State's plan for maintaining the 1997 National Ambient Air Quality Standard for ozone averaged over eight hours (8-hour ozone standard) in the Phoenix-Mesa nonattainment area for ten years beyond redesignation, and the related motor vehicle emission budgets, because they meet the applicable requirements for such plans and budgets. EPA is also proposing to approve a request from the Arizona Department of Environmental Quality to redesignate the Phoenix-Mesa nonattainment area to attainment of the 1997 8-hour ozone standard because the request meets the statutory requirements for redesignation under the Clean Air Act.

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

ADDRESSES: Submit your comments, identified by Docket ID number EPA-R09-OAR-2013-0686, by one of the following methods:

1. *http://www.regulations.gov*: Follow the on-line instructions for submitting comments.
2. *Email*: vagenas.ginger@epa.gov
3. *Postal Mail or Delivery*: Ginger Vagenas (AIR-2), U.S. Environmental Protection Agency, Region 9, 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. The online docket system at *http://www.regulations.gov* is an anonymous access system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If EPA cannot read your comment due to technical

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

Docket: Generally, documents in the docket for this action are available electronically at <http://www.regulations.gov> and in hard copy at the EPA Region 9 office. While all documents in the docket are listed at <http://www.regulations.gov>, some information may not be specifically listed in the index to the docket or may be publicly available only in hard copy at the EPA Region 9 office (e.g., copyrighted material, large maps, multi-volume reports, or otherwise voluminous materials), and some may not be publicly available in electronic or hard copy form (e.g., confidential business information). To view the hard copy materials, please schedule an appointment during normal business hours with the contact person listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Ginger Vagenas, U.S. EPA, Region 9, 75 Hawthorne Street (AIR-2), San Francisco, CA 94105-3901. Ginger Vagenas can also be reached at (415) 972-3964, or via electronic mail at vagenas.ginger@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, "we", "us", and "our" refer to the United States Environmental Protection Agency (EPA).

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I. Summary of Today's Proposed Action

EPA is proposing to take several related actions. First, under section 110(k)(3) of the Clean Air Act (CAA or "Act"), EPA is proposing to approve, as a revision to the Arizona State Implementation Plan (SIP), a plan developed by the Maricopa Association of Governments (MAG),¹ entitled *MAG Eight-Hour Ozone Redesignation Request and Maintenance Plan for the Maricopa Nonattainment Area*, dated February 2009 ("Eight-Hour Ozone Maintenance Plan"), and submitted by the Arizona Department of Environmental Quality (ADEQ) to EPA on March 23, 2009.²

In connection with the Eight-Hour Ozone Maintenance Plan, EPA is proposing to find that the maintenance demonstration

¹ The MAG membership currently consists of the 27 incorporated cities and towns within Maricopa County and the contiguous urbanized area, the Gila River Indian Community, the Salt River Pima Maricopa Indian Community, Fort McDowell Yavapai Nation, Maricopa and Pinal Counties. Representatives of the Arizona Department of Transportation (ADOT) and the Citizens Transportation Oversight Committee (CTOC) also serve on the Regional Council for transportation-related issues.

² See letter from Patrick J. Cunningham, Acting Director, Arizona Department of Environmental Quality, to Laura Yoshii, Acting Regional Administrator, EPA Region IX, March 23, 2009. This letter included three enclosures, one of which is the Eight-Hour Ozone Maintenance Plan, including appendices A and B organized into volumes 1, 2, and 3.

shows that the Phoenix-Mesa area will continue to attain the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS or "standard") for 10 years beyond redesignation and that the contingency provisions, which include already implemented measures as well as a process for identifying new or more stringent measures in the event of a future monitored violation, meet all applicable requirements for maintenance plans and the related contingency provisions of CAA section 175A. EPA is also proposing to approve motor vehicle emission budgets in the Eight-Hour Ozone Maintenance Plan because we find they meet the applicable transportation conformity requirements under 40 CFR 93.118(e).

Second, under CAA section 107(d)(3)(D), EPA is proposing to approve ADEQ's request to redesignate the Phoenix-Mesa 8-hour ozone nonattainment area to attainment for the 1997 8-hour ozone NAAQS. We are doing so based on our conclusion that the area has met the five criteria for redesignation under CAA section 107(d)(3)(E). This conclusion is based on our proposed determination that: the area has attained the 1997 8-hour ozone NAAQS; relevant portions of the Arizona SIP are fully approved; improvement in air quality in the area is due to permanent and enforceable reductions in emissions; Arizona has met all requirements applicable to the Phoenix-Mesa 1997 8-hour ozone nonattainment area with respect to section 110 and part D of the

CAA; and, as part of this action, our proposed approval of the Eight-Hour Ozone Maintenance Plan.

II. Background

Ground-level ozone is an oxidant that is formed from photochemical reactions in the atmosphere between volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight. These two pollutants, referred to as ozone precursors, are emitted by many types of pollution sources including on-road motor vehicles (cars, trucks, and buses), nonroad vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints.

In 1971, under section 109 of the Act, as amended in 1970, EPA promulgated the original NAAQS for pervasive air pollutants, including photochemical oxidants.³ The NAAQS are concentration levels that, the attainment and maintenance of which, EPA has determined to be requisite to protect public health (i.e., the "primary" NAAQS) and welfare (i.e., the "secondary" NAAQS). In 1979, EPA revised the chemical designation of the NAAQS from "photochemical oxidants" to "ozone," and established a 1-hour ozone NAAQS of 0.12 parts per million (ppm).⁴

In March of 1978, Maricopa County was designated as a 1-hour oxidant nonattainment area (43 FR 8962). In 1979, EPA

³ See 36 FR 8186 (April 30, 1971).

⁴ See 44 FR 8202 (February 8, 1979).

revised Maricopa County's designation to refer to ozone (rather than oxidant) and reduced the geographic extent of the nonattainment area to reflect MAG's Urban Planning Area ("Phoenix metropolitan area") rather than the entire county. See 44 FR 16388 (March 19, 1979). Under the CAA, states with nonattainment areas are required to submit revisions to their SIPs that include a control strategy necessary to demonstrate how the area will attain the NAAQS, and EPA took action on a number of related SIP revisions submitted by Arizona in the late 1970s and 1980s for the Phoenix metropolitan 1-hour ozone nonattainment area. However, by 1990, the area still had not attained the standard, and under the CAA Amendments of 1990, the Phoenix metropolitan area was classified as a "moderate" nonattainment area with an attainment deadline of November 15, 1996 (56 FR 56694, November 6, 1991). The area was later reclassified as a "serious" nonattainment area with a deadline of November 15, 1999 (62 FR 60001, November 6, 1997).

In 1997, EPA revised the NAAQS for ozone, setting it at 0.08 ppm averaged over an 8-hour timeframe (referred to herein as the "1997 8-hour ozone standard") to replace the existing 1-hour ozone standard of 0.12 ppm.^{5,6} In 2004, EPA designated the

⁵ See 62 FR 33856 (July 18, 1997).

⁶ On March 27, 2008 (73 FR 16436), EPA lowered the 8-hour ozone standard to 0.075 ppm (the 2008 8-hour ozone standard), and on May 21, 2012, EPA designated the Phoenix-Mesa area as marginal nonattainment for the 2008 8-hour ozone standard (77 FR 30088). Today's proposed action relates to a

Phoenix-Mesa area as nonattainment for the 1997 8-hour ozone standard and established June 15, 2005 as the date when the 1-hour ozone standard would be revoked. The Phoenix-Mesa 8-hour ozone nonattainment area covers a much larger portion of Maricopa County than the Phoenix metropolitan 1-hour ozone area and also includes the Apache Junction portion of Pinal County.⁷ Just prior to revocation of the 1-hour ozone standard, EPA redesignated the Phoenix metropolitan 1-hour ozone nonattainment area to attainment (70 FR 34362, June 14, 2005).⁸

On April 15, 2004, EPA designated Phoenix-Mesa as Subpart 1 nonattainment for the 1997 8-hour ozone standard under CAA section 172 with an attainment deadline no later than June 15, 2009.⁹ The designation became effective on June 15, 2004. The Phoenix-Mesa nonattainment area is located in the central portion of Arizona and encompasses 4,880 square miles, including the urban portions of Maricopa and Pinal Counties, and areas of Indian country of the Fort McDowell Yavapai Nation, the Salt River-Pima Maricopa Indian Community, and the Tohono O'odham Nation. For a precise description of the geographic boundaries

maintenance plan and redesignation request for the 1997 8-hour ozone standard, not the more stringent 2008 8-hour ozone standard.

⁷ The precise boundaries of the Phoenix-Mesa 8-hour ozone nonattainment area and the Phoenix metropolitan 1-hour ozone nonattainment are found in 40 CFR 81.303.

⁸ A more detailed description of the history of 1-hour ozone planning in the Phoenix metropolitan area is presented in section II of EPA's proposed redesignation for the 1-hour ozone standard. See 70 FR 13425 at 13426-13428 (March 21, 2005).

⁹ See 69 FR 23858 (April 30, 2004) and 40 CFR 81.303.

of the Phoenix-Mesa nonattainment area, see 40 CFR 81.303 and figure 1-1 of the Eight-Hour Ozone Maintenance Plan. MAG is the agency with primary responsibility for developing air quality plans related to the 1997 8-hour ozone NAAQS for the Phoenix-Mesa nonattainment area.

Under part D, subpart 1 of the Act, states must submit plans to come into attainment within 3 years of the effective date of the nonattainment designation and must attain the standard as expeditiously as practicable, but no later than 5 years after the effective date of the designation. Later, in the wake of a court decision partially vacating EPA's regulations implementing the 1997 8-hour ozone standard,¹⁰ EPA classified the Phoenix-Mesa ozone nonattainment area as "marginal" under subpart 2 of part D of title I of the CAA.¹¹

On June 13, 2007, ADEQ submitted a SIP revision demonstrating attainment of the 1997 8-hour ozone standard in the Phoenix-Mesa nonattainment area by the attainment date of June 15, 2009 ("Eight-Hour Ozone Attainment Plan"). In June 2012, EPA approved the Eight-Hour Ozone Attainment Plan.¹² On March 23, 2009, ADEQ submitted the Eight-Hour Ozone Maintenance Plan as a revision to the Arizona SIP.

