ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[AZ092–002; FRL–6575–3]

Approval and Promulgation of Implementation Plans; Arizona—Maricopa County PM–10 Nonattainment Area; Serious Area Plan for Attainment of the Annual PM–10 Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to approve provisions of the Revised MAG 1999 Serious Area Particulate Plan for PM–10 for the Maricopa County (Phoenix) Nonattainment Area, February 2000, and the control measures on which it relies, that address the annual PM–10 national ambient air quality standard. We also propose to grant Arizona's request to extend the Clean Air Act deadline for attaining the annual PM–10 standard in the Phoenix area from 2001 to 2006. Finally, we propose to approve two particulate matter rules adopted by the Maricopa County Environmental Services Department and Maricopa County's Residential Woodburning Restrictions Ordinance.

DATES: Comments on this proposal must be received in writing by June 12, 2000. Comments should be addressed to the contact listed below.

ADDRESSES: Comments may be mailed to: Frances Wicher, Office of Air Planning (AIR–2), EPA Region 9, 75 Hawthorne Street, San Francisco, CA 94105–3901.

A copy of docket No. AZ–MA–00–001, containing the technical support document (TSD) and other material relevant to EPA's proposed action, is available for public inspection at EPA's Region 9 office during normal business hours.

A copy of the docket is also available for inspection at: Arizona Department of Environmental Quality, Library, 3033 N. Central Avenue, Phoenix, Arizona 85012, (602) 207–2217. Maricopa Association of Governments, 302 North 1st Street, Phoenix, Arizona 85003, (602) 254–6300.

Electronic Availability

This document and the Technical Support Document (TSD) are also available as electronic files on EPA's Region 9 Web Page at http://www.epa.gov/region09/air.

FOR FURTHER INFORMATION CONTACT: Frances Wicher, Office of Air Planning (AIR–2), U.S. Environmental Protection Agency, Region 9, 75 Hawthorne Street, San Francisco, California 94105, (415) 744–1238, email: wicher.frances@epa.gov.

SUPPLEMENTARY INFORMATION:

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Summary of Today's Proposals

We are proposing to approve the serious area air quality plan for attainment of the annual PM–10 standard in the Phoenix, Arizona, metropolitan area.[1] Our proposed actions are based on our initial determination that this plan complies with the Clean Air Act's requirements for attainment of the annual PM–10 standard in serious PM–10 nonattainment areas.

Specifically, we propose to approve the following elements of the plan as they apply to the annual PM–10 standard:

- the base year emissions inventory of PM–10 sources,
- the demonstration that the plan provides for implementation of reasonably available control measures (RACM) and best available control measures (BACM),
- the demonstration that attainment of the PM–10 annual standard by the Clean Air Act deadline of December 31, 2001 is impracticable,
- the demonstration that attainment of the PM–10 annual standard will occur by the most expeditious alternative date practicable, in this case, December 31, 2006,

[1] There are two separate national ambient air quality standards (NAAQS) for PM–10, an annual standard of 50 μg/m^3 and a 24-hour standard of 150 μg/m^3.

• the demonstration that the plan provides for reasonable further progress and quantitative milestones,
• the demonstration that the plan includes to our satisfaction the most stringent measures found in the implementation plan of another state or are achieved in practice in another state, and can feasibly be implemented in the area.
• the demonstration that major sources of PM–10 precursors such as nitrogen oxides and sulfur dioxide do not contribute significantly to violations of the annual PM–10 standard, and
• the transportation conformity budget.

We are also proposing to grant Arizona's request to extend the attainment date for the annual PM–10 standard from December 31, 2001 to December 31, 2006.

Finally, we are proposing to approve Maricopa County's fugitive dust rules, Rules 310 and 301.01, and its residential woodburning restriction ordinance.

This preamble describes our proposed actions on the Phoenix area plan and provides a summary of our evaluation of the plan. Our detailed evaluation of the plan can be found in the technical support document (''EPA TSD'') that accompanies this proposal. A copy of the EPA TSD can be downloaded from our website or obtained by calling or writing the contact person listed above.

Summary of the MAG Plan

We are evaluating and proposing action on the Revised Maricopa Association of Governments 1999 Serious Area Particulate Plan for PM–10 for the Maricopa County Nonattainment Area, February 2000 (''MAG plan''). This plan was developed by the Maricopa Association of Governments (MAG), the lead air quality planning agency in Maricopa County, with the assistance of the Maricopa County Environmental Services Department (MCESD), the Arizona Department of Environmental Quality (ADEQ), and the cities and towns in the Maricopa County nonattainment area. ADEQ submitted the final plan as a revision to the Arizona State Implementation Plan (SIP) on February 16, 2000.

We are also evaluating and proposing action on the December 11, 1997 submittal of Serious Area Committed Particulate Control Measures for PM–10 for the Maricopa County Nonattainment Area and Support Technical Analysis, MAG, December 1997. This submittal contains additional control measures that are relied on in the MAG plan. We consider the measures in this submittal to be part of the MAG plan and have evaluated them as such.

Finally, we are also evaluating and proposing to act on the most recent revisions to MCESD's Rule 310, Fugitive Dust Sources (adopted February 16, 2000) and Rule 310.01, Fugitive Dust from Open Areas, Vacant Lots, Unpaved Parking Lots, and Unpaved Roadways (adopted February 16, 2000). We are also proposing to approve the revised Maricopa County Residential Woodburning Restrictions Ordinance (adopted November 17, 1999).

As submitted, the revised MAG plan consists of the main plan document, four volumes of technical appendices, and four volumes of commitments from various agencies to implement PM–10 controls. The plan contains a 1994 regional PM–10 emissions inventory and uses the urban airshed model/limited chemistry version (UAM/LC) to model air quality in 1995 as a base year and in 2006 as the attainment year. The plan includes a BACM analysis and a demonstration that attainment by 2001 is impracticable. It also includes the State's request for a five year extension of the attainment date, a demonstration that the plan provides for the most stringent measures found in other areas' plans or used in practice, and a demonstration of attainment by December 31, 2006. The plan shows that the principal sources contributing to PM–10 exceedances in the Phoenix area are fugitive dust sources, such as construction sites, vacant lots, paved and unpaved roads, and various other dust sources. The principal controls relied on for attainment are controls on these fugitive dust sources.

The MAG plan addresses both the annual and 24-hour PM–10 standards. We are not at this time proposing any actions regarding the plan's compliance with the statutory requirements relating to the 24-hour standard. As we explain in more detail later, the annual PM–10 standard is a separate air quality standard from the 24-hour one; therefore, we can and must separately evaluate a plan's compliance with the statutory requirements for each standard. We do not need to do these reviews concurrently.

The MAG plan also contains contingency measures as required by CAA section 172(c)(9). We are not proposing action on these contingency measures at this time. Contingency measures are a distinct provision of the Clean Air Act that we may act on separately from the attainment requirements.

PM–10 Air Quality in the Phoenix Metropolitan Area

A. The Maricopa Nonattainment Area and its PM–10 Air Quality

The Maricopa County (Phoenix) PM–10 nonattainment area is located in the eastern portion of Maricopa County and encompasses the cities of Phoenix, Mesa, Scottsdale, Tempe, Chandler, Glendale as well as 17 other jurisdictions and considerable unincorporated County lands.[2] 40 CFR 81.303. The area is home to almost 3 million people.

The area violates both the annual and 24-hour PM–10 standards. In 1990, the area was designated nonattainment for PM–10 and classified as moderate. In 1996, because of continuing violations of both PM–10 standards, the area was reclassified to serious. 61 FR 21372 (May 10, 1996).

As noted before, the principal contributors to elevated PM–10 levels in the Phoenix area are fugitive dust sources such as construction sites, unpaved roads, vacant lots and paved road dust. Also contributing to the PM–10 problem, but to a much lesser degree than fugitive dust, are internal and external combustion sources including directly-emitted PM–10 from automobiles, trucks, construction equipment, bus, residential woodburning and industrial, commercial, and residential use of natural gas and fuel oil. See MAG plan, 3–5.

B. PM–10 Air Quality Planning in the Phoenix Metropolitan Area

The MAG plan is the latest in a series of air quality plans addressing the PM–10 problem in Phoenix. These previous plans are:

• *1991 MAG Moderate Area Plan.* Arizona submitted this plan in 1991 and revisions to it in 1993 and 1994. The 1991 plan contained a demonstration that attainment was impracticable by the CAA's deadline for moderate areas, December 31, 1994. We initially approved this plan in 1995 (60 FR 18010 (April 10, 1995)); however, the 9th Circuit Court of Appeals vacated our approval in 1996, finding among other things that the plan did not address the 24-hour PM–10 standard. *Ober* v. *EPA,* 84 F.3d 304 (9th Cir. 1996). In 1998, we disapproved the 1991 plan's reasonably available control measure (RACM) demonstration for the annual standard because the plan failed to provide for the implementation of RACM on

[2] The Maricopa nonattainment area also includes the town of Apache Junction in Pinal County. Apache Junction is covered by a separate air quality plan and will be addressed in a later action.

number of significant sources of PM–10, including unpaved roads. The failure to provide for the implementation of RACM also meant that the plan could no longer conclusively demonstrate the impracticability of attainment of the annual standard by December 31, 1994, so we also disapproved the impracticability demonstration. 63 FR 15919, 15925 (April 1, 1998).

• *Microscale Plan.* Arizona submitted this plan in 1997 as a response to the 9th Circuit's findings in *Ober.* The plan addressed the CAA's serious area PM–10 requirements for attaining the 24-hour standard around four representative air quality monitors (that is, at four localized or ''microscale'' sites) in the Phoenix area. It found that 24-hour exceedances in the Phoenix area are mainly caused by fugitive dust from construction, agriculture, unpaved roads and parking lots, and disturbed vacant land. We approved the plan in part but also disapproved it in part because it did not provide for the implementation of RACM or BACM on agricultural sources, unpaved roads, unpaved parking lots, and disturbed vacant lots and did not demonstrate attainment at two of the four sites. 62 FR 41856 (August 4, 1997).