¹⁰ See *South Coast Air Quality Management Dist. v. EPA*, 472 F3d 882 (D.C. Cir. 2006).

¹¹ See 77 FR 28424 (May 14, 2012). June 13, 2012 is the effective date for the "marginal" classification of the Phoenix-Mesa 8-hour ozone nonattainment for the 1997 8-hour ozone NAAQS.

¹² See 77 FR 21690 (April 11, 2012) and 77 FR 35285 (June 13, 2012).

In summary, the Phoenix metropolitan area was originally designated as nonattainment for the photochemical oxidant, later 1-hour ozone NAAQS, but was later redesignated as attainment for the 1-hour ozone NAAQS prior to the revocation of that standard. With respect to the 1997 8-hour ozone NAAQS, EPA designated a larger geographic area, the Phoenix-Mesa area, as nonattainment, later classified as "marginal," for the 1997 8-hour ozone NAAQS. ADEQ's request to redesignate the Phoenix Mesa area as attainment for the 1997 8-hour ozone NAAQS is the subject of today's proposed action. Lastly, EPA has also designated the Phoenix Mesa area as "marginal" nonattainment for the 2008 ozone NAAQS. Today's proposed action does not affect the designation of the Phoenix-Mesa area for the 2008 ozone NAAQS.

III. Procedural Requirements for Adoption and Submittal of SIP Revisions

Section 110(1) of the Act requires States to provide reasonable notice and public hearing prior to adoption of SIP revisions. Appendix B, Exhibit 1 of the Eight-Hour Ozone Maintenance Plan documents the public review process followed by MAG in adopting the plan prior to transmittal to ADEQ for subsequent submittal to EPA as a revision to the Arizona SIP. The documentation in Exhibit 1 also provides evidence that reasonable notice of a public hearing was provided to the public and that a public hearing was conducted prior to adoption.

Specifically, notice of the availability of, and opening of a 30-day comment period on, the public-draft Eight-Hour Ozone Maintenance Plan was published on December 23, 2008, in a newspaper of general circulation within the Phoenix area. The public hearing was held on January 22, 2009. One individual commented on the draft maintenance plan during the public hearing. No written comments were received during the public comment period. MAG provided responses to comments in Exhibit 1 of Appendix B.

On February 25, 2009, the MAG Regional Council adopted the Eight-Hour Ozone Maintenance Plan, as certified in Appendix B, exhibit 2 of the plan. Following adoption, MAG provided the maintenance plan to ADEQ, and ADEQ adopted the plan and submitted it to EPA for approval on March 23, 2009.

Based on the documentation provided in Appendix B, we find that the submittal of the Eight-Hour Ozone Maintenance Plan as a SIP revision satisfies the procedural requirements of section 110(l) of the Act.

IV. Substantive Requirements for Redesignation

The CAA establishes the requirements for redesignation of a nonattainment area to attainment. Specifically, section 107(d)(3)(E) allows for redesignation provided that the following criteria are met: (1) EPA determines that the area has attained the applicable NAAQS; (2) EPA has fully approved the

applicable implementation plan for the area under 110(k); (3) EPA determines that the improvement in air quality is due to permanent and enforceable reductions; (4) EPA has fully approved a maintenance plan for the area as meeting the requirements of CAA 175A; and (5) the State containing such area has met all requirements applicable to the area under section 110 and part D of the CAA. Section 110 identifies a comprehensive list of elements that SIPs must include, and part D establishes the SIP requirements for nonattainment areas. Part D is divided into six subparts. The generally-applicable nonattainment SIP requirements are found in part D, subpart 1, and the ozone-specific SIP requirements are found in part D, subpart 2.

EPA provided guidance on redesignations in a document entitled "State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990", published in the Federal Register on April 16, 1992 (57 FR 13498), and supplemented on April 28, 1992 (57 FR 18070) (referred to herein as the "General Preamble"). Additional guidance was issued in a September 4, 1992 memorandum from John Calcagni, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards, entitled "Procedures for Processing Requests to Redesignate Areas to Attainment" (referred to herein as the "Calcagni memo"). Maintenance plan submittals are SIP revisions, and as such, EPA is obligated,

under CAA section 110(k), to approve them or disapprove them depending upon whether they meet the applicable CAA requirements for such plans.

For reasons set forth below in section V of this document, we propose to approve ADEQ's request for redesignation of the Phoenix-Mesa ozone nonattainment area to attainment for the 1997 8-hour ozone NAAQS based on our conclusion that all the criteria under CAA section 107(d)(3)(E) have been satisfied.

V. Evaluation of the State's Redesignation Request for the Phoenix-Mesa Ozone Nonattainment Area

A. Determination That the Area Has Attained the Applicable NAAQS

CAA section 107(d)(3)(E)(i) requires that we determine that the area has attained the NAAQS. EPA generally makes the determination of whether an area's air quality meets the ozone NAAQS based upon the most recent three years 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 or local agencies in compliance with EPA monitoring requirements must be submitted to AQS. Heads of monitoring agencies annually certify that these data are accurate to the best of their knowledge. Accordingly, EPA relies primarily on data in AQS when determining the

attainment status of areas.¹³ All data are reviewed to determine the area's air quality status in accordance with 40 CFR part 50, Appendix I.

Under EPA regulations at 40 CFR part 50, the 1997 ozone standard is met at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm.¹⁴ This 3-year average is referred to as the design value. When the design value is less than or equal to 0.084 ppm (based on the rounding convention in 40 CFR part 50, Appendix I) at each monitoring site within the area, the area is meeting the NAAQS. The data completeness requirement is met with the 3-year average percent of days with valid ambient monitoring data is at least 90 percent of the days during the designated ozone monitoring season, and no single year has less than 75 percent data completeness as determined in Appendix I of 40 CFR part 50.

Three state or local agencies are responsible for monitoring ambient air quality data in the Phoenix-Mesa nonattainment area: the Maricopa County Air Quality Department (MCAQD), the Pinal County Air Quality Control District (PCAQCD), and ADEQ. These agencies submit monitoring network plan reports to EPA on an annual basis. These reports discuss the status of

¹³ See 40 CFR 50.10; 40 CFR part 50, Appendix I; 40 CFR part 53; 40 CFR part 58, Appendices A, C, D, and E.

¹⁴ See 40 CFR 50.10 and 40 CFR part 50, Appendix I.

the air monitoring network, as required under 40 CFR part 58. Beginning in 2007, EPA has reviewed these annual plans for compliance with the applicable reporting requirements in 40 CFR 58.10. With respect to ozone, we have found that MCAQD's, PCAQCD's, and ADEQ's annual network plans meet the applicable reporting requirements under 40 CFR part 58.¹⁵

EPA conducts periodic technical system audits of the state and local ambient air monitoring networks, and has done so for ADEQ, MCAQD, and PCAQCD. For the purposes of this action, EPA has reviewed the findings in EPA's technical system audits of the networks operated by the three relevant agencies and notes that none of the findings in these reports cast doubt on the reliability of the ozone data collected at the various monitoring sites in these networks.¹⁶

During the relevant time period, the ozone monitoring network in the Phoenix-Mesa nonattainment area comprised 20 ozone monitors: MCAQD operated 18 monitors¹⁷, ADEQ operated one monitor, and PCAQCD operated one monitor. Please see figure 2-1

¹⁵ See EPA letters to MCAQCD, PCAQCD, and ADEQ concerning annual network plan reports, which are included in the docket for this rulemaking.

¹⁶ For the most recent technical system audits (TSAs), see EPA's report on the Agency's September 2008 audit of MCAQCD's network, EPA's final TSA report for ADEQ's network dated January 2013, and EPA's final TSA report for PCAQCD's network dated June 2013, which are included in the docket for this rulemaking.

¹⁷ The Mesa ozone monitor, operated by MCAQD, began operation on November 1, 2012 and therefore only gathered data for two months during the 2010-2012 design value period. As a result, this monitor is not appropriate to consider in determining whether the area has attained the 1997 ozone standard. In the future, as complete data become available, the monitor will be eligible for use in determining continued attainment.

in the Eight-Hour Ozone Maintenance Plan for a map showing the locations of the monitors constituting the State and local agency regional ozone monitoring network. Based on population and ambient ozone, EPA regulations required only three ozone monitoring sites in the Phoenix-Mesa-Glendale Metropolitan Statistical Area (MSA) during the 2010-2012 period. Thus, the ozone monitoring network in the Phoenix-Mesa nonattainment area exceeds the requirements for the minimum number of monitoring sites designated as SLAMS for that pollutant.

MCAQD, PCAQCD, and ADEQ annually certify that the data they submit to AQS are complete and quality-assured.¹⁸ All 20 sites monitored ozone concentrations on a continuous basis using Federal Equivalent Method (FEM) analyzers. The spatial scale and site type (monitoring objective type) of most of the ozone monitoring sites in the nonattainment area are "neighborhood" and "population exposure," respectively. The Blue Point, Cave Creek, Pinnacle Peak, and Rio Verde sites are classified as "urban" scale with site types of "maximum ozone concentrations," while the Humboldt Mountain site is classified as "regional scale" with a site type of "maximum ozone concentrations." The Fountain Hills and JLG Supersite sites are also sited to measure

¹⁸ For the most recent data certification submittals, see MCAQCD, PCAQCD, and ADEQ letters concerning data certification for 2010, 2011, and 2012, which are included in the docket for this rulemaking.

"maximum ozone concentrations" but are located at the "neighborhood" scale.¹⁹

In addition to the SLAMS ozone network maintained by MCAQD, PCAQCD, and ADEQ, there are five tribal monitors located within the nonattainment area. The Salt River Pima-Maricopa Indian Community (Salt River) operates four ozone monitors and the Fort McDowell Yavapai Nation (Fort McDowell) operates one monitor on tribal lands located in the eastern portion of the nonattainment area. The ozone monitoring data from Fort McDowell is characterized as "informational" and therefore not suitable for comparison against the 1997 ozone standard. Conversely, the Salt River ozone monitors have the basic monitoring objective of "NAAQS comparison" and the data should be considered "regulatory" and appropriate for use when determining if the nonattainment area is attaining the 1997 ozone standard.

Consistent with the requirements contained in 40 CFR part 50, EPA has reviewed the ozone ambient air monitoring data as recorded in AQS for the monitoring period from 2010 through 2012 collected at the monitoring sites discussed above and found that the data meet our completeness criteria (see table 1).