• *1998 Moderate Area Federal Implementation Plan* (FIP). We promulgated this plan on August 3, 1998. It provided for the implementation of RACM on the significant sources—unpaved roads, unpaved parking lots, disturbed vacant lots, and agricultural sources—left unaddressed by the 1991 MAG moderate area plan and the Microscale plan.[3] The FIP demonstrated that the implementation of RACM was insufficient for attainment of the 24-hour and annual standards by Phoenix area's attainment deadline of December 31, 2001.[4] 63 FR 41326 (August 3, 1998).

A more detailed history of PM–10 planning in the Phoenix area can be found in the EPA TSD.

[3] The FIP's requirements for unpaved roads, unpaved parking lots and disturbed vacant lots are codified at 40 CFR 52.128. We withdrew the FIP's agricultural requirements, formerly codified at 40 CFR 52.127, when we approved similar State requirement in 1999. 64 FR 34726 (June 29, 1999).

[4] At the time we promulgated the FIP in 1998, the moderate PM–10 area deadline of December 31, 1994 had passed and we had reclassified the Phoenix area to serious. As a result the only statutory attainment deadline then applicable to the Phoenix area, and thus the deadline applicable to our moderate area FIP, was the serious area deadline, i.e., as expeditiously as practicable but not later than December 31, 2001. See 63 FR 15919, 15926.

C. Clean Air Act Sanctions on the Phoenix Area

Our 1998 disapprovals of parts of the 1991 MAG moderate area plan started sanction clocks under CAA section 179(a). Under section 179(a), once we disapprove a SIP provision because it fails to meet a CAA requirement, a State has 18 months to correct the deficiency that resulted in the disapproval before the first of two sanctions goes into place. If the state still has not corrected the deficiency within 24 months of the disapproval, the second sanction goes into place.

The two CAA sanctions are a limitation on certain highway approvals and funding and an increase in the offset ratio to 2 to 1 for any major new stationary source or major modification. See CAA section 179(b). Our sanctions regulations provide that the first sanction to be imposed is the offset ratio unless we have established at the time of the disapproval that the highway sanction will be first. 40 CFR 52.31(d).

On August 3, 1998, we published our disapprovals of the RACM and attainment demonstrations for the annual standard in the 1991 MAG moderate area plan. 63 FR 41326. When these disapprovals became effective 30 days later on September 2, 1998, the sanction clocks started. The first of these sanction clocks expired on March 2, 2000 and the 2:1 offset sanction is now in place in the Phoenix area. The second sanction clock for the highway funding limitations is set to expire on September 2, 2000.

Under section 179(a) and our sanctions regulations at 40 CFR 52.31(d)(1), we must approve a SIP revision that corrects the deficiencies to permanently end the sanctions clocks and lift any imposed sanctions. However, we may temporarily stay the clocks and any imposed sanctions if we propose to approve a SIP revision that corrects the deficiencies and have issued an interim final determination that the State has corrected the deficiencies. 40 CFR 52.31(d)(2)(i).

In a rule being published concurrently with this proposal, we are issuing an interim final determination that, based our proposed findings here, Arizona has more than likely corrected the deficiencies that resulted in our August 1998 disapprovals.

The Clean Air Act's Planning Requirements for Serious PM–10 Areas and EPA's Guidance on Meeting these Requirements

The Phoenix area is a PM–10 nonattainment area that has been reclassified to serious because it failed to attain by the moderate area attainment date of December 31, 1994. Such an area must submit, within 18 months of the reclassification, revisions to its implementation plan that address the CAA requirements for serious PM–10 nonattainment areas. CAA section 189(b)(2). These requirements are:

(a) assurances that best available control measures (BACM) for the control of PM–10 shall be implemented no later than 4 years after the area is reclassified (CAA section 189(b)(1)(B)); [5]

(b) assurances that best available control technology (BACT) on major stationary sources of PM–10 precursors shall be implemented no later than 4 years after the area is reclassified except where EPA has determined that such sources do not contribute significantly to exceedances of the PM–10 standards (CAA section 189(e));

(c) a demonstration (including air quality modeling) that the plan will provide for attainment as expeditiously as practicable but no later than December 31, 2001, or, where the State is seeking an extension of the attainment date under section 188(e), a demonstration that attainment by December 31, 2001 is impracticable (CAA sections 188(c)(2) and 189(b)(1)(A));

(d) quantitative milestones which are to be achieved every 3 years and which demonstrate reasonable further progress (RFP) toward attainment by the applicable attainment date (CAA sections 172(c)(2) and 189(c)); and

(e) a comprehensive, accurate, current inventory of actual emissions from all sources of PM–10. (CAA sections 172(c)(3)).

Serious area PM–10 plans must also meet the general requirements applicable to all SIPs including reasonable notice and public hearing under section 110(l), necessary assurances that the implementing agencies have adequate personnel, funding and authority under section 110(a)(2)(E)(i) and 40 CFR 51.280; and the description of enforcement methods as required by 40 CFR 51.111.

Except for the requirements for the implementation of RACM and BACM and for extension requests, we will discuss our policies for each of these requirements when we discuss our evaluation of that section of the MAG plan later in this preamble.

[5] When a moderate area is reclassified to serious, the requirement to implement RACM in section 189(a)(1)(C) remains and is augmented by the requirement to implement BACM. Thus, a serious area PM–10 plan must, in addition to BACM, provide for the implementation of RACM as expeditiously as practicable to the extent that the RACM requirement has not been satisfied in the area's moderate area plan.

We have issued a General Preamble, 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992), and Addendum to the General Preamble (''Addendum''), 59 FR 41998 (August 16, 1994), describing our preliminary views on how we intend to review SIPs submitted to meet the Clean Air Act's requirements for PM–10 plans. We have also issued other guidance documents related to PM–10 plans or provisions of these plans. These other guidance documents will be cited as appropriate.

A. Implementation of Best Available Control Measures

Under section 189(b)(2), serious area PM–10 plans must provide assurances that BACM will be implemented in the area no later than four years after the area is reclassified as serious. For Phoenix, the BACM implementation deadline is June 10, 2000.

The Act does not define what constitutes BACM. We consider BACM to be a particular level of control, in this case the best, on a source or source category. More specifically, we have defined BACM to be, among other things, the maximum degree of emission reductions achievable from a source or source category which is determined on a case-by-case basis, considering energy, economic and environmental impacts. Addendum at 42010. We also consider BACM as going beyond existing RACM-level controls, such as expanding the use of RACM controls (e.g., paving more miles of unpaved roads). Addendum at 42013. Additionally, we believe that BACM should emphasize prevention rather than remediation (e.g., preventing track out at construction sites rather than simply requiring clean up of tracked-out dirt). Addendum at 42013.

A serious area plan must provide for the implementation of BACM on each significant (*i.e.*, non-de minimis) source category. Addendum at 42011. In guidance, we have established a presumption that a ''significant'' source category is one that contributes 1 $\mu g/m^3$ or more of PM–10 to a location of an annual standard violation. Addendum at 42011. However, whether the threshold should be lower than this in any particular area depends upon the specific facts of that area's nonattainment problem. Specifically, in areas that are demonstrating attainment by December 31, 2001, it depends on whether requiring the application of BACM on source categories below a proposed de minimis level would meaningfully expedite attainment. In areas that are claiming the impracticability of attainment by December 31, 2001, it depends upon whether requiring the application of BACM on source categories below a proposed de minimis level would make the difference between attainment and nonattainment by the serious area deadline of December 31, 2001.[6]

We have outlined in our guidance a multi-step process for identifying BACM. Addendum at 42010–42014. The steps are:

1. develop a detailed emission inventory of PM–10 sources and source categories,

2. model to evaluate the impact on PM–10 concentrations over the standards of the various sources and source categories to determine which are significant,

3. identify potential BACM for significant source categories including their technological feasibility, costs, and energy and environmental impacts if needed to determine BACM, and

4. provide for the implementation of the BACM or provide a reasoned justification for rejecting any potential BACM.

B. Implementation of Reasonably Available Control Measures

When a moderate area is reclassified to serious, the requirement to implement RACM in section 189(a)(1)(C) remains. Thus, a serious area PM–10 plan must also provide for the implementation of RACM as expeditiously as practicable to the extent that the RACM requirement has not been satisfied in the area's moderate area plan.

However, we do not normally conduct a separate evaluation to determine if a serious area plan's measures also meet the RACM requirements as interpreted by us in the General Preamble at 13540. This is because in our serious area guidance (Addendum at 42010), we interpret the BACM requirement, as generally subsuming the RACM requirement (i.e. if we determine that the measures are indeed the ''best available,'' we have necessarily concluded that they are ''reasonably available''). Therefore, a separate analysis to determine if the measures represent a RACM level of control is not necessary. Consequently, our proposed approval of the MAG plan's provisions relating to the implementation of BACM is also a proposed finding that the plan provides for the implementation of RACM.

C. Extension of the Attainment Date Beyond 2001

Section 188(e) of the Act allows us to extend the attainment date for a serious area for up to five years beyond 2001 if attainment by 2001 is impracticable. However, before we may grant an extension of the attainment date, the State must first:

1. apply to us for an extension of the PM–10 attainment date beyond 2001,

2. demonstrate that attainment by 2001 is impracticable,

3. have complied with all requirements and commitments applying to the area in its implementation plan,

4. demonstrate to our satisfaction that its serious area plan includes the most stringent measures that are included in the implementation plan of any state and/or are achieved in practice in any state and are feasible for the area, and

5. submit a demonstration of attainment by the most expeditious alternative date practicable.

In determining whether to grant an extension and the appropriate length of the attainment date extension, we may consider:

1. the nature and extent of the nonattainment problem,

2. the types and number of sources or other emitting activities in the area (including the influence of uncontrollable natural sources and international transport),

3. the population exposed to concentrations in excess of the standard,

4. the presence and concentration of potentially toxic substances in the mix of particulate emissions in the area, and

5. the technological and economic feasibility of various control measures.

We may grant only one extension for an area and that extension cannot be for more than 5 years after 2001; that is, the extended attainment date can be no later than December 31, 2006. CAA section 188(e).

To date, we have not issued any policy or regulation interpreting the attainment date extension requirements for urban areas like Phoenix. Therefore, before reviewing Arizona's request for an extension, we will first discuss how we propose to interpret section 188(e).

The following is our preliminary interpretation of the section 188(e) requirements and we request comment on it. We emphasize that this is our preliminary view and it is subject to modification as we gain more experience reviewing on extension requests from other areas.

[6] This principle is best illustrated by an example: In Area A, attainment of the annual standard by December 31, 2001 requires that total PM–10 emissions in the area be reduced to 200 tons per day (tpd). After application of BACM to all source categories above the proposed de minimis level, total emissions in the area are reduced to 220 tpd. BACM on the proposed de minimis source categories would reduce total emissions a further 5 tons to 215 tpd. Since application of BACM to the proposed de minimis source categories still leaves emissions above the attainment level of 200 tpd, the proposed de minimis level is appropriate.

We have listed above the five requirements a State must meet before we can consider granting an attainment date extension. We discuss each requirement in order:

1. Apply for an Attainment Date Extension

The State must apply in writing to EPA for an extension of the attainment deadline. The request should accompany the SIP submittal containing the most expeditious alternative attainment demonstration. The public must be provided reasonable notice and a public hearing on the request before it is submitted.

Extension requests are not SIP submittals per se and are therefore not subject to the requirements of the Clean Air Act and our regulations for public notice and hearing on SIP revisions. However, because they can greatly affect the content and ultimate approvability of a serious area PM–10 plan, we believe a state must give the public an opportunity, consistent with the requirements for SIP revisions, to comment on an extension request prior to submitting it to us.

2. Demonstrate That Attainment by 2001 is Impracticable

In order to demonstrate impracticability, the plan must show that the implementation of BACM (as determined by our guidance) on significant source categories will not bring the area into attainment by December 31, 2001. BACM is the required level of control for serious areas that must be in place before the 2001 attainment date; therefore, we believe that it is reasonable to interpret the Act to require that a state provide for at least the implementation of BACM on significant source categories before it can claim impracticability of attainment by 2001. This interpretation parallels our interpretation of the impracticability option for moderate PM–10 nonattainment areas in section 189(a)(1)(B). In moderate areas, RACM was required before a moderate area plan could show impracticability of attainment by 1994, the moderate area attainment deadline. General Preamble at 13544.

The statutory provision for demonstrating impracticability requires that the demonstration be based on air quality modeling. See section 189(b)(1)(A).

3. Complied With all Requirements and Commitments in its Implementation Plan

We interpret this criterion to mean that the State has implemented the control measures in the SIP revisions it has submitted to us to address the CAA requirements in sections 172 and 189 for PM–10 nonattainment areas.

We read this provision not to require the area to have a fully approved SIP that meets the CAA's requirements for moderate areas. We base this reading on the plain language of section 188(e) which requires the state to comply with all requirements and commitments pertaining to that area in the implementation plan but does not require that the state comply with all requirements pertaining to the area in the Act. For the same reason we also read this provision not to bar an extension if all or part of an area's moderate area plan is disapproved or has been promulgated as a FIP.

4. Demonstrate the Inclusion of the Most Stringent Measures

The fourth extension criterion requires the State to ''demonstrate to the satisfaction of the Administrator that the plan for the area includes the most stringent measures that are included in the implementation plan of any State, or are achieved in practice in any State, and can feasiblely be implemented in the area.'' CAA section 188(e).

The requirement for most stringent measures (MSM) is similar to the requirement for BACM. We define BACM to be, among other things, the maximum degree of emission reduction achievable from a source or source category which is determined on a case by case basis considering energy, economic and environmental impacts. Addendum at 42010. The Act establishes the deadline for implementing BACM as four years after an area's reclassification to serious. CAA section 189(b)(1)(A).

We proposed to define a ''most stringent measure'' in a similar manner: the maximum degree of emission reduction that has been required or achieved from a source or source category in other SIPs or in practice in other states and can feasiblely be implemented in the area. The Act does not specify an implementation deadline for MSM. Because the clear intent of section 188(e) is to minimize the length of any attainment date extension, we propose that the implementation of MSM should be as expeditiously as practicable.

Given this similarity between the BACM implementation and MSM requirements, we believe that determining MSM should follow a process similar to determining BACM, but with one additional step, to compare the potentially most stringent measure against the measures already adopted in the area:

1. develop a detailed emission inventory of PM–10 sources and source categories,

2. model to evaluate the impact on PM–10 concentrations over the standards of the various source categories to determine which are significant for the purposes of adopting MSM,

3. identify the potentially most stringent measures in other implementation plans or used in practice in other States for each significant source category and, for each measure, determine their technological and economic feasibility for the area,

4. compare the potentially most stringent measures for each significant source category against the measures, if any, already adopted for that source category, and

5. provide for the adoption and expeditious implementation of any MSM that is more stringent than existing measures or, in lieu of adoption, provide a reasoned justification for rejecting the potential MSM, *i.e.,* why such measures cannot be feasiblely implemented in the area.

The level of control resulting from a most stringent measure depends on how well other areas have chosen to control their sources. If a source category has not been well controlled in other areas then MSM may in fact result in a rather low level of control. This contrasts with BACM which is determined independently of what other areas have done and depends only on what is the best level of control feasible for an area.

Because BACM is the best level of control feasible for an area, it would be easy for the MSM requirement to result in no more controls and no more emission reductions in an area than result from the implementation of BACM. Given the strategy in the nonattainment provisions of the Act to offset longer attainment time frames with more stringent control requirements, we need to interpret the MSM provision to assure that it results in additional controls beyond the set of measures adopted as BACM. The primary ways to do this are (1) to require that more sources and source categories be subject to MSM analysis than to BACM analysis, that is, by lowering the threshold for what is considered a de minimis source category and (2) to require reanalysis of any measures garnered from other areas that were rejected during the BACM analysis because they could not be implemented by the BACM-implementation deadline to see if they

are now feasible for the area given the longer attainment date.

De Minimis Thresholds. What constitutes a de minimis source category for BACM is dependent upon the specific facts of the nonattainment problem under consideration. In particular, it depends upon whether requiring the application of BACM for such sources would make the difference between attainment and nonattainment by the serious area deadline. We propose to use a similar approach for judging what constitutes a de minimis source category for MSM but instead of the attainment/nonattainment test, we propose to use a test of whether MSM controls on the de minimis sources would result in more expeditious attainment.

We would not review an MSM analysis in a plan if the plan did not demonstrate expeditious attainment since one prerequisite for granting an extension is that the plan demonstrate attainment. Therefore, any de minimis standard for MSM that relied on the difference between attainment and nonattainment would be meaningless because no additional controls are needed for attainment beyond those already in the plan. Our responsibility under section 188(e), however, is to grant the shortest practicable extension of the attainment date by assuring the plan provides for attainment as expeditiously as practicable. Thus, one means of determining an appropriate de minimis level is to determine if applying MSM to the proposed de minimis source categories would meaningfully expedite attainment. If it did, then the de minimis level is too high, and if it did not, then the de minimis level is appropriate.[7]

Technological Feasibility. In the MSM analysis, a state must evaluate the application of controls from elsewhere to sources in its own area. In many cases, these sources are already subject to local control measures. In these situations, part of determining if a control is technologically feasible is determining if the new control can be integrated with the existing controls without reducing or delaying the emission reductions from the existing control. If it cannot, then we would not, in general, consider the measure to be technologically feasible for the area.

[7] In extension areas, the applicable control requirement after the December 31, 2001 attainment date is the MSM and expeditious attainment requirements of section 188(e). Thus, for measures implemented after December 31, 2001, a state need only show that the measure meets at minimum the MSM level of control and, combined with all other measures, is sufficient for expeditious attainment. A state has no obligation to show that the measure meets a BACM-level of control.

Economic Feasibility. Because cost is rarely used to justify rejection of a measure in the MAG plan, we will not attempt to establish a general guide for evaluating when a measure is economically infeasible but instead will address the issue on a case-by-case basis as needed.

We propose to use the following approach in evaluating the selection of the most stringent among multiple measures, *i.e.,* evaluating the determination of when one is more stringent than another:

1. The determination will be made on a source category basis. When only a single measure is applicable to a source category then we will compare the measures directly. However, in many cases multiple measures apply to a single source category (*e.g.,* unpaved roads which in the MAG plan are controlled both by Rule 310.01 and through City and County commitments). In these cases, we will evaluate the impact of the overall control strategy on emissions in the source category against the impact of the overall control strategy on the source category in other areas and will not compare individual measures within the source category.

2. We will review all the elements of a rule that apply to a specific type of source as an inseparable measure. A rule's applicability and emission limitations (as they apply to a single type of source) together define its stringency. They are not separable elements that can be compared in isolation to another rule.

3. Because stringency is based on an emissions level, we will not use a measure's implementation mechanisms (*e.g.,* rule versus commitment), funding level, compliance schedule, resources available for enforcement, or other similar items as criteria for judging relative stringency. (We do consider these items when judging whether the plan provides for *implementation* of MSM.)

Finally, we address how we view the ''to the satisfaction of the Administrator'' qualifier on the requirement that the State demonstrate that its plan includes the most stringent measures. The presence and wording of this qualifier indicate that Congress granted us considerable discretion in determining whether a plan in fact includes MSM. Under the terms of section 188(e), we believe that we can still accept an MSM demonstration even if it falls short of having every MSM possible. To intuit the limits of this discretion, we again look to the overall intent of section 188(e), that we grant as short an extension as practicable. In concrete terms, this means that when judging the overall adequacy of the MSM demonstration, we will give more weight to a failure to include MSM for source categories that contribute the most to the PM–10 problem in Phoenix and to the failure to include measures that could provide for more expeditious attainment and less weight to a failure to include MSM for source categories that contribute little to the PM–10 problem and/or would not expedite attainment.