Table 1: Summary of Ambient Data for Ozone Collected Within Phoenix-Mesa Ozone Nonattainment Area, 2010-2012

¹⁹ The sources of information for this paragraph include ADEQ's "State of Arizona Air Monitoring Network Plan for the Year 2013," dated October 29, 2013; MCAQD's "2012 Air Monitoring Network Review," undated; and PCAQCD's "2013 Ambient Monitoring Network Plan and 2012 Data Summary," dated July 1, 2013.

Site	Site ID	Agency	Parameter	2010-2012 Design Value (DV) and % Complete
Apache Junction	04-013-3001	PCAQCD	DV (ppm)	0.074
			% complete	98
Blue Point	04-013-9702	MCAQD	DV (ppm)	0.075
			% complete	99
Buckeye	04-013-4011	MCAQD	DV (ppm)	0.066
			% complete	100
Cave Creek	04-013-4008	MCAQD	DV (ppm)	0.077
			% complete	100
Central Phoenix	04-013-3002	MCAQD	DV (ppm)	0.074
			% complete	100
Dysart	04-013-4010	MCAQD	DV (ppm)	0.071
			% complete	100
Falcon Field	04-013-1010	MCAQD	DV (ppm)	0.069
			% complete	99
Fountain Hills	04-013-9704	MCAQD	DV (ppm)	0.076
			% complete	99
Glendale	04-013-2001	MCAQD	DV (ppm)	0.076
			% complete	100
High School	04-013-7024	SRPMIC	DV (ppm)	0.074
			% complete	99
Humboldt Mountain	04-013-9508	MCAQD	DV (ppm)	0.075
			% complete	100
JLG Supersite	04-013-9997	ADEQ	DV (ppm)	0.076
			% complete	98
Lehi	04-013-7022	SRPMIC	DV (ppm)	0.073
			% complete	98
North Phoenix	04-013-1004	MCAQD	DV (ppm)	0.081

			% complete	100
Pinnacle Peak	04-013-2005	MCAQD	DV (ppm)	0.077
			% complete	78 ²⁰
Red Mountain	04-013-7021	SRPMIC	DV (ppm)	0.077
			% complete	93
Rio Verde	04-013-9706	MCAQD	DV (ppm)	0.074
			% complete	98
Senior Center	04-013-7020	SRPMIC	DV (ppm)	0.074
			% complete	95
South Phoenix	04-013-4003	MCAQD	DV (ppm)	0.076
			% complete	98
South Scottsdale	04-013-3003	MCAQD	DV (ppm)	0.077
			% complete	100
Tempe	04-013-4005	MCAQD	DV (ppm)	0.070
			% complete	99
West Chandler	04-013-4004	MCAQD	DV (ppm)	0.074
			% complete	100
West Phoenix	04-013-0019	MCAQD	DV (ppm)	0.078
			% complete	100

Table 1 summarizes the site-specific 3-year ozone design values for all monitoring sites within the Phoenix-Mesa nonattainment area for the period of 2010-2012. As shown in table 1, the design value for the 2010-2012 period was less than 0.084 ppm at all of the monitors in the Phoenix-Mesa ozone nonattainment area. Therefore, we are proposing to determine,

²⁰ The Pinnacle Peak site was temporarily shut down on November 16, 2011 and relocated to a nearby location on July 1, 2012. See Letter from Ben Davis, Air Monitoring Manager, MCAQD, to Michael Flagg, Air Quality Analysis Office, EPA Region 9, dated January 31, 2012.

based on complete quality-assured data for the 2010-2012 period, that the Phoenix-Mesa ozone nonattainment area has attained the 1997 8-hour ozone standard. Preliminary data for 2013 are also consistent with continued attainment.²¹ Given the timing of this proposed action after the end of 2013 but before the monitoring agencies must enter data collected during the final quarter of the 2013 into AQS, we will be updating this determination based on design values calculated for 2011-2013, and preliminary review of available 2014 data, for the purposes of the final action.

B. The Area Must Have a Fully Approved SIP Meeting the Requirements Applicable for Purposes of Redesignation Under Section 110 and Part D

Section 107(d)(3)(E)(ii) and (v) require 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.

1. Basic SIP Requirements Under CAA Section 110

Section 110(a)(2) sets forth the general elements that a SIP must contain in order to be fully approved. EPA has analyzed the Arizona SIP and determined that it is consistent with the requirements of section 110(a)(2). The Phoenix-Mesa portion of the approved Arizona SIP, which includes rules pertaining to

²¹ See the AQS Preliminary Design Value Report for 2013 dated March 6, 2014, included in the docket for this rulemaking.

areas and sources under the jurisdiction of ADEQ, MCAQD, and PCAQCD, contains enforceable emission limitations; requires monitoring, compiling, and analyzing of ambient air quality data; requires preconstruction review of new or modified stationary sources; provides adequate funding, staff, and associated resources necessary to implement its requirements; and provides the necessary assurances that the State of Arizona maintains responsibility for ensuring adequate implementation of the SIP where the State is relying on local or regional governments or agencies for implementation of the SIP.²²

²² We note that SIPs must be fully approved only with respect to the applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). 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 (transport SIP). However, the section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, we do not believe that these requirements should be construed to be applicable requirements for the purposes of redesignation. In addition, EPA believes that the other section 110 elements that are not connected with nonattainment plan submissions and not linked with an area's attainment status are not applicable requirements for the purposes of redesignation. The State will still be subject to these requirements after the Phoenix-Mesa nonattainment area is redesignated.

This policy is consistent with EPA's existing policy on applicability of conformity (i.e., for redesignations) and oxygenated fuels requirements. See Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174 dated October 10, 1996 and 62 FR 24816 dated May 7, 1997); Cleveland-Akron-Lorain, Ohio, final rulemaking (61 FR 20458 dated May 7, 1996); and Tampa, Florida, final rulemaking (60 FR 62748 dated December 7, 1995). See also the discussion of this issue in the Cincinnati redesignation (65 FR 37879 at 37890 dated June 19, 2000), in the Pittsburgh redesignation (66 FR 53094 dated October 19, 2001), and in the South Coast redesignation (72 FR 6986 dated February 14, 2007 and 72 FR 26718 dated May 11, 2007).

On numerous occasions, we have approved Arizona submittals addressing the basic CAA section 110 provisions. There are no outstanding or disapproved applicable SIP submittals with respect to the Phoenix-Mesa portion of the SIP that prevent redesignation of the Phoenix-Mesa nonattainment area for the 1997 8-hour ozone standard.²³ Therefore, we propose to find that Arizona has met all SIP requirements for the Phoenix-Mesa ozone area applicable for the purposes of redesignation under section 110 of the CAA (General SIP Requirements).

2. Part D Requirements

a. Introduction

The CAA contains two sets of provisions, subparts 1 and 2, that address planning and emission control requirements for ozone nonattainment areas. Both of these subparts are found in title I, part D of the CAA; sections 171-179 and sections 181-185, respectively. Subpart 1 contains general, less prescriptive requirements for all nonattainment areas of any pollutant, including ozone, governed by a NAAQS. Subpart 2 contains additional, more specific requirements for ozone nonattainment areas classified under subpart 2.

²³ On November 5, 2012 (77 FR 66398) EPA issued a partial approval and partial disapproval of Arizona's "infrastructure" SIP for the 1997 8-hour ozone NAAQS. While this final rule was not a full approval, it does not represent an obstacle to redesignation of the Phoenix-Mesa 1997 ozone nonattainment area because the infrastructure elements effective in the Phoenix-Mesa area that EPA disapproved (i.e., certain PSD program elements, composition of air quality hearing boards) are not related to the nonattainment SIP requirements for the Phoenix-Mesa ozone nonattainment area and thus are not relevant for the purposes of redesignation.

The applicable subpart 1 requirements are contained in sections 172(c)(1)-(9) and 176 of the CAA. Under subpart 1, with respect to the Phoenix-Mesa 8-hour ozone nonattainment area, the state of Arizona is required to submit SIP revisions that provide for:

- Implementation of all reasonably available control measures (RACM), including, at a minimum, reasonable available control technology for existing sources and attainment of the standard (section 172(c)(1));
- Reasonable further progress (RFP) (section 172(c)(2));
- A comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in the area (section 172(c)(3));
- Identification and quantification of the emissions, if any, of any such pollutant which will be allowed in accordance with section 173(a)(1)(B) (i.e., new or modified stationary sources located in established economic development zones) (section 172(c)(4));
- Permits for the construction of new and modified major stationary sources in the nonattainment area (section 172(c)(5)) (herein, referred to as "nonattainment NSR" or "NSR");

- Enforceable emission limitations as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date (section 172(c)(6));
- Compliance with section 110(a)(2) of the Act (section 172(c)(7));
- Use of equivalent modeling emission inventory, and planning procedures if approved by EPA (section 172(c)(8));
- Contingency measures (section 172(c)(9)); and
- Interagency consultation and enforceability for the purposes of transportation conformity (section 176(c)(4) and 40 CFR 51.390).

On June 13, 2012 (77 FR 35285), EPA approved the Eight-Hour Ozone Attainment Plan for the Phoenix-Mesa nonattainment area based on the determination that it met all applicable requirements for such plans under subpart 1 of part D, title 1 of the CAA for the 1997 8-hour ozone NAAQS. Specifically, we approved the following SIP elements:

- The RACM demonstration and attainment demonstration as meeting the requirements of section 172(c)(1), 40 CFR 51.912(d), and 40 CFR 51.908;
- The RFP demonstration as meeting the requirements of CAA section 172(c)(2) and 40 CFR 51.910;

- The 2002 base year emission inventory as meeting the requirements of section 172(c)(3) and 40 CFR 51.915; and
- The contingency measures for failure to make RFP or to attain as meeting the requirements of section 172(c)(9).

In addition, we note that the approved Eight-Hour Ozone Attainment Plan relied on enforceable emission limitations necessary to attain the 1997 8-hour ozone NAAQS by the applicable attainment date in compliance with section 172(c)(6) and the plan was adopted and submitted in compliance with section 110(a)(2) as required under section 172(c)(7).