5. Demonstrate Attainment by the Most Expeditious Alternative Date Practicable

Section 189(b)(1)(A) requires that a serious area plan demonstrate attainment, using air quality modeling, by the most expeditious date practicable after December 31, 2001. This demonstration is the final criterion that must be met before we may grant an extension request.

Our determination of whether the plan provides for attainment by the most expeditious date practicable will depend on whether the plan provides for implementation of BACM by the BACM implementation deadline and MSM as expeditiously as practicable.

Please see section 4 of the EPA TSD for an additional discussion of our proposed interpretation of the extension requirements.

D. Separating Our Rulemaking Actions on the Annual and 24-hour Standards

As we discussed above, there are two PM–10 NAAQS, an annual standard of 50 $\mu g/m^3$ and a 24-hour standard of 150 $\mu g/m^3$. In this proposed action, we are evaluating the MAG plan only for its compliance with the Clean Air Act's requirements for attaining the annual PM–10 standard. We are not, at this time, evaluating the plan for its compliance with the Act's requirements for the 24-hour PM–10 standard. Under section 110(k)(2), we have until February 25, 2001—one year after the completeness finding—to act on the balance of the plan that was submitted on February 16, 2000.

The two PM–10 standards are independent and must be addressed independently by states in their SIPs. This independence was highlighted by the Ninth Circuit Court of Appeals in *Ober* v. *EPA,* 84 F.3d 304 (9th Cir. 1996). In *Ober,* the Court was reviewing our approval of the MAG moderate area plan:

> The general provisions of the Clean Air Act repeatedly emphasize that implementation plans must provide for attainment of the NAAQS as expeditiously as practicable. For PM–10, the EPA promulgated two separate NAAQS-the annual standard and the 24-hour standard-which differ in the following

respects. First, the 24-hour standard offers protection against dangerous short-term exposures to high PM–10 levels, a protection that is distinct from the protection against chronic degradation in lung function provided by the annual standard. Second, the sources of PM–10 violation differ for the annual and the 24-hour: violations of the 24-hour standard are generally caused by localized sources such as construction projects, whereas violations of the annual standard tend to be caused by more diverse, dispersed sources. Third, control measures differ in effectiveness for the 24-hour standard and the annual standard.

These differences emphasize the importance of viewing PM–10's two NAAQS individually and of requiring independent treatment of them in an implementation plan. . . . . Such independent treatment furthers the Clean Air Act's goals of protecting health and achieve clean air.

Ober at 309 (emphasis added).

If a state must treat each PM–10 NAAQS independently in the implementation plan, then we also must treat each PM–10 NAAQS independently when reviewing the plan's compliance with the Clean Air Act. Therefore, it is necessary for us to review the MAG plan's compliance against the CAA requirements as they apply to the annual standard and again review them against the CAA requirements as they apply to the 24-hour standard. There is no mandate that we conduct these reviews concurrently even if Arizona submitted a single document to meet the requirements for both standards since, effectively, we must treat it as if it contained two separate plans.

We have chosen not to act at this time on the 24-hour provisions of the revised MAG plan because the State is still working on quantifying emission reductions from the best management practice measures (BMPs) intended to reduce fugitive dust from agricultural sources. Attainment of the 24-hour standard in the Phoenix area, unlike the annual standard, depends in part on emission reductions from these BMPs. Once Arizona quantifies the reductions, it will revise the 24-hour attainment demonstrations and resubmit them to us. We expect these changes later this year. We do not believe it is an efficient use of our resources to act now on the 24-hour provisions currently in the MAG plan knowing that they will be substantially revised prior to our statutory deadline to act on them.

Discussion of the MAG Plan's Compliance with the Clean Air Act's Requirements

The following sections present a condensed discussion of our evaluation of the MAG plan's compliance with the applicable CAA requirements for attainment of the annual PM–10 standard. Our complete evaluation is found in the EPA TSD for this proposal. We urge anyone wishing to comment on this proposal to first review the TSD before preparing comments. A copy of the TSD can be downloaded from our website or obtained by calling or writing the contact person listed above.

A. Completeness of the SIP Submittals

The first step we take after receiving a SIP submittal is to determine if it is complete. CAA section 110(k)(1)(B) requires that we review all SIPs and SIP revisions for completeness within 60 days of receipt of the submittal. The completeness review allows us to quickly determine if a state has submitted a SIP revision, including all needed supporting material, on which we can take action. We make completeness determinations using criteria we have established in 40 CFR part 51, appendix V.

We found ADEQ's February 16, 2000 submittal (received on February 23, 2000) of the final revised MAG serious area PM–10 plan complete. We notified the State of our completeness determination on February 25, 2000. See Letter, David P. Howekamp, EPA, to Jacqueline Schafer, ADEQ.

If we do not make a completeness determination, a submittal becomes complete by default 6 months after we receive it. See 100(k)(1)(B). We did not review the 1997 submittal of control measures for completeness and it became complete by default on June 15, 1998.

We found Arizona's submittals containing MCESD's Rule 310 and 310.01 and the revised Maricopa County residential woodburning ordinance complete on March 31, 2000.

B. Adequacy of the Transportation Conformity Budgets

Section 176(c) of the Clean Air Act requires that federally funded or approved transportation plans, programs, and projects in nonattainment areas ''conform'' to the area's air quality implementation plans. Conformity ensures that federal transportation actions do not worsen an area's air quality or interfere with its meeting the air quality standards. We have issued a conformity rule that establishes the criteria and procedures for determining whether or not transportation plans, programs, and project conform. See 40 CFR part 93, subpart A.

One of the primary tests for conformity is to show transportation plans and improvement programs will not cause motor vehicle emissions higher than the levels needed to make progress toward and meet the air quality standards. The motor vehicle emissions levels needed to make progress toward and meet the air quality standards are set in an area's attainment and/or reasonable further progress (RFP) plans and are known as the ''emissions budget for motor vehicles.'' Emissions budgets are established for specific years and specific pollutants. See 40 CFR 93.118(a).

Before an emissions budget in a submitted SIP revision may be used in a conformity determination, we must first determine that it is adequate. The criteria by which we determine adequacy of submitted emission budgets are outlined in our conformity rule in 40 CFR 93.118(e)(4).

The MAG plan establishes a mobile source emissions budget of 59.7 mtpd. This regional budget is applicable for both the annual and 24-hour PM–10 standards. The on-road mobile portion of the budget, which includes emissions from reentrained road dust, vehicle exhaust, and travel on unpaved roads, is 58.6 mtpd. The road construction portion of the budget is 1.1 mtpd. MAG plan, p. 8–13.

On March 30, 2000, we have found adequate for transportation conformity purposes this motor vehicle emission budget. As a result of our adequacy finding, MAG and the Federal Highway Administration are required to use this budget in future conformity analyses.

C. Emission Inventory

CAA section 172(c)(3) requires all nonattainment area plans to contain a comprehensive, accurate, and current inventory. Our policies require that the inventory be fully documented.

The MAG plan describes annual and average annual day emissions for 1994 from point, area, nonroad, on-road, and nonanthropogenic sources in the Maricopa County portion of the 2,880 square mile nonattainment area. The inventory includes emissions of PM–10, PM–2.5, ammonia (NH_3), nitrogen oxides (NO_X), and sulfur oxides (SO_X).

The inventory shows that the dominant sources of emissions in the Phoenix area are paved road dust (39.1 percent), unpaved roads, (21.6 percent) and construction-related fugitive dust (20.1 percent). Much lower but still important contributors are directly-emitted PM–10 from non-road engines (7.0 percent) and on-road motor vehicles (3.3 percent), all stationary area sources, *e.g.,* woodburning (6.1 percent) and stationary point sources (2.7 percent). MAG plan, Table 3–1.

Generally the inventories are very well documented with the

documentation exceeding our guidance requirements.

Current: The base year, 1994, is a reasonably current year, considering the length of time needed to develop an inventory, perform the modeling, develop and adopt control measures, and hold public hearings on such a large and technically-complex plan like the MAG plan.

Comprehensive: The MAG plan inventories are fairly complete, considering a few emission factors are unknown for some of the smaller sources of PM–10. The inventories did not include emissions of volatile organic compounds (VOC) which is a precursor of secondary PM–10 because the plan found there is a negligible impact on ambient measurements of PM–10 from VOC aerosol. We concur with this finding and that VOC sources need not be inventoried for the PM–10 plan.

Accurate: In developing the inventory, MAG and MCESD closely followed our guidance relative to the use of emission factors, activity estimates, and growth and control factors, and the other source specific emission estimation methodologies (continuous emission monitoring, annual stack tests, and mass balance methods). Source specific methods were used to the maximum extent possible as they are inherently more accurate than emission factors. The relative accuracy of each estimate underwent the prescribed quality assurance procedures to eliminate all possible errors. The inventory is thus as accurate as inventories can be.

Because we find that the inventory is current, comprehensive, and accurate, we propose to approve it under CAA section 172(c)(3).

D. Adequate Monitoring Network

CAA section 110(a)(2)(B)(i) requires States to establish and operate air monitoring networks to compile data on ambient air quality for all criteria pollutants. Our regulations in 40 CFR part 58 establishes specific regulatory requirements for operating air quality surveillance networks to measure ambient concentrations of PM–10, including measurement method requirements, network design, quality assurance procedures, and in the case of large urban areas, the minimum number of monitoring sites designated as National Air Monitoring Stations (NAMS).

The MAG plan does not specifically address the adequacy of the PM–10 monitoring network in the Phoenix area. There is no requirement that it does. We are reviewing the adequacy of the monitoring network here because the plan relies on ambient data to characterize the extent and severity of the PM–10 problem in the Phoenix area and we need to assure that the monitoring network is adequate for this purpose.