Furthermore, the State of Arizona did not rely on sections 172(c)(4) (i.e., identification and quantification of certain emission increases) or 172(c)(8) (equivalent techniques) in connection with the Eight-Hour Ozone Attainment Plan. The approved Eight-Hour Ozone Attainment Plan did not address the following SIP elements: (1) NSR permit requirements in the nonattainment area (section 172(c)(5)) and (2) transportation conformity provisions related to interagency consultation and enforceability (section 176(c)(4) and 40 CFR 51.390). We address these two remaining part D SIP elements later in this subsection.²⁴

²⁴ The requirements for SIP revisions to demonstrate RACM, RFP, attainment, and contingencies (for failure to meet RFP or attainment) in subpart 1 are not applicable for the purposes of evaluating a redesignation request. Such requirements are directed at ensuring attainment by the applicable attainment

As noted above, the Phoenix-Mesa nonattainment area was initially designated nonattainment under subpart 1 of the CAA, but was subsequently classified as marginal nonattainment for the 1997 8-hour ozone standard under subpart 2 of the CAA (77 FR 28424, May 14, 2012). The effective date of the classification of the Phoenix-Mesa nonattainment area as marginal was June 13, 2012, and under our subpart 2 classifications rule, states had one year from the effective date of that final rule (i.e., until June 13, 2013) to submit SIP revisions.

ADEQ has not submitted any SIP revisions for the Phoenix-Mesa nonattainment area in response to the area's classification to marginal.²⁵ However, EPA believes that this does not preclude this redesignation from being approved, based on (1) EPA's longstanding policy of evaluating requirements in accordance with the requirements due at the time the redesignation request

date, and since, as discussed in section V.A., the area is showing attainment, the requirements have no meaning at this point. See the General Preamble, 74 FR 13498, at 13564 (April 16, 1992).

²⁵ In any event, the State of Arizona is not required to submit further SIP revisions to satisfy additional requirements under section 182(a)(2)(A) to correct RACT rules for the Phoenix-Mesa 8-hour ozone nonattainment area because we already determined that the State had met the VOC RACT requirements under section 182(a)(2)(A). See our proposed rule (70 FR 13425, at 13435, March 21, 2005) and final rule (70 FR 34362, at 34363, June 14, 2005) redesignating the Phoenix metropolitan area as attainment for the 1-hour ozone NAAQS. We also note that the State of Arizona previously submitted, and EPA approved, an "enhanced" vehicle inspection and maintenance (I/M) program that exceeds the requirements of section 182(a)(2)(B) for the Phoenix-Mesa nonattainment area, if those requirements were applicable for the purposes of redesignation. See 69 FR 2912 (January 22, 2003). Lastly, the State of Arizona previously submitted, and EPA approved Maricopa County's emissions statement rule and thereby has complied with section 182(a)(3)(B), if that requirement were applicable for the purposes of redesignation for the 1997 8-hour ozone NAAQS. See 70 FR 7038 (February 10, 2005).

is submitted; and (2) consideration of the inequity of retroactively applying any requirements that might be applied in the future.

Under EPA's longstanding interpretation of section 170(d)(3)(E) of the CAA, to qualify for redesignation, states requesting redesignation to attainment must meet only the relevant SIP requirements that came due prior to the submittal of a complete redesignation request.²⁶ At the time the redesignation request was submitted (i.e., March 23, 2009), the Phoenix-Mesa nonattainment area was not classified under subpart 2, and thus, subpart 2 requirements were not yet due for this area.

Moreover, it would be inequitable to retroactively apply any new SIP requirements that were not applicable at the time the request was submitted. The D.C. Circuit Court has recognized the inequity in such retroactive rulemakings. See *Sierra Club v. Whitman* 285 F.3d 63 (D.C. Cir. 2002), in which the court upheld a district court's ruling refusing to make retroactive an EPA determination of nonattainment that was past the statutory due date. Such a determination would have resulted in the imposition

²⁶ See the Calcagni memo; see also Memorandum entitled "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992," from Michael Shapiro, Acting Assistant Administrator for Air and Radiation dated September 17, 1993; Redesignation of Detroit-Ann Arbor, Michigan, 60 FR 12459 (March 7, 1995); *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004), upholding this interpretation; and Redesignation of St. Louis, Missouri, 68 FR 25418, 25424, 25427 (May 12, 2003).

of additional requirements on the area. The court stated, “[a]lthough EPA failed to make the nonattainment determination within the statutory frame, Sierra Club’s proposed solution only makes the situation worse. Retroactive relief would likely impose large costs on the states, which would face fines and suits for not implementing air pollution prevention plans in 1997, even though they were not on notice at the time.” *Id.* at 68. Similarly here, it would be unfair to penalize the Phoenix-Mesa nonattainment area by applying to it, for purposes of redesignation, additional SIP requirements under subpart 2 that were not in effect or yet due at the time it submitted its redesignation request, or the time that the Phoenix-Mesa nonattainment area attained the 1997 ozone NAAQS.

In the following subsection, we address the following SIP elements: (1) NSR permit requirements in the nonattainment area (section 172(c)(5)) and (2) transportation conformity provisions related to interagency consultation and enforceability (section 176(c)(4) and 40 CFR 51.390).

b. Permits for New and Modified Major Sources

To meet the requirements of CAA section 172(c)(5), states must submit SIP revisions that meet the requirements under 40 CFR 51.165 (“Permit requirements”), and EPA regulations at 40 CFR 51.914, which extend the SIP requirements of 40 CFR 51.165

to areas designated as nonattainment for the 1997 8-hour ozone standard.

Under 40 CFR 51.165, states are required to submit SIP revisions that establish certain requirements for new or modified stationary sources in nonattainment areas, including provisions to ensure that major new sources or major modifications of existing sources of nonattainment pollutants incorporate the highest level of control, referred to as 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.

The process for reviewing permit applications and issuing permits for new or modified stationary sources of air pollution is referred to as new source review. With respect to new major sources or major modifications at existing major sources of nonattainment pollutants in nonattainment areas, this process is referred to as nonattainment NSR or simply NSR. With respect to new major sources or major modifications at existing major sources of pollutants for which an area is designated attainment or unclassifiable, states are required to submit SIP revisions that ensure that major new stationary sources and major modifications of existing stationary sources meet the federal requirements for prevention of significant deterioration (PSD), including application of the best available control technology

(BACT) for each applicable pollutant emitted in significant amounts, among other requirements.

In the Phoenix-Mesa nonattainment area, EPA, MCAQD, PCAQCD, and ADEQ share responsibility for issuing permits. EPA has the responsibility for permit application review and permit issuance for new or modified stationary sources in Indian country of the Fort McDowell Yavapai Nation, the Salt River-Pima Maricopa Indian Community, and the Tohono O'odham Nation. MCAQD and PCAQCD are responsible for permitting for most stationary sources located within their respective counties and to portable sources that operate solely within the boundaries of the counties. ADEQ has jurisdiction over refineries, copper smelters, coal-fired power plants, Portland cement plants throughout the State and over sources that operate in multiple counties or outside the boundaries of Maricopa, Pima, and Pinal counties.

EPA has promulgated nonattainment NSR rules at 40 CFR 49.166 through 49.175 that establish the necessary permitting requirements for new or modified major stationary sources in the areas of Indian country located within the Phoenix-Mesa nonattainment area. With respect to PCAQCD, the existing Arizona SIP does not include rules that meet nonattainment NSR requirements for Pinal County; however, because the Pinal County portion of the nonattainment area was newly designated as

nonattainment for ozone in 2004, i.e., had not previously been part of the Phoenix metropolitan 1-hour ozone nonattainment area, EPA's regulations in appendix S to 40 CFR part 51 apply until such time as nonattainment NSR rules meeting the applicable requirements are approved by EPA as a revision to the Arizona SIP. See 40 CFR 52.24(k).

EPA has not approved nonattainment NSR rules for ADEQ and MCAQD since the 1980s, and the existing SIP-approved NSR rules do not comply with all of the current SIP NSR requirements under the CAA, as amended in 1990, and under 40 CFR 51.165 for ozone nonattainment areas. However, the existing SIP-approved NSR rules for both ADEQ and MCAQD meet the basic requirements of a nonattainment NSR program, including the definition of "major stationary source" as any stationary source in a nonattainment area with a potential to emit 100 tons per year or more, emissions limitations that constitute LAER, and emissions reductions to offset emissions increases that would otherwise occur. See Arizona Administrative Code (AAC) section R9-3-101 ("Definitions") and section R9-3-302 ("Installation permits for sources in nonattainment areas"); and Maricopa County Rule 21.0 ("Procedures for Obtaining an Installation Permit"). Also, because the SIP-approved NSR rules apply "in any nonattainment area for the pollutant(s) for which the source is classified as a major source," AAC R9-3-302(A), the requirements apply

throughout the Phoenix-Mesa 1997 8-hour ozone nonattainment area, except for Indian country and for sources subject to Pinal County jurisdiction, as discussed above.

Moreover, ADEQ's and MCAQD's SIP-approved NSR rules have served as a federally-enforceable constraint on the growth of stationary source emissions, and thus have supported the region's efforts to lower ambient ozone concentrations in the Phoenix-Mesa area. Those efforts have resulted in attainment of the standard since 2007 (see table 2, below) and thus we find that ADEQ's and MCAQD's SIP-approved NSR rules are likely to continue to support continued attainment of the standard during the maintenance phase after redesignation.

Therefore, given that a portion of the nonattainment area is subject to federal rules implementing the nonattainment NSR requirements (Indian country and the Pinal County portion of the nonattainment area) and given that the fundamental nonattainment NSR requirements are approved into the SIP for the other portions of the nonattainment area, we conclude that the State has met the applicable NSR requirements for the Phoenix-Mesa eight-hour ozone nonattainment area for the purposes of redesignation of the area for the 1997 eight-hour ozone standard.

c. Conformity Requirements

Under section 176(c) of the 1990 CAA Amendments, States are required to establish criteria and procedures to ensure that federally-supported or funded projects conform to the air quality planning goals in the applicable SIP. Section 176(c) further provides that state conformity provisions must be consistent with federal conformity regulations that the CAA required EPA to promulgate. EPA's conformity regulations are codified at 40 CFR Part 93, subparts A (referred to herein as transportation conformity) and B (referred herein as general conformity). Transportation conformity applies to transportation plans, program, and projects developed, funded, and approved under title 23 U.S.C. or the Federal Transit Act. General Conformity applies to all other federally-supported or funded projects. SIP revisions intended to address conformity requirements are referred to herein as conformity SIPs.

The State of Arizona has adopted general conformity procedures, approved by EPA on April 23, 1999 (65 FR 19916).²⁷ The State-adopted transportation conformity procedures, found at Arizona Revised Statutes (ARS), Title 18, Chapter 2, Article 14, have not yet been approved by EPA. EPA, however, believes it is reasonable to interpret the conformity SIP requirements as not

²⁷ In August 2005, Congress passed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which eliminated the requirement for States to adopt and submit conformity SIPs addressing general conformity requirements. See 75 FR 17254 (April 5, 2010) for conforming changes to EPA's general conformity regulations.

applying for the purposes of a redesignation request under section 107(d)(3)(E) because state conformity rules are still required after redesignation and federal conformity rules apply where state rules have not been approved.²⁸

C. The Area Must Show the Improvement in Air Quality is Due to Permanent and Enforceable Emission Reductions

Section 107(d)(E)(iii) precludes redesignation of a nonattainment area to attainment unless EPA determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from the implementation of the applicable SIP, applicable federal air pollution control regulations, and other permanent and enforceable regulations. Under this criterion, the State must be able to reasonably attribute the improvement in air quality to emissions reductions that are permanent and enforceable. Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions.

In our proposed (70 FR 13425, March 21, 2005) and final (70 FR 34362, June 14, 2005) redesignation rules for the Phoenix metropolitan 1-hour ozone nonattainment area, we described the

²⁸ See *Wall v. EPA*, 265 F.3d 426, 439 (6th Cir. 2001) upholding this interpretation.

numerous stationary source and mobile source control measures that were approved as part of the Arizona SIP and that, together with certain federal measures, had provided for attainment of the 1-hour ozone standard through permanent and enforceable emissions reductions. See, e.g., the table of VOC RACT rules on page 13433 of our proposed 1-hour ozone redesignation rule at 13425. Significant mobile source control measures that contributed to attainment and provide for maintenance of the 1-hour ozone standard included low volatility cleaner burning gasoline, the federal motor vehicle and nonroad control programs, and implementation of an enhanced vehicle emissions inspection (VEI) program. See 70 FR 13425 at page 13430.

The State of Arizona has relied on these same permanent and enforceable measures to attain the 1997 8-hour ozone standard but added an additional stationary source rule to the control strategy, Maricopa County rule 358 ("Polystyrene Foam Operations"), which EPA approved at 70 FR 30370 (May 26, 2005). In the approved Eight-Hour Ozone Attainment Plan, MAG quantified the emissions reduction from certain specific State and local measures, including VEI enhancements, local transportation improvements, summer gasoline formulation, and a rule governing polystyrene foam operation, as totaling 6.0 mtpd of VOC in 2008 (a 2.4 percent reduction compared to the 2002 base case) and 13.4 mtpd of NO_x (a 4.6 percent reduction compared to the 2002

base case). These reductions have contributed to the overall reduction in emissions that have provided for attainment of the 1997 8-hour ozone standard in the Phoenix-Mesa area.

The Eight-Hour Ozone Maintenance Plan relies on monitoring data (see figure 2-2 in the plan) showing a general downward trend in 8-hour ozone concentrations in the Phoenix-Mesa area from 2000 through 2008 despite increases of more than 15 percent in population, employment and vehicle travel, as evidence that the improvement in air quality can reasonably be attributed to the permanent and enforceable emissions reductions from the measures described above.

In addition, we reviewed temperature data for Phoenix over this time period to determine if unusual meteorological conditions could have played a significant role in attaining the 1997 8-hour ozone standard in the Phoenix-Mesa area. However, we did not observe any anomaly over this period relative to long-term averages.²⁹ The period from 2002 to 2008 did not show a trend in declining air temperatures that would suggest that the observed trend in ozone concentrations was a result of favorable meteorology. We do recognize that a significant economic slowdown occurred nationally starting in 2008, and that the Phoenix-Mesa area was affected, but we note that the downward

²⁹ See memorandum from Rynda Kay, Air Quality Analysis Office, Air Division, EPA Region IX, entitled "Meteorological Trend Analysis for Phoenix-Mesa Area," dated November 22, 2013, included in the docket for this rulemaking.

trend in ozone concentrations had already been established well before that time.³⁰

Based on the evidence discussed above, EPA finds that the improvement in air quality in the Phoenix-Mesa nonattainment area is the result of permanent and enforceable emission reductions from implementation of a combination of control measures. As such, we propose to find that the criterion for redesignation set forth at CAA section 107(d)(e)(E)(iii) is satisfied.

D. The Area Must Have a Fully Approved Maintenance Plan Under CAA Section 175A.

Section 175A of the CAA 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: attainment inventory, maintenance demonstration, monitoring network, verification of continued attainment, and contingency plan. See Calcagni memo, pages 8 through 13.

Under CAA section 175A, a maintenance plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after EPA approves a redesignation to attainment. Eight years after redesignation, the State must submit a revised maintenance plan that demonstrates continued attainment for the

³⁰ Id.

subsequent ten-year period following the initial ten-year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain such contingency provisions that EPA deems necessary to promptly correct any violation of the NAAQS that occurs after redesignation of the area. Based on our review and evaluation of the plan, as detailed below, we are proposing to approve the Eight-Hour Ozone Maintenance Plan because we believe that it meets the requirements of CAA section 175A.

1. Attainment Inventories and Projected Future Inventories

A maintenance plan for the 1997 8-hour ozone standard must include an inventory of emissions of ozone precursors (VOC and NO_x) in the area in order to identify a level of emissions that are sufficient to attain the 1997 8-hour ozone NAAQS. This inventory must be consistent with EPA's most recent guidance on emissions inventories for nonattainment areas available at the time of plan submittal 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 point sources, area sources, nonroad mobile sources, and on-road motor vehicle sources, and must be based on actual "ozone season data," i.e., summertime emissions.

MAG selected year 2005 as the year for the attainment inventory in the Eight-Hour Ozone Maintenance Plan. As shown in

table 2, the area attained the 1997 8-hour ozone standard at the end of 2007 based on monitoring data collected over the course of the previous three-year period (2005-2007) during which the calculated design value was less than the standard. The attainment inventory will generally be the actual inventory during the time period the area attained the standard, and year 2005 was one of the years from the three-year period for which the area first attained the standard. Thus, MAG's selection of 2005 for the attainment inventory is acceptable.

Table 2: Eight-Hour Ozone Design Values in the Phoenix-Mesa Nonattainment Area

Site	Agency	Design Value* (parts per million)					
		2005-07	2006-08	2007-09	2008-10	2009-11	2010-12
Apache Junction	PCAQCD	0.076	0.080	0.075	0.073	0.072	0.074
Blue Point	MCAQD	0.067	0.064	0.067	0.070	0.072	0.075
Buckeye	MCAQD	0.065	0.066	0.064	0.064	0.064	0.066
Cave Creek	MCAQD	0.079	0.078	0.075	0.074	0.075	0.077
Central Phoenix	MCAQD	0.075	0.074	0.070	0.071	0.071	0.074
Dysart	MCAQD	0.067	0.067	0.066	0.068	0.070	0.071
Falcon Field	MCAQD	0.076	0.075	0.071	0.070	0.068	0.069
Fountain Hills	MCAQD	0.082	0.079	0.074	0.074	0.073	0.076
Glendale	MCAQD	0.075	0.074	0.071	0.072	0.072	0.076
High School	SRPMIC	0.077**	0.076**	0.073	0.072	0.072	0.074
Humboldt Mountain	MCAQD	0.081	0.078	0.074	0.071	0.071	0.075
JLG Supersite	ADEQ	0.076	0.076	0.075	0.075	0.075	0.076
Lehi	SRPMIC	0.079**	0.074	0.074	0.073	0.072	0.073
North Phoenix	MCAQD	0.082	0.081	0.076	0.077	0.077	0.081

Pinnacle Peak	MCAQD	0.078	0.074	0.072	0.073	0.074	0.077
Red Mountain	SRPMIC	0.083	0.080	0.076	0.076	0.076	0.077
Rio Verde	MCAQD	0.083	0.080	0.075	0.072	0.073	0.074
Senior Center	SRPMIC	0.076	0.075	0.072	0.072	0.072	0.074
South Phoenix	MCAQD	0.072	0.072	0.071	0.072	0.072	0.076
South Scottsdale	MCAQD	0.078	0.077	0.075	0.074	0.074	0.077
Tempe	MCAQD	0.077	0.077	0.073	0.071	0.068	0.070
West Chandler	MCAQD	0.076	0.076	0.073	0.073	0.072	0.074
West Phoenix	MCAQD	0.074	0.078	0.073	0.073	0.073	0.078

* The design value is the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration.

** Design values do not meet the completeness requirements of 40 CFR part 50, appendix I.

The attainment year emission inventory for 2005 in the Eight-Hour Ozone Maintenance Plan is generally consistent with the 2005 Periodic Emission Inventory (PEI) emissions estimates for Maricopa County and the Phoenix-Mesa nonattainment area. The PEI was calculated in terms of annual emissions and ozone season-day emissions.

Emissions from point sources were estimated from each identified facility through permit system databases and annual emissions reports submitted to the facility's permitting authority. Emissions from area sources were estimated by source category using information from permit databases and previous SIP inventories. MAG estimated nonroad mobile source emissions using EPA's NONROAD2005 model, and estimated on-road motor vehicle source emissions using EPA's MOBILE6.2 model. On-road

vehicle emissions estimates reflect estimates of vehicle miles traveled (VMT) using data from U.S. Department of Transportation's 2005 Highway Performance and Monitoring System. Biogenic emissions of NO_x and VOC were calculated using the Model of Emissions of Gases and Aerosols from Nature (MEGAN) with input including emissions rates developed from measurements made of the dominant plant species in Maricopa County, locations and biomass densities of the dominant plant species, and surface temperature data. See 2005 Periodic Emissions Inventory for ozone precursors in volume 1 of the appendices to the Eight-Hour Ozone Maintenance Plan.