In 1995, the base year for the air quality modeling, there were 18 monitoring sites collecting data in the Phoenix area, all of which were operated in accordance with our regulations. Most of these PM–10 monitoring sites were neighborhood scale sites with an objective of assessing population exposure. Given the widespread nature of the emission sources in the Phoenix area, we believe this focus was appropriate and that the network was adequate to characterize the extent and severity of the PM–10 problem in 1995.

E. Contribution to PM–10 Exceedances of Major Sources of PM–10 Precursors

Under CAA section 189(e), a state must apply the control requirements applicable to major stationary sources of PM–10 to major stationary sources of PM–10 precursors, unless we determine such sources do not contribute significantly to PM–10 levels in excess of the NAAQS in the area. For the serious area plan, a ''major source'' is one that emits or has the potential to emit over 70 English tons per year (tpy) of sulfur oxides (SOx), nitrogen oxides (NOx), or ammonium.

PM–10 precursors react in the atmosphere to form ''secondary'' particulate, secondary because it is not directly emitted from the source. The MAG plan does not provide specific information on the impact of major precursor sources on Phoenix PM–10 levels; however, it does provide sufficient information on the contribution of total secondary particulates to PM–10 levels and the emissions from major precursor sources to estimate the impact.

All major stationary sources of PM–10 precursors are estimated to contribute just 0.24 $\mu g/m_3$ to the annual levels of PM–10. See EPA TSD section, ''BACT for Major Stationary Sources of PM–10 Precursors.'' This contribution is less than 0.5 percent of the annual PM–10 levels over the standard in the Phoenix area and less than 0.5 percent of the annual standard of 50 $\mu g/m^3$.

We believe that this small contribution is insignificant for the Phoenix area. PM–10 levels above the annual standard in Phoenix are almost exclusively caused by a few large source categories of fugitive dust, and it is BACM-level controls on these sources that are the key to expeditious attainment of the annual standard in the Phoenix area and not controls on small contributors such as major sources of PM–10 precursors.

We, therefore, propose to determine that major sources of PM–10 precursors do not contribute significantly to PM–10 levels in excess of the PM–10 NAAQS in the Phoenix area. As a result, Arizona is not required to apply BACT to major sources of PM–10 precursors in the Phoenix area.

F. Implementation of Reasonably Available and Best Available Control Measures

CAA section 189(b)(1)(B) requires that a serious area PM–10 plan provide for the implementation of BACM within four years of reclassification to serious. For Phoenix, this deadline is June 10, 2000. BACM must be applied to each significant area-wide source category. Addendum at 42011. As discussed above, we have established a four-step process for evaluating BACM in serious area PM–10 plans.

1. Determination of Significant Sources

The first step in the BACM analysis is to develop a detailed emission inventory of PM–10 sources and source categories that can be used in modeling to determine their impact on ambient air quality. Addendum at 42012.

The MAG plan uses three modeling studies of PM–10 sources in the Phoenix area to identify significant source categories. One of these studies evaluated significant sources using chemical mass balance (CMB) modeling performed on monitoring samples collected at 6 sites in 1989–1990. The two other studies evaluated significant sources using dispersion modeling of sources around 6 monitoring sites using data from 1992 through 1995.[8]

From these evaluations, the MAG plan identified 8 significant source categories and 12 insignificant source categories. MAG plan, p. 9–6.

The final list of significant source categories did not distinguish between those categories that are significant for the 24-hour standard and those significant for the annual standard; although previous studies have shown that some source categories are significant only for one or the other standard. Because the MAG plan did not distinguish significant source categories between the two standards, we will treat each of the listed significant source

[8] These studies are ''The 1989–90 Phoenix PM–10 Study,'' Desert Research Institute, April 1991; ''Particulate Control Measure Feasibility Study,'' Sierra Research, January 1997; and ''Plan for Attainment of the 24-hour PM–10 Standard, Maricopa County PM–10 Nonattainment Area,'' ADEQ, May 1997.

categories as significant for the annual standard.

For the annual standard, the MAG plan demonstrates that its selection of significant source categories is appropriate by showing that control on the de minimis source categories would not make the difference between attainment and nonattainment of the annual standard by 2001. According to the plan, total emissions in the area need to be reduced to 130 mtpd to attain the annual standard by 2001. After application of BACM, total emissions are reduced to 152 mtpd. MAG plan, p. 9–11. The 12 de minimis sources categories contribute in total 10.3 mtpd. MAG plan, Table 9–a. Totally eliminating these source categories would reduce total regional emissions to 142 mtpd, still 12 mtpd above the regional emissions level needed for attainment. MAG plan, pp. 9–10 through 9–12.

The 8 significant source categories are:

1. Paved road travel.
2. Unpaved road travel (includes unpaved parking lots).
3. Industrial paved road travel (paved and unpaved).
4. Construction site preparation (includes disturbed vacant lots that are not undergoing construction).
5. Agricultural tilling (includes all agricultural sources).
6. Residential wood combustion.
7. On-road and non-road motor vehicle exhaust.
8. Secondary ammonium nitrate.

MAG Plan, Table 9–1.

The 12 de minimis source categories are:

1. Stationary point sources.
2. Fuel combustion (excluding residential wood combustion).
3. Waste/open burning.
4. Agricultural harvesting.
5. Cattle feedlots.
6. Structural/vehicle fires.
7. Charbroiling/frying meat.
8. Marine vessel exhaust.
9. Airport ground support exhaust.
10. Railroad locomotive exhaust.
11. Windblown from fluvial channels.
12. Wild fires.

MAG plan, Table 9–a. The plan notes that several de minimis source categories are already subject to control or will be controlled in the future. MAG plan, p. 9–12.

We propose to find that the MAG plan has not excluded any source categories that should be considered significant from its list of significant source categories. The plan presents acceptable modeling to evaluate the impact of various PM–10 sources and source categories on PM–10 levels and to derive a comprehensive and conservative list of significant source categories.

Our proposal here does not mean that we believe all the source categories identified as significant in the MAG plan needed to be considered significant for the purpose of evaluating BACM. We believe that the MAG plan is conservative in its selection of significant source categories, that is, it may have included more source categories in its significant source list than are strictly needed. Thus our use of negative wording in our proposed finding: no significant source categories were excluded as opposed to only the significant categories were included. In our 1998 FIP, we derived a narrower list of significant sources based on more recent modeling than was used to develop the list in the MAG plan. See 63 FR 15920, 15932 (Table 2 and text).

2. Identification of Potential BACM

In preparing the list of candidate BACM, MAG reviewed our guidance documents on BACM, other EPA documents on PM–10 control, as well as PM–10 plans from other serious PM–10 areas in the West. It also evaluated controls proposed during public comment. MAG plan, pp. 9–24 through 9–29.

The MAG plan appropriately screened the list of candidate BACM to eliminate measures that did not apply to significant source categories in the area, were technologically infeasible for the area because they would not reduce PM–10 emissions, or duplicated other measures on the list. The MAG plan also provides cost effectiveness estimates for each of the candidate BACM. MAG plan, pp. 9–30 through 9–39.

We propose to find that the MAG plan identified and evaluated potential BACM for the Maricopa area consistent with our guidance. As we will discuss below in our evaluations of the implementation of BACM for each significant source category, we do not believe that the MAG plan left out any candidate BACM. We note that additional evaluation of control measures was done as part of the most stringent measure analysis. MAG plan, pp 10–25 & 10–26. Overall, the MAG plan presents one of the most comprehensive lists of potential BACM ever produced.

3. Implementation of RACM and BACM and Inclusion of MSM for Each Significant Source Category

In the following sections, we review the results of the MAG plan's BACM analysis. To present these results, we have grouped the emission generating activities that comprise the MAG plan's significant categories slightly differently from the plan, *e.g.,* we have addressed separately construction activities and disturbed vacant lands which are both included in the MAG plan's significant category of construction site preparation.[9] We have done this to make our evaluations of the plan's provisions for the implementation of BACM and inclusion of MSM clearer and thus, we believe, more understandable. However, despite the method of presentation, we have addressed the MAG plan's provisions for implementing RACM and BACM for each of the plan's significant source categories.

Also, because of the substantial overlap in the source categories and controls evaluated for BACM and those evaluated for MSM, we present our evaluation of the MAG plan's provisions for including MSM alongside our evaluation of the provisions for implementing RACM and BACM for each significant source category.

Finally, controls on a number of significant source categories are found in MCESD's fugitive dust rules, Rule 310 and Rule 310.01. MCESD has made extensive commitments to improve compliance and enforcement of these rules to assure that they achieve the emission reductions necessary for expeditious attainment. These commitments are an important component of our finding that the MAG plan provides for implementation of RACM and BACM and inclusion of MSM. We discuss them at the end of this section.

a. Technology controls for on-road motor vehicle exhaust. This category includes tailpipe and tire wear emissions of primary PM–10 from on-road motor vehicles. On-road motor vehicles include both gasoline and diesel-powered passenger cars, light, medium, and heavy duty trucks, buses, and motorcycles.[10]

[9] MAG plan uses this grouping despite the fact that disturbed vacant lands include lands that are disturbed for reasons other than construction activity.

[10] We will treat gasoline-and diesel-powered vehicles together here to preserve to the extent practicable the significant source groupings in the MAG plan; however, we believe they are in fact distinct categories. Almost 95 percent of diesel PM–10 emissions come from heavy-duty diesel trucks while 75 percent of gasoline PM–10 comes from the family car, that is, light duty cars and trucks (which include sports utility vehicles). See Table ORM–1 in the EPA TSD section ''Implementation of BACM and Inclusion of MSM for On-Road Motor Exhaust (Technology Standards).'' There is almost no overlap in the controls for the family car and those for heavy duty diesel trucks, key evidence that they are in fact distinct source categories. See Table ORM–4 in the EPA TSD.

The suggested technology-based measures for controlling emissions from on-road motor vehicle exhaust fall into one of five categories: new emission standards, inspection and maintenance programs, fuels, programs to encourage alternative fueled vehicle usage, and programs to accelerate fleet turnover. In total, the MAG plan considers 22 technology-based control measures. See MAG plan, Table 5–2. We believe this list is complete and propose to find that the MAG plan evaluates a comprehensive set of potential technology-based controls for on-road motor vehicle exhaust emissions including the potentially most stringent measures from other states.

For gasoline vehicles, Arizona has implemented one of the nation's best and most comprehensive enhanced I/M programs including expanding the program to areas surrounding Phoenix; has adopted its own Clean Burning Gasoline program which mandates the use of either Phase II federal reformulated gasoline or California reformulated gasoline; offers generous tax credits and deductions for conversion of vehicles to alternative fuels; and mandates federal, state, county, and municipal governments to convert their fleets to alternative fuels. MAG plan, pp. 7–2 through 7–24.

Arizona has instituted a heavy duty diesel I/M program, will require pre-1988 HDDV registered in the Phoenix nonattainment area to meet 1988 federal emission standards starting in 2004, has established a voluntary vehicle repair and retrofit program to encourage retrofitting and overhaul of heavy duty diesel engines to reduce emissions, and has limited diesel sulfur content to 500 parts per million (ppm). MAG plan, Chapter 7.

The California Air Resources Board's diesel fuel standards (CARB diesel) is one of the few identified motor vehicle controls not adopted by the State. The plan identifies this measure as a potential MSM. MAG plan, Table 10–7. The MAG plan claims that the measure is unreasonable on a cost basis. MAG plan, p. 9–46. We make no judgement on this claim given the great uncertainty regarding the potential cost of implementing CARB diesel in the Phoenix area. We do note that the State has already adopted half of the CARB diesel standards, the 500 ppm sulfur limit.[11]

Under our proposed policy for MSM in extension requests, we believe that we can find that the MAG plan provides for the inclusion of MSM to our satisfaction absent the adoption and implementation of CARB diesel because, based on information in the MAG plan, the on-road engine category's contribution to nonattainment in the Phoenix area is relatively low compared to other PM–10 dust sources and implementation of CARB diesel would not advance the attainment date.

According to the MAG plan, the on-road motor vehicle category contributes just 1.3 percent of the pre-control inventory in 2006, compared to construction dust at 43.8 percent, paved road dust at 20.4 percent, unpaved road dust at 13.1 percent, and windblown dust at 8.7 percent. MAG plan, Table 8–3. Adoption of CARB diesel would generate a total reduction of 0.8 mtpd in 2006. MAG plan, p. 10–37. It takes a 4 mtpd reduction to advance the annual standard attainment date one year (the minimum needed because it is an annual standard), so reductions from implementation of this measure are insufficient to advance the attainment date. See section on RFP and Quantitative Milestones.

As noted before, Arizona has in place one of the nation's most comprehensive programs to address on-road motor vehicle emissions. With the additional measures in the MAG plan (including a more stringent diesel I/M program and measures both encouraging and requiring diesel fleet turnover) the overall mobile source program is strengthened and goes beyond the existing program. Both strengthening and expanding existing programs are key criteria for demonstrating the implementation of BACM. See Addendum at 42013. Where the MAG plan has rejected potential BACM, it provides a reasoned and acceptable justification for the rejection.

The MAG plan identified just a few measures from other areas as being more stringent than existing programs. These measures have either been adopted or we have concluded that the measures need not be included to assure the inclusion of MSM.

All the adopted BACM and MSM are already implemented, except for one. The requirement that pre-1988 heavy duty diesel vehicles registered in the nonattainment area meet 1988 federal emission standards will not be implemented until January 1, 2004 in order to provide sufficient lead time for modification or replacement of the non-complying heavy duty diesel vehicles.

We, therefore, propose to find that the combination of on-road motor vehicle technology controls and TCMs (described in the next section) in the MAG plan provides for the implementation of RACM and BACM and the inclusion of MSM for on-road motor vehicle exhaust.

b. Transportation control measures (TCMs) for on-road motor vehicle exhaust and paved road dust. TCMs can reduce PM–10 emissions in both the on-road motor vehicle exhaust and paved road dust source categories by reducing vehicle miles traveled (VMT) and vehicle trips. They can also reduce vehicle exhaust emissions through relieving congestion. Our serious area PM–10 guidance requires that plans identifying on-road motor vehicles as a significant sources must also evaluate the TCMs listed in section 108(f) of the CAA. Addendum at 42013.

In our review, we have primarily assessed the MAG plan's provisions for implementing RACM and BACM and including MSM through TCMs based on the measures' effectiveness in controlling directly-emitted PM–10 from vehicle exhaust. We have not assessed the plan based on the TCMs' potential benefit in controlling PM–10 precursors such as NO_X and SO_X because (1) from available ambient measurements, neither nitrates nor sulfates are important to overall PM–10 concentrations in the Phoenix area (See EPA TSD section, ''BACT for Major Stationary Sources of PM–10 Precursors'' which shows that total secondary particulates accounted for less than 4 $\mu g/m^3$ in 1995) and (2) Arizona has already targeted mobile source NO_X and SO_X through an aggressive set of mobile source controls which we believe cover the implementation of RACM and BACM and inclusion of MSM requirements for tailpipe NO_X and SO_X. See discussion immediately above on technology controls for on-road motor exhaust.

In total, the MAG plan identifies 19 TCMs for consideration including the CAA section 108(f) measures. The plan does not identify any potentially more stringent TCMs from other areas. See EPA TSD section ''Implementation of BACM and MSM for On-Road Motor Vehicle Exhaust and Paved Road Dust (TCMs).'' We believe that this list is complete and propose to find that the MAG plan evaluates a comprehensive set of potential TCMs for on-road motor vehicle exhaust emissions and the potentially most stringent measures from other States.

Arizona has a long history of adopting and then enhancing programs to reduce emissions from on-road motor vehicles by reducing vehicle miles traveled,

[11] The other CARB diesel standard is a limit on the aromatic hydrocarbon content of no more than 10 percent by volume. CARB, Fact Sheet on California Diesel Fuel, March 1997.

vehicle trips, and/or congestion.[12] The area has an employer trip reduction ordinance which applies to employers of 50 or more, a public outreach program to encourage people to reduce driving, programs to improve bicycling and pedestrian travel, and an extensive program to synchronize traffic lights. In most instances, these programs were adopted and implemented as part of carbon monoxide and ozone control programs, but they also reduce PM–10.

With the additional measures in the MAG plan (including additional traffic light synchronization, transit improvements, and bicycle and pedestrian facility improvements), the overall TCM program is strengthened and goes beyond the existing program. See EPA TSD, Table TCM–3 in section ''Implementation of BACM and MSM for On-Road Motor Vehicle Exhaust and Paved Road Dust (TCMs).'' Both strengthening and expanding existing programs are key criteria for demonstrating the implementation of BACM. See Addendum at 42013. Where the MAG plan has rejected potential BACM, it provides a reasoned justification for the rejection.

All the adopted TCM BACM are already implemented or have on-going implementation schedules because they are part of a on-going capital improvement program (*e.g.,* signal synchronization).

We propose to find that the combination of on-road motor vehicle technology controls (described in the previous section) and TCMs in the MAG plan provides for the implementation of RACM and BACM and inclusion of MSM for on-road motor vehicle exhaust. We also propose to find that the combination of TCMs and paved road dust measures (described in the paved road section later in this preamble) provides for the implementation of RACM and BACM and the inclusion of MSM for paved road dust.

c. Nonroad engines. The non-road engine category covers a diverse collection of engines, equipment and vehicles fueled by gasoline, diesel, electric, natural gas, and other alternative fuels, including outdoor power equipment, recreational equipment, farm equipment, construction equipment, lawn and garden equipment, and marine vessels.

The suggested measures for controlling emissions from nonroad engines fall into one of four categories: new emission standards, programs to accelerate fleet turnover, programs affecting usage, or fuels. In total, the MAG plan evaluates 8 measures in addition to clean fuels measures for reducing PM–10 emissions from nonroad engines. We believe that this list is complete and propose to find that the MAG plan evaluates a comprehensive set of potential measures for nonroad engines including the potentially most stringent measures from other States.

We have adopted national emission standards for a broad range of nonroad engines. These standards apply to nonroad engines sold in Arizona and are the base, RACM-level, program for controlling emissions from nonroad engines. The CAA preempts all states, except for California, from setting independent nonroad emission standards. CAA section 209(e). Other states, however, may adopt regulations identical to California's regulations, provided they notify us and give appropriate lead time, 2 years, for implementation. Section 209(e)(2)(B).

Arizona has committed to adopt California's non-road standards that are more stringent than the federal standards. MAG plan, p. 7–42. In addition, the State has established and is currently running a voluntary retirement program for gasoline powered lawn and garden equipment which is run by Maricopa County and a program to encourage the use of temporary electrical power rather than portable generators at construction sites. See MAG plan, pp. 7–41 and 7–43.

With the addition of these measures, the overall nonroad engine program is strengthened and goes beyond the existing federal program. See EPA TSD section ''Implementation of BACM and Inclusion of MSM for Nonroad Engines.'' Both strengthening and expanding existing programs are key criteria for demonstrating the implementation of BACM. See Addendum at 42013. Where the MAG plan has rejected potential BACM, it provides a reasoned justification for the rejection.

The MAG plan identifies CARB diesel as a potential MSM for non-road engines but does not adopt it. MAG plan, Table 10–7. Under our proposed policy for MSM in extension requests, we believe that we can find that the MAG plan provides for the inclusion of MSM to our satisfaction absent the adoption of CARB diesel because, based on information in the MAG plan, the non-road engine category's contribution to nonattainment in the Phoenix area is relatively low compared to other PM–10 dust sources and implementation of CARB diesel would not advance the attainment date.