For the Eight-Hour Ozone Maintenance Plan, MAG adjusted and supplemented the 2005 PEI ozone precursor emissions estimates developed using the methods described above to develop emissions estimates for an area referred to as the inner modeling domain ("modeling domain"), a rectangular area encompassing all of the nonattainment area and largely defined by the boundaries of the irregularly-shaped nonattainment area. See figure II-1 of MAG's technical support document (TSD) for the Eight-Hour Ozone Maintenance Plan for an illustration of the modeling domain. The modeling domain defines the area for which MAG modeled ozone concentrations.

MAG developed modeling-domain emissions estimates for 2005 for the June, July, and August episodes that were modeled for

the approved Eight-Hour Ozone Attainment Plan. See table 3 below for a summary of modeling domain emissions estimates by source category for year 2005 for the June modeling episode. The 2005 attainment year inventory includes credit for committed control measures that were in place during the summer of 2005. See table 3-5 of the Eight-Hour Ozone Maintenance Plan.

Table 3: 2005 and Projected 2019 and 2025 VOC and NO_x Emissions for the Phoenix-Mesa Modeling Domain for June Ozone Episode (metric tons per day)^a

Source Category	NO_x			VOC		
	2005	2019	2025	2005	2019	2025
Point	10.9	58.6	59.1	11.1	16.7	18.7
Area	19.6	27.7	31.1	79.2	111.4	124.8
Nonroad Mobile	77.7	43.9	37.9	40.3	48.7	31.8
On-road Motor Vehicles	154.3	125.8	109.8	72.1	30.9	47.9
Biogenics	8.6	8.6	8.6	451.3	451.3	451.3
Total	271.1	264.4	246.4	653.9	659.0	674.4

^a Emissions reflect a specific day of the week (Thursday) during the June ozone episode.

Sources: Eight-Hour Ozone Maintenance Plan at tables 3-6 and 3-7; table 1 of the Maintenance Plan Supplement.

As shown in table 3, in the 2005 attainment year inventory for the modeling domain, biogenic sources contributed approximately 70 percent to total VOC emissions. In contrast, on-road motor vehicles dominated the total NO_x emissions and accounted for 60 percent of total NO_x.

In addition to 2005 values, table 3 above also summarizes MAG's VOC and NO_x emissions estimates for an interim year (2019) and the maintenance plan's horizon year (2025). The projected emission inventories for 2019 and 2025 were based on the use of

growth factors, on-going emissions control programs, and retirement rates for obsolete sources. The Eight-Hour Ozone Maintenance Plan includes MAG's 2025 emissions estimates and related documentation, while MAG's 2019 interim-year emissions estimates and documentation are found in a separate MAG document, entitled "Analysis of the Interim Year 2019 as a Supplement to the 2009 MAG Eight-Hour Ozone Redesignation Request and Maintenance Plan for the Maricopa Nonattainment Area," dated June 17, 2013 ("Maintenance Plan Supplement").

MAG used growth factors to project emissions in 2019 and 2025 for point and area sources based on population and employment projections approved by the MAG Regional Council in May 2007. MAG included population and employment growth projections for 2016 and 2021 in the Maintenance Plan Supplement and projected emissions for 2019 from interpolation of the projected emissions for 2016 and 2021. MAG used a compound annual growth rate for population of 2.6 percent between 2005 and 2016. The actual compound annual growth rate between 2005 and 2011, based on the 2005 Special Census for Maricopa County and the 2010 Census, was 0.8 percent. Because the population of Maricopa County grew more slowly than projected, MAG expects the emission inventories related to the socioeconomic projections for the interim and horizon years to be conservatively overestimated.

MAG used different growth factors for different source types within each source category (e.g., specific stationary point sources excluding power plants, specific categories of area sources such as dry cleaners). For nonroad mobile sources, MAG derived growth factors from the EPA NONROAD2005 model defaults for Maricopa County. The growth factors are listed in Appendix IV-vii to Appendix A, Exhibit 2 of the Eight-Hour Ozone Maintenance Plan and generally range from 1 to 1.8. For power plants, MAG estimated future emissions based on the facility's potential to emit (PTE), i.e., the maximum levels allowed under existing permits. MAG estimated on-road motor vehicle emissions based on the same population and employment projections used to estimate point and area sources, but increased on-road source emissions of VOC and NO_x by 10 percent to provide safety margins for the motor vehicle emission budgets for transportation conformity.

For biogenic emissions, the 2005 inventory was held constant for 2019 and 2025. In the approved Eight-Hour Ozone Attainment Plan, MAG similarly held biogenic emissions constant, compared to the 2002 base year inventory, when demonstrating attainment with the standard by 2008 (see tables 5-3 and 5-4 in the Eight-Hour Ozone Attainment Plan). In additional information provided to EPA during our review of the Eight-Hour Ozone Attainment Plan, MAG explained that no projected land use or

land cover data was available for the 2008 attainment year, therefore biogenic emissions in the ozone modeling domain were held constant. As discussed in greater detail in our proposed rulemaking to approve the Eight-Hour Ozone Attainment Plan, MAG expected that the trend of increasing urbanization in the Phoenix-Mesa nonattainment area would be expected to decrease biogenic VOC emissions in Maricopa County. Because MAG did not have 2008 land use data available, it determined that maintaining constant biogenic emissions of the ozone precursors would be more conservative than attempting to estimate the anticipated decrease in biogenic VOC emissions. See 77 FR 21690 at 21694 (April 11, 2012). This rationale similarly applies to the use of a constant biogenic emissions value for each ozone episode in the Eight-Hour Ozone Maintenance Plan.

The Eight-Hour Ozone Maintenance Plan builds upon the control strategy developed for attainment and maintenance of the 1-hour ozone standard and the control strategy developed for attainment of the 1997 8-hour ozone standard. The plan specifically cites and quantifies the emissions reductions from seven control measures for maintenance demonstration purposes in the Phoenix-Mesa area through year 2025. These measures include one federal control measure, a measure referred to as "Federal Nonroad Equipment Emission Standards," and six State or local control measures. All of these measures have been approved into

the Arizona SIP, or, in the case of the federal nonroad equipment emission standards, have been promulgated by EPA as regulations published in the CFR:

- Summer fuel reformulation, approved as part of Arizona's cleaner burning gasoline regulations at 69 FR 10161 (March 4, 2004);
- Phased-In emission test cutpoints and one-time waiver from vehicle emissions test, approved as part of the Arizona vehicle emissions inspection and maintenance program at 69 FR 2912 (January 22, 2003);
- Tougher enforcement of vehicle registration and emission test compliance, as set forth in ARS 49-552 ("Enforcement on city, town, county, school district or special district property"), approved at 70 FR 11553 (March 9, 2005); and 49-541.01 (paragraphs D and E)³¹ ("Vehicle emissions inspection program; constant four wheel drive vehicles; requirements; location; violation; classification; penalties; new program termination"), approved at 70 FR 11553 (March 9, 2005);
- Federal (tier 4) nonroad equipment emissions standards, promulgated in 40 CFR part 1039 at 69 FR 38958 (June 29, 2004);

³¹ These provisions are now codified in ARS 49-550 ("Violation; Classification; Civil Penalty").

- Expansion of Area A boundaries, as set forth in ARS 49-541 (“Definitions”), approved at 78 FR 30209 (May 22, 2013); and
- Ban open burning during the ozone season, as set forth in ARS 49-501 (“Unlawful open burning; exceptions; fine; definition”), approved in a final rule signed by the EPA Region IX Regional Administrator on December 16, 2013 (not yet published in the Federal Register).

Table 4 shows the projected emission reductions developed by MAG from the seven maintenance measures during the June ozone episode. Of the seven maintenance measures in the Phoenix-Mesa Maintenance Plan, the federal nonroad equipment emission standards represents the largest reduction in VOC and NO_x emissions from an individual maintenance measure.

Table 4: 2025 Emission Reductions from Individual Maintenance Measures in the Phoenix-Mesa 8-Hour Ozone Modeling Domain

Maintenance Measure	VOC		NO _x	
	Reduction (metric tons per day)	Percent Reduction in Anthropogenic Emissions	Reduction (metric tons per day)	Percent Reduction in Anthropogenic Emissions
Summer Fuel Reformulation	1.3	0.5	0.4 (increase)	0.1 (increase)
Phased-In Emission Test Cutpoints	< 0.1	< 0.1	< 0.1	< 0.1
One-Time Waiver from Vehicle Emissions Test	0.2	< 0.1	0.3	0.1
Tougher Enforcement of Vehicle Registration and Emission Test Compliance	0.2	< 0.1	0.4	0.1
Federal Nonroad Equipment Emission Standards	19.3	7.9	47.2	16.5
Expansion of Area A Boundary	0.2	< 0.1	0.4	0.1

Ban Open Burning During Ozone Season	< 0.1	< 0.1	< 0.1	< 0.1
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Source: Eight-Hour Ozone Maintenance Plan, table 3-2.

As shown in table 3, NO_x emissions from point sources is projected to increase dramatically between 2005 and the interim and horizon years of 2019 and 2025, primarily due to MAG's conservative assumption that power plants in the future would operate at their PTE. Emissions of NO_x from area sources are also estimated to be higher in the interim and horizon years. MAG projected that emissions from nonroad sources would decrease due to the implementation of federal emission standards for nonroad equipment (see Table 4). Emissions of NO_x from on-road motor vehicles are also projected to decrease notwithstanding the 10% increase added to the 2025 motor vehicle emissions estimates (to provide for a safety margin for transportation conformity purposes), due to the continuing benefit of the federal motor vehicle control program and the turnover of older model cars to newer models designed to meet more stringent EPA emissions standards. Overall, between 2005 and 2025, MAG projected total emissions of NO_x to decrease by nearly 25 mtpd for the June ozone episode.

As shown in table 3, MAG projected that VOC emissions from point and area sources will increase over the 2005 to 2025 time frame. Emissions from VOC from nonroad and on-road mobile sources are projected to decrease between 2005 and 2025,

notwithstanding the 10% safety margin added to 2025 motor vehicle emissions estimates for the same reasons given above for NO_x. Emissions of biogenic VOC are projected to remain constant, as discussed above. Overall, MAG projected total emissions of VOC in 2025 to increase by approximately 20 mtpd for the June ozone episode as compared to 2005.

Based on our review of the emission inventories (and related documentation) from the Eight-Hour Ozone Maintenance Plan, we find that the inventory for 2005 is comprehensive, that the methods and assumptions used by MAG to develop the 2005 emission inventory are reasonable, and that the inventory reasonably estimates actual ozone season emissions in an attainment year. Moreover, we find that the 2005 emission inventory reflects the latest planning assumptions and emission models available at the time the plan was developed, and provide a comprehensive and reasonably accurate basis upon which to forecast ozone precursor emissions for years 2019 and 2025.