The nonroad motor vehicle category contributes 4.8 percent of the pre-control inventory in 2006, compared to construction dust at 43.8 percent, paved road dust at 20.4 percent, unpaved road dust at 13.1 percent, and windblown dust at 8.7 percent. MAG plan, Table 8–3. Adoption of CARB diesel would generate a total reduction of 0.8 mtpd in 2006. MAG plan, p. 10–37. It takes a 4 mtpd reduction to advance the annual standard attainment date one year (the minimum needed because it is an annual standard), so reductions from implementation of this measure are insufficient to advance the attainment date. See section on RFP and Quantitative Milestones.

We, therefore, propose to find that MAG plan provides for the implementation of RACM and BACM and inclusion of MSM for on-road motor vehicle exhaust.

d. Paved road dust. Paved road dust is the largest source of PM–10 in the Maricopa area. It is fugitive dust that is deposited on a paved roadway and then is re-entrained into the air by the action of tires grinding on the roadway. Dust is deposited on the roadway from being blown onto the road from disturbed areas; tracked onto the road from unpaved shoulders, unpaved roads, or other unpaved access points; stirred up from unpaved shoulders by wind currents created from traffic movement; spilled onto the road by haul trucks; and carried onto the road by water runoff or erosion.

The suggested measures for controlling emissions from paved road dust fall into one of three categories: reductions in vehicle trips (VT) and vehicle miles traveled (VMT), preventing deposition of material onto a roadway and cleaning material off the roadway. We have already discussed measures for reducing VT and VMT in the section on TCMs above.

The MAG plan lists several potential BACM for paved road dust. It also lists a number of potentially MSM from other areas. We believe these lists are complete and propose to find that the MAG plan evaluates a comprehensive set of potential controls for paved road dust including the potentially MSM from other States.

Prior to the MAG plan, the cities and towns in the Phoenix area and Maricopa County implemented a number of measures addressing paved road dust. See MAG plan, Table 10–5. With the additional measures in the MAG plan (described below), the overall control program to reduce paved road dust is both strengthened and expanded beyond the existing program. See EPA TSD section ''Implementation of BACM

[12] These plans include the MAG moderate and serious area carbon monoxide plans and MAG moderate area ozone plan.

and Inclusion of MSM for Paved Road Dust.'' Both strengthening and expanding existing programs are key criteria for demonstrating the implementation of BACM. See Addendum at 42013.

For the potential MSM, the MAG plan shows that these measures are either adopted or are not in fact more stringent than existing Phoenix area programs.

With the exception of the MSM for PM–10-efficient street sweepers described below, all the adopted BACM for paved roads are already implemented or have on-going implementation schedules because they are part of a on-going capital improvement program (*e.g.,* curbing). For the reasons discussed below, we propose to find that the MAG plan provides for the implementation of the PM-10 efficient street sweeper measures as expeditiously as practicable, consistent with our proposed MSM policy.

We, therefore, propose to find that the MAG plan provides for the implementation of RACM and BACM and for the inclusion of MSM for paved road dust.

Preventing deposition of material onto a roadway. Measures aimed at preventing track out on a paved road include treating unpaved access points, preventing track out from construction/industrial sites, treating shoulders on paved roads, controlling emissions during material transport (*e.g.,* truck covers, freeboard requirements), and preventing erosion onto paved roads.

The MAG plan includes each of these measures:

Unpaved access points: In the MAG moderate area plan, local jurisdictions focused on requiring new connections to public paved streets to be paved. MAG plan, p. 9–74. In the serious area plan, the focus has shifted to addressing existing unpaved access points in addition to preventing new unpaved access points while maintaining the previous programs. Most public entities committed to stabilize unpaved access points when a connecting road is built, improved or reconstructed. See, for example, Glendale Commitment, ''Reduce Particulate Emissions from Unpaved Shoulders and Unpaved Access Points on Paved Roads.'' Some cities have made explicit commitments for stabilizing existing access points without this prerequisite, such as Gilbert and Mesa. We also anticipate that routine city/town/County road paving and stabilization projects will result in controlling a number of existing unpaved access points. These projects combined with increased enforcement of track-out restrictions and additional PM–10 efficient street sweeping efforts should reduce paved road emissions attributable to unpaved access points.

The only potential MSM that the MAG plan identifies for unpaved access points are track out control requirements for construction sites. See MAG plan, Table 10–7. We discuss these measures in the next section.

Track out. Rule 310, sections 308.2(c) and 308.3 address dirt track out from construction/industrial sites: All work sites that are five acres or larger and all work sites where 100 cubic yards of bulk materials are hauled on-site or off-site each day must control and prevent track out by installing a track out control device. All work sites must also clean up spillage or track out immediately when it extends a cumulative distance of 50 linear feet or more; where track out extends less than 50 feet, it must be cleaned up at the end of the work day.

The MAG plan identifies, as a potentially more stringent measure for track out, South Coast (Los Angeles area) Air Quality Management District's Rule 403. MAG plan, Table 10–7. The plan concludes that the two rules are reasonably similar in several respects, and where differences exist, the relative impacts on control roughly balance against each other. MSM Study, p. C–4.[13] We agree. Both rules emphasize prevention and rapid removal of track out. See EPA TSD section ''Implementation of BACM and Inclusion of MSM for Paved Roads Dust,'' Note 2.

Unpaved Road Shoulders. As with unpaved access points, the MAG plan demonstrates a shift to dealing with existing unpaved shoulders from only preventing new ones. MAG plan, Table 9–11. Maricopa County has committed to treat 100 miles of shoulders along existing paved arterial and collector roadways with high volume truck traffic by 2003, in addition to its annual capital improvement projects for paving or treating unpaved shoulders. Maricopa County commitment, 1999 revised measure 5. Other jurisdictions have also made commitments to treat shoulders.

A.R.S. 9–500.04(3) and 49–474.01(4), adopted by the State legislature in 1998, require the cities, towns and County of Maricopa to develop and implement plans to stabilize targeted unpaved roads and alleys and to stabilize unpaved shoulders on targeted arterials beginning January 1, 2000. Although this legislation does not specify how many shoulder miles to be controlled, we believe that the local jurisdictions' efforts to meet this new legislation will result in the control of unpaved shoulders where it is most needed.

Material Transport. Requirements for the control of PM–10 emissions during material transport are found in Rule 310, sections 308.1 and 308.2. When hauling material off-site onto paved public roadways, sources are required to: (1) load trucks such that the freeboard is not less than three inches; (2) prevent spillage; (3) cover trucks with a tarp or suitable enclosure; and (4) clean or cover the interior cargo compartment before leaving a site with an empty truck.

The MAG plan identifies requirements for bulk material transport in Imperial County Regulation VIII as a potential MSM. MAG plan, Table 10–7. The plan concludes that MCESD's rule is equally stringent. We agree because Rule 310's requirements for bulk material transport/hauling are essentially the same as Imperial County's requirements.

Cleaning material off the roadway. Measures for cleaning material off roadway are track out, erosion, and spill removal requirements and road sweeping.

The MAG plan includes each of these measures:

Material spillage, erosion, or accumulation. Rule 310, section 308.2 and 308.3 address rapid clean up of track out from construction/industrial sites. Rule 310.01, section 306 requires property owners/operators to remediate erosion-caused deposits of bulk materials onto paved surfaces. Erosion-caused deposits are to be removed within 24 hours of their identification or prior to resumption of traffic on the pavement.

The MAG plan identifies South Coast's Rule 1186 and Mojave Desert's Rule 403 as potential MSMs for material spillage, erosion, and accumulation onto roadways. MAG plan, Table 10–7. In both cases, the plan concludes that MCESD's rules are more stringent. We agree. MCESD's rules require the clean up of more incidences of spillage, etc. than does South Coast's rule. See EPA TSD, ''Implementation of BACM and Inclusion of MSM for Paved Roads,'' Note 5.

Street sweeping. Most cities/towns and the County have on-going street sweeping programs with variable sweeping frequencies. With some exceptions, public entities implementing this measure have not explicitly committed to increase their existing sweeping frequencies. Phoenix,

[13] The ''MSM Study'' is the ''Most Stringent PM–10 Control Measure Analysis,'' Sierra Research, May 13, 1998 found in Appendix C, Exhibit 4 of the MAG plan.

for example, approved a program in 1996 to increase the frequency of residential street sweeping to match the uncontained trash pick-up schedule. Phoenix commitment, measure 97-DC–5. However, sweeping frequency is appropriately evaluated in combination with other paved road measures, because the emission-reducing potential of increased sweeping frequency is closely associated with other factors. These factors include whether the sweepers currently in use are PM–10 efficient (such that the act of sweeping does not cause increased emissions) and whether the public entity has identified roads that tend to experience higher silt loadings where more frequent sweeping is likely to make an appreciable difference in PM–10 emissions. Because sweeping frequency is among the criteria included in MAG's PM–10 efficient street sweeper solicitation (see below), we believe this measure is largely incorporated into MAG's new program.

The MAG plan identifies as a MSM the PM–10 efficient street sweeping provisions in South Coast Rule 1186. MAG plan, Table 10–7. However, the plan's analysis pre-dates MAG's commitment for the purchase and distribution of PM–10 efficient street sweepers and is no longer current.

The MAG plan includes commitments by MAG, cities, towns and the County for the purchase and use of PM–10 efficient street sweepers. This commitment involves the allocation of $3.8 million in Congestion Mitigation Air Quality (CMAQ) funds for the FY 2000–2004 Transportation Improvement Program (TIP) to purchase PM–10 certified street sweepers for the local jurisdictions to use. MAG has recommended an additional $1.9 million CMAQ funds be allocated to purchase PM–10 certified street sweepers in the FY 2001–2005 TIP. See MAG commitment, ''PM–10 Efficient Street Sweepers.''