2. Maintenance Demonstration

CAA section 175A(a) requires that the maintenance plan "provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation." Generally, a state may demonstrate maintenance of the 1997 ozone standard by either showing that future emissions will not exceed the level

of the attainment year inventory or by modeling to show that the future mix of sources and emissions rates will not cause a violation of the NAAQS. For areas that are required under the Act to submit modeled attainment demonstrations, the maintenance demonstration should generally use the same type of modeling as used for the attainment demonstration. See Calcagni memo, page 9.

On June 13, 2012 (77 FR 35286), EPA published a final approval of the Eight-Hour Ozone Attainment Plan, which demonstrated attainment of the 1997 8-hour ozone NAAQS in the Phoenix-Mesa nonattainment area by June 15, 2009. Consistent with EPA's "Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for the 8-Hour Ozone and PM_{2.5} NAAQS and Regional Haze" ("EPA Modeling Guidance"), the Eight-Hour Ozone Attainment Plan included the following components: a conceptual description of the area's nonattainment problem, a modeling protocol, model selection and set-up, selection and evaluation of ozone episodes to model, meteorological and emissions input data preparation, model performance evaluations for the photochemical and meteorological models, the modeled attainment test, and a weight of evidence evaluation. See Eight-Hour Ozone Attainment Plan, chapter 3 and appendix A, exhibit 2. EPA evaluated these components and found

that they provided an adequate basis for the attainment demonstration. See 77 FR 21690, at 21697-21699.

For the modeled 10-year maintenance test, MAG selected the same photochemical and meteorological-input models and set-up and the same high-ozone episodes to model as evaluated in the Eight-Hour Ozone Attainment Plan. As such, we are not reassessing the modeling protocol, choice of ozone episodes, and model performance. Here, the model was used to predict the effect of changes in emissions due to land use changes, growth, and the effect of control measures from a baseline emission year of 2005 to maintenance years 2019 and 2025.³² The resulting concentrations were used to evaluate the impact of emission changes during the high-ozone episode-specific meteorological conditions. See Eight-Hour Ozone Maintenance Plan (chapter 3 and appendix A, exhibit 2) and the Maintenance Plan Supplement.

Under EPA Modeling Guidance, the model is used to develop relative response factors (RRFs) that give the model's response to emission changes, and the RRFs are applied to monitored design value concentrations to arrive at the predicted future concentrations. The particulars of the calculation, and which model grid cells and modeled days are to be included, are specified in the EPA Guidance. See EPA Modeling Guidance, pages

³² We evaluate the emissions inventory for the baseline and maintenance years in section V.D.1., above.

15, 25, and 155. MAG assessed the 2019 and 2025 effects and found the maximum predicted ozone design value to be 0.081 parts per million (ppm) in 2019 and 0.081 ppm in 2025. All values equal to or less than 0.084 ppm meet the 1997 8-hour ozone NAAQS, and thus, the modeling results predict continued maintenance of the 1997 8-hour ozone NAAQS in the Phoenix-Mesa area for at least ten years beyond redesignation (assuming redesignation of the area before 2016).

In addition to a modeled maintenance demonstration, which focuses on locations with an air quality monitor, EPA generally requires an unmonitored area analysis. This analysis is intended to ensure that a control strategy leads to maintenance of the NAAQS in other locations that have no monitor but that might have base year (and/or future year) ambient ozone levels exceeding the NAAQS. The unmonitored area analysis uses a combination of model output and ambient data to identify areas that might exceed the NAAQS if monitors were located there. In order to examine unmonitored areas in all portions of the modeling domain, EPA recommends use of interpolated spatial fields of ambient data combined with gridded modeled outputs. See EPA Modeling Guidance, page 29. MAG used the EPA developed Modeled Attainment Test Software (MATS) Version 2.0.1 to conduct this analysis. The maximum design values from this analysis were

0.083 ppm in 2019 and 0.083 ppm in 2025, i.e., in attainment of the 1997 8-hour ozone NAAQS. See Maintenance Plan Supplement.

Based on our prior approval of MAG's photochemical modeling approach for 8-hour ozone attainment demonstration purposes and because we find MAG's application of the same basic approach to the 8-hour ozone maintenance demonstration to be reasonable, we accept the results of MAG's modeling as a sufficient demonstration that the plan provides for maintenance of the 1997 8-hour ozone NAAQS in the Phoenix-Mesa area through the first ten years after redesignation to attainment. Therefore, we propose to find that the Eight-Hour Ozone Maintenance Plan meets the maintenance demonstration requirements under CAA section 175A(a).

3. Monitoring Network

Continued ambient monitoring of an area is generally required over the maintenance period. As discussed in section V.A. of this document, ozone is currently monitored by ADEQ, MCAQD, and PCAQCD at a total of 20 sites within the Phoenix-Mesa 1997 8-hour ozone nonattainment area. ADEQ and MCAQD monitors represent 19 of the 20 sites.

The Eight-Hour Ozone Maintenance Plan (see page 3-21 of the plan) indicates that ADEQ and MCAQD will continue to operate an appropriate air quality monitoring network in accordance with 40 CFR part 58 to verify continued attainment of the 1997 8-hour

ozone NAAQS. Further, if there is significant change to parameters such as population, vehicle miles of travel, or significant sources, ADEQ and MCAQD will undertake studies to determine if it is appropriate to re-site monitors or add additional monitors to the network. Lastly, the Eight-Hour Ozone Maintenance Plan takes note of the annual review by EPA of State and local ambient monitoring network plans under 40 CFR part 58 as providing a continuing means for ensuring the adequacy of the ozone monitoring network in the Phoenix-Mesa area.

We note that PCAQCD is not cited in the subsection on an approved monitoring network and verification of continued attainment in the Eight-Hour Maintenance Plan, but find the failure to include PCAQCD in the plan's discussion of continued monitoring and verification of continued attainment to be harmless error because the applicable monitoring requirements in 40 CFR part 58 will continue to apply to PCAQCD's ozone monitor regardless of our approval of the maintenance plan and redesignation request and because the overall ozone monitoring network operated by ADEQ and MCAQD alone (i.e., 19 of 20 NAMS and SLAMS stations) is sufficient to meet ozone monitoring requirements in the Phoenix-Mesa area. Therefore, for the reasons given above, EPA finds that the Eight-Hour Maintenance Plan adequately provides for continued ambient ozone monitoring in the Phoenix-Mesa area.

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 to maintain the NAAQS. Previously, in taking action to approve the various measures that the State is relying on for attainment and maintenance of the 1997 8-hour ozone NAAQS, such as the cleaner burning gasoline regulations and the vehicle emissions inspection (VEI) program, we determined that the State has the necessary legal authority to implement and enforce the measures and find no sunset clauses that would be triggered for these control measures upon redesignation to attainment. We are, however, aware of Arizona Revised Statutes (ARS) section 41-3017.01 which provides for the termination of the VEI on January 1, 2017, but recognize that the Arizona Legislature has at various intervals in the past extended the termination date for the VEI program and expect it to do so again before 2017. We also find that the applicable State, regional, and county agencies, such as ADEQ, the Arizona Department of Weights and Measures, Arizona Department of Transportation (DOT), MAG, Maricopa County, Pinal County, and local cities and towns, have the necessary authority to adopt, implement, and enforce any emission control contingency measures determined to be necessary to correct ozone NAAQS violations.

To verify continued attainment, in addition to continuing to operate an ozone monitoring network that meets EPA ambient air quality surveillance requirements, MCAQD will continue to update the emissions inventory for ozone precursors in the Phoenix-Mesa area every three years with input and assistance from ADEQ, Arizona DOT, and MAG. These emissions inventory updates will provide a means with which to track emissions relative to those projected in the maintenance plan, and thereby verify the continued attainment of the NAAQS.

Lastly, the transportation conformity process, which requires a comparison of on-road motor vehicle emissions that would occur under new or amended transportation plans and programs with the motor vehicle emissions budgets in the Eight-Hour Ozone Maintenance Plan, represents another means by which to verify continued attainment of the 1997 8-hour ozone NAAQS in the Phoenix-Mesa area, given the importance of motor vehicle emissions to the overall emissions inventories of ozone precursors. See pages 3-14 and 3-15 of the Eight-Hour Ozone Maintenance Plan. These methods are sufficient for the purpose of verifying continued attainment.

5. Contingency Provisions

Section 175A(d) of the Act requires that maintenance plans include contingency provisions, as EPA deems necessary, to promptly correct any violations of the NAAQS that occur after

redesignation of the area. Such provisions must include a requirement that the State will implement all measures (with respect to the control of the air pollutant concerned) that were contained in the SIP for the area before redesignation of the area as an attainment area.

Under section 175A(d), contingency measures identified in the contingency plan do not have to be fully adopted at the time of redesignation. However, the contingency plan is considered to be 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. As a necessary part of the plan, the State should also identify specific indicators or triggers that will be used to determine when the contingency measures need to be implemented.

As required by section 175A of the CAA, MAG adopted a contingency plan to address possible future ozone air quality problems. See page 3-21 of the Eight-Hour Ozone Maintenance Plan. The plan includes both specific contingency measures that have already been adopted and are being implemented early³³ and a

³³ MAG followed the August 13, 1993 EPA guidance memorandum entitled "Early Implementation of Contingency Measures for Ozone and Carbon Monoxide (CO) Nonattainment Areas."

mechanism to trigger the adoption of additional measures as needed. The specific contingency measures, which are described in more detail in section IV-7-2 of MAG's TSD for the Eight-Hour Ozone Maintenance Plan (appendix A, exhibit 2 of the plan), are:

- Gross Polluter Option for I/M Program Waivers;
- Increased Waiver Repair Limit Options;
- Federal Heavy Duty Diesel Vehicle Emissions Standards;
- Coordinate Traffic Signal Systems;
- Develop Intelligent Transportation Systems; and
- Liquid Leaker Test as Part of Vehicle Emissions Inspection Program.

Two of the measures, "coordinate traffic signal systems" and "develop intelligent transportation systems," are control measures that the Eight-Hour Ozone Attainment Plan had relied upon to demonstrate attainment of the standard. As noted above, CAA section 175A(d) requires contingency plans to include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned that were contained in the SIP for the area before redesignation of the area as an attainment area, i.e., if triggered under the terms of the contingency plan. In the case of these two specific contingency measures, we do not believe that the contingency plan must include a specific requirement to resume their

implementation, i.e., if triggered, because the measures themselves continue to be implemented by the relevant agencies. The Eight-Hour Ozone Maintenance Plan simply does not rely on emissions reductions from them to demonstrate maintenance through 2025. The emissions reductions from the other contingency measures listed above are also not included in the projected emissions inventory, and no emission reduction credit was taken for these measures in the modeling for the maintenance demonstration. As noted in the maintenance plan, implementation of these measures should provide additional assurance that the 1997 ozone standard will be maintained through 2025.

In addition to the previously implemented contingency measures listed above, the plan includes a commitment to examine ambient air quality data to determine if additional contingency measures are needed. If the three-year average of the annual fourth highest daily 8-hour ozone concentration exceeds 84 parts per billion at any ozone monitor, additional control measures will be considered. The plan requires that (1) the monitoring data will be verified within three months after the activation of the trigger; (2) control measures will be considered for adoption six months after the date established in (1); and (3) the resultant committed measures will be implemented within six to twelve months, depending on the time needed to put the measures in place.

Upon our review of the plan, as summarized above, we find that the contingency provisions of the Eight-Hour Ozone Maintenance Plan identify specific contingency measures, contain tracking and triggering mechanisms to determine when contingency measures are needed, and contain specific timelines for action. Accordingly, we conclude that the contingency provisions of the Eight-Hour Ozone Maintenance Plan are adequate to ensure prompt correction of a violation and therefore comply with section 175A(d) of the Act.

6. Subsequent Maintenance Plan Revisions

CAA section 175A(b) provides that States shall submit a SIP revision eight years after redesignation that provides for maintaining the NAAQS for an additional ten years. The Eight-Hour Ozone Maintenance Plan includes MAG's commitment to prepare the revised maintenance plan eight years after redesignation to attainment. See page 3-22 of the Eight-Hour Ozone Maintenance Plan.

7. 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 national ambient air quality standards or any interim milestones.

Maintenance plan submittals must specify the emissions of transportation-related VOC and NO_x emissions allowed in the last year of the maintenance period, i.e., the motor vehicle emissions budgets (MVEBs or budgets). 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 submittal must also 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) providing public notification 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 based on our initial review of the submitted SIP. The process for determining the adequacy of a submitted MVEB is codified at 40 CFR 93.118.

The availability of the SIP submission with MVEBs was announced for public comment on EPA's Adequacy Web site on April 27, 2009 at:

<http://www.epa.gov/otaq/stateresources/tansconf/currsips.htm>,

which provided a 30-day public comment period. The comment period for this notification ended on May 28, 2009, and EPA received no comments from the public. Note, however, that a second mechanism is also provided for EPA review and public comment on MVEBs, as described in 40 CFR 93.118(f)(2). This mechanism provides for EPA's review of the adequacy of an implementation plan MVEB simultaneously with its review and approval or disapproval of the submitted plan itself. In this instance, EPA used the web notification discussed above to solicit public comments on the adequacy of the Phoenix-Mesa MVEBs in the Eight-Hour Ozone Maintenance Plan, but is taking comment on the approvability of the submitted MVEBs through this proposed rule. Any and all comments on the approvability of the Eight-Hour Ozone Maintenance Plan MVEBs should be submitted

during the comment period stated in the **DATES** section of this document.

The Eight-Hour Ozone Maintenance Plan contains new VOC and NO_x MVEBs for the Phoenix-Mesa area for 2025.³⁴ MAG developed the budgets for the 2025 maintenance year by using geographic information systems (GIS) to separate the on-road motor vehicle emissions in the Phoenix-Mesa air quality planning area from the larger ozone modeling domain, resulting in MVEBs of 43.8 metric tons per day (mtpd) of VOC and 101.8 mtpd of NO_x. The MVEBs include a 10% safety margin³⁵ and correspond to the peak episode day (Thursday) in June 2025 that was used to model maintenance of the 1997 8-hour ozone NAAQS in the Phoenix-Mesa area in the Eight-Hour Ozone Maintenance Plan.

To estimate motor vehicle emissions for the Eight-Hour Ozone Maintenance Plan and related MVEBs, MAG used the version of EPA's motor vehicle emissions factor model (MOBILE6.2) that was current at the time the emissions estimates were prepared. The calculated emission factors were multiplied by the estimates

³⁴ The derivation of the MVEBs is discussed in MAG's emissions inventory, which was included in the Eight-Hour Ozone Maintenance Plan submittal as Appendix A, Exhibit 1 (pages 99-110), and in Section IV-2 of MAG's TSD, which was included in the Eight-Hour Ozone Maintenance Plan submittal as Appendix A, Exhibit 2. Additional discussion of the on-road emissions budgets is included in Section IV-9 of the TSD.

³⁵ MAG increased the 2025 VOC and NO_x emissions from on-road motor vehicle sources in the eight-hour ozone modeling domain in order to address the "inherent uncertainties associated with the use of the latest planning assumptions in conformity analyses." MAG distributed the increase spatially "based on the proportion of onroad mobile emissions assigned to each four kilometer grid cell." See page 3-20 of the Eight-Hour Ozone Maintenance Plan.

of vehicle miles of travel (VMT) to generate emission estimates for on-road motor vehicle sources. The projected emissions inventory and related MVEBs take into account expected growth in VMT and reductions from the maintenance measures, but do not include reductions from implementation of the contingency measures.

The MVEBs are consistent with the 2025 on-road motor vehicle source VOC and NO_x emissions included in the Eight-Hour Ozone Maintenance Plan's 2025 emission inventory, as summarized above in table 3, above. The conformity rule (40 CFR 93.124(a)) allows for a safety margin, and even with the 10 percent safety margin added to the on-road emissions, the overall emissions in the Phoenix-Mesa area are consistent with continued maintenance of the 1997 ozone standard.

EPA is proposing to approve the MVEBs for 2025 as part of our approval of the Eight-Hour Ozone Maintenance Plan for the Phoenix-Mesa area. We have determined that the MVEB emission targets are consistent with emission control measures in the SIP and that the Phoenix-Mesa area can maintain the 1997 8-hour ozone NAAQS for ten years beyond redesignation. The details of EPA's evaluation of the MVEBs for compliance with the budget

adequacy criteria of 40 CFR 93.118(e) are provided in a separate memorandum included in the docket of this rulemaking.³⁶

If we finalize this action as proposed, we will make the adequacy finding for the 2025 MVEBs in the final rule in which we approve the Eight-Hour Ozone Maintenance Plan. Pursuant to 40 CFR 93.118(f)(2)(iii), our adequacy finding will be effective upon publication of the final rule in the Federal Register. Once found adequate, MAG and the U.S. Department of Transportation must use these new budgets for 2025 in conformity analyses with applicable horizon years after 2024. The 2008 MVEBs established in MAG's Eight-Hour Ozone Attainment Plan, which EPA previously approved (77 FR 35285), also remain in effect. On-road motor vehicle emissions in any required analysis years up to and including 2024 cannot exceed levels established by those previously-approved MVEBs.

VI. Proposed Action and Request for Public Comment

Under CAA section 110(k)(3), and for the reasons set forth above, EPA is proposing to approve ADEQ's submittal dated March 23, 2009 of the *MAG Eight-Hour Ozone Redesignation Request and Maintenance Plan for the Maricopa Nonattainment Area* (February 2009) ("Eight-Hour Ozone Maintenance Plan") as a revision to the Arizona state implementation plan (SIP). In connection with the

³⁶ See EPA memorandum dated October 31, 2013 entitled "Adequacy Documentation for Motor Vehicle Emission Budgets in the February 2009 Ozone Maintenance State Implementation Plan for the Phoenix-Mesa Nonattainment Area."

Eight-Hour Ozone Maintenance Plan, EPA finds that the maintenance demonstration showing how the area will continue to attain the 1997 8-hour ozone NAAQS for 10 years beyond redesignation and the contingency provisions describing the actions that the relevant State, regional, and local agencies 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. EPA is also proposing to approve the motor vehicle emissions budgets in the Eight-Hour Ozone Maintenance Plan because we find they meet the applicable transportation conformity requirements under 40 CFR 93.118(e). The motor vehicle emissions budgets, 43.8 mtpd of VOC and 101.8 mtpd of NO_x, include a 10% safety margin and correspond to the peak episode day (Thursday) during the June 2025 ozone episode that was used to model maintenance of the 1997 8-hour ozone NAAQS in the Phoenix-Mesa area in the Eight-Hour Ozone Maintenance Plan.

Second, under CAA section 107(d)(3)(D), we are proposing to approve ADEQ's request, which accompanied the submitted of the maintenance plan, to redesignate the Phoenix-Mesa 8-hour ozone nonattainment area to attainment for the 1997 8-hour ozone NAAQS. We are doing so based on our conclusion that the area has met the five criteria for redesignation under CAA section 107(d)(3)(E). Our conclusion in this regard is in turn based on

our proposed determination that the area has attained the 1997 8-hour ozone NAAQS, that relevant portions of the Arizona SIP are fully approved, that the improvement in air quality is due to permanent and enforceable reductions in emissions, that Arizona has met all requirements applicable to the Phoenix-Mesa 8-hour ozone nonattainment area with respect to section 110 and part D of the CAA, and based on our proposed approval as part of this action of the Eight-Hour Ozone Maintenance Plan.

EPA is soliciting public comments on the issues discussed in this document or on other relevant matters. We will accept comments from the public on this proposal for the next 30 days. We will consider these comments before taking final action.

VII. 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 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.*);
- 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 (Pub. L. 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 CAA; and
- Do not provide 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, this proposed rule does not have Tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on Tribal governments or preempt Tribal law. Nonetheless, EPA has discussed the proposed action with the three Tribes, the Fort McDowell Yavapai Nation, the Salt River-Pima Maricopa Indian Community, and the Tohono O'odham Nation located within the Phoenix-Mesa 8-hour ozone nonattainment area.

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

40 CFR Part 81

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

Dated: March 14, 2014.

Jared Blumenfeld,
Regional Administrator,
Region IX.

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