The funds allocated by MAG for this program should be sufficient to replace approximately two-thirds of the 72 existing city/town/County street sweepers.[14] Each fiscal year in which CMAQ funds are allocated for street sweepers, MAG will solicit requests for funding from cities, towns and the County in the PM–10 nonattainment area. Funding requests must identify by facility type (*i.e.* freeway, arterial/collector, local) the number of centerline miles to be swept with the PM–10 certified units, expected frequency of sweeping, and average daily traffic (if available). MAG will use this information to estimate the emissions reduction associated with each sweeper request and rank the requests in priority order of effectiveness for consideration in the allocation of CMAQ funds. See MAG commitment, ''PM–10 Efficient Street Sweepers.''

In evaluating this program, we considered not only the number of PM–10 efficient street sweepers to be purchased and distributed, but whether the program incorporates use factors that influence emissions reductions. The greatest emissions reduction benefit for this mitigative measure will be achieved if the sweepers are used on a frequent basis on roads with high silt loadings or significant visible accumulations. Each public entity has a monetary incentive to compete for the PM–10 efficient street sweepers, as the program is funded by MAG with a low cost share (5.7 percent) requirement. Also, the new street sweepers will either replace existing city-owned street sweeping equipment or contracted out services, or be added to existing street sweeper equipment/services. MAG's selection process includes PM–10 emissions reduction potential, based on the types of roads each jurisdiction is targeting for sweeping and how frequently they will be swept. This data will assist MAG in distributing the street sweepers to local jurisdictions in a way that maximizes the regional air quality benefits of the program. Plus, when the cities/towns/County are awarded PM–10 efficient street sweepers, their submittals will incorporate use factors that maximize emission reductions from this measure.

We believe that implementation of the PM–10 efficient street sweeper program is as expeditious as practicable. The funding necessary to purchase this equipment is available only over the course of several fiscal years and the purchase of the PM–10 efficient street sweepers can only proceed at the rate these funds become available.

South Coast's Rule 1186 requires any government or government agency which contracts to acquire street sweeping equipment or services for routine street sweeping on public roads that it owns and/or maintains, where the contract date or purchase or lease date is January 1, 2000 or later, to acquire or use only certified street sweeping equipment. The rule establishes street sweeper testing and certification procedures. Unlike Maricopa's strategy, Rule 1186 requires that PM–10 efficient street sweepers be used whenever street sweeping is contracted out as of January 2000, and it requires public agencies to replace their existing street sweeping equipment with PM–10 efficient equipment by attrition.

MAG's PM–10 efficient street sweeper program is being funded over the next 4 to 5 fiscal years, which may result in a greater number of street sweepers distributed in a shorter time frame than could be expected using South Coast's natural attrition approach. While it is possible that some cities/towns in Maricopa may continue to contract out for street sweeping services where PM–10 efficient sweepers may not be used, most do not contract for street sweeping. Furthermore, due to the fact that public entities will be competing for PM–10 efficient street sweepers funded by CMAQ dollars with only a low cost share requirement, we believe that the already limited reliance on contracted out services in Maricopa County will lessen as new PM–10 efficient equipment becomes available and that contractors will switch to PM–10 efficient equipment to meet new demand. In addition, MAG's program ensures that the cities/town/County develop plans for how the street sweepers will be used to maximize their emissions reduction potential. We, therefore, believe that overall the Maricopa program is equivalent to South Coast's Rule 1186.

e. Unpaved parking lots. This category includes emissions from re-entrained road dust from vehicle traffic in unpaved parking lots and windblown dust entrained from the disturbed surface of unpaved parking lots.

There are two principle ways to control emissions from unpaved parking lots: prohibit unpaved parking lots or treat the lot. MAG plan identified both: a prohibition on unpaved haul roads and parking or staging areas and surface treatment to reduce dust from unpaved driveways and parking lots. MAG plan, Table 5–2. The MAG plan identified one potentially more stringent measure from South Coast which controls fugitive dust from parking areas on construction sites. MSM Study, p. C–9 and 10. It did not identify any potential MSM for non-construction site unpaved parking lots. We believe this list is complete and propose to find that the MAG plan evaluates a comprehensive set of potential BACM and MSM for unpaved parking lots.

Most local jurisdictions in Maricopa County identified ordinances that require paving of new parking lots. In addition, MCESD Rule 310.01 requires owners/operators of an unpaved parking lot larger than 5,000 square feet to pave, apply dust suppressants, or apply gravel, according to the applicable rule

[14] Some street sweepers may be additions to, as opposed to replacements of, existing equipment.

standards/test methods. Section 303. Applicable standards include a 20 percent opacity standard, and an 8 percent silt content standard and/or a 0.33 oz/square foot silt loading standard. Section 303.2. MCESD Rule 310 applies the same stabilization requirements to parking lots on permitted facilities. Rule 310, section 302.1. Finally, many cities/towns have treated their own parking lots or required treatment of private lots below MCESD's thresholds.

In determining whether the MAG plan provides for the implementation of BACM for unpaved parking lots, we are also specifically considering whether the plan provides for the implementation of RACM for these sources.[15] In our FIP, we promulgated a RACM fugitive dust rule applicable to unpaved parking lots in the Phoenix PM–10 nonattainment area and thus it provides a starting point for determining whether the MAG plan measures for unpaved parking lots meet RACM. It is not necessary for the MAG plan measures to be identical to the FIP rule in order to meet the CAA's RACM requirement, but only that they provide for the implementation of RACM.[16] However, if the submitted measures for a particular source are identical to the FIP rule, we can determine without further analysis that the MAG plan has provided for RACM for that source.

MCESD requirements for unpaved parking lots found in Rule 310.01, section 303 are the same in terms of source coverage and applicable standards/test methods for unpaved parking lots as the FIP rule, with the only difference being that Rule 310.01 applies county-wide while the FIP rule applies strictly to sources located in the PM–10 nonattainment area. Rule 310.01 requirements are effective upon adoption and were adopted on February 2000, such that the timeframe for controls is equivalent to the FIP rule and is also as expeditious as practicable. In light of the fact that Rule 310.01 requirements are the same as the FIP rule requirements and MCESD's commitments to improve compliance and enforcement of Rule 310.01, we propose that the MAG plan provides for the implementation of RACM. Given additional MAG plan city/town commitments that collectively increase the stringency of control on unpaved parking lots, we propose that the MAG plan also provides for the implementation of BACM.

South Coast Rule 403 requires sources to apply dust suppressants to stabilize at least 80 percent of unstabilized surface area. Sources must comply with a 0 percent opacity property line limit. The MAG plan deems the respective requirements roughly equivalent to Rule 310. We believe that the addition of a silt loading/content standard for unpaved parking lots for sources covered under Rule 310 increases the rule's stringency to be at least equivalent to that of South Coast Rule 403. We, therefore, propose to find that the MAG plan correctly concluded that there are no more stringent measures in other State plans or used in practice elsewhere that are applicable to the Phoenix area.

f. Disturbed vacant lands. This category includes windblown fugitive dust emissions from disturbed surfaces of vacant lands. On vacant land, fugitive dust emissions are caused by virtually any activity which disturbs an otherwise naturally stable parcel of land, including earth-moving activities, material dumping, weed abatement, and vehicle traffic. 63 FR 15919, 15937 (April 1, 1998).

The MAG plan includes three suggested measures for controlling fugitive dust from vacant disturbed lands. The plan also identified controls on weed abatement operations and off-road racing as potential most stringent measures. We believe this list is complete and propose to find that the MAG plan evaluates a comprehensive set of potential BACM and MSM for disturbed vacant lands.

The MAG plan includes two MCESD rules that address BACM for vacant lots. Rule 310 requirements apply to vacant lots located at permitted facilities (including construction sites) and Rule 310.01 requirements apply to nonpermitted sources.[17] Rule 310 and Rule 310.01 requirements apply to both publicly and privately owned lots. Rule 310, section 302.3 and Rule 310.01, section 301 and 302.

In determining whether the MAG plan provides for the implementation of BACM for disturbed vacant land, we are also specifically considering whether the Plan provides for the implementation of RACM for these sources. See Footnote 15. In our FIP, we promulgated a RACM fugitive dust rule applicable to disturbed vacant land in the Phoenix PM–10 nonattainment area and thus it provides a starting point for determining whether the MAG plan measures for disturbed vacant lands meet RACM. It is not necessary for the MAG plan measures to be identical to the FIP rule in order to meet the CAA's RACM requirement, but only that they provide for implementation of RACM. See footnote 16. However, if the submitted measures for a particular source are identical to the FIP rule, we can determine without further analysis that the MAG plan has provided for RACM for that source.

Rule 310.01 requirements for vacant lots and open areas are virtually identical to the Phoenix FIP rule's requirements for these sources. Rule 310.01, however, is more broadly applicable. It covers vacant lots and open areas located anywhere in Maricopa County, in contrast to the Phoenix FIP rule, which only applies to lots in the Maricopa County portion of PM–10 nonattainment area (located in the eastern third of the County). Rule 310.01, sections 301 and 302. Unlike the FIP rule, Rule 310.01 also applies to partially developed residential, industrial, institutional, governmental, or commercial lots in Maricopa County, and any tract of land in the Maricopa County portion of the nonattainment area adjoining agricultural property. Rule 310.01, section 211.

Rule 310 requirements for vacant lots and open areas on permitted sources are more stringent than those in Rule 310.01, in that Rule 310 requires stabilization of all inactive disturbed surface areas on permitted facilities, regardless of their size. Rule 310, section 302.3. Rule 310 also contains requirements for weed abatement that closely resembles the Phoenix FIP rule's weed abatement requirements, except

[15] While a serious area PM–10 plan must provide for both the implementation of RACM and BACM, in determining whether such a plan provides for BACM implementation, we do not normally conduct a separate evaluation to determine if the measures also meet the RACM requirements of the CAA as interpreted by EPA in its General Preamble. See 57 FR 13540. This is because in our serious area guidance (Addendum at 42010), we interpret the BACM requirement, as generally subsuming the RACM requirement (i.e. if we determine that the measures are indeed the ''best available,'' we have necessarily concluded that they are ''reasonably available''). See Addendum at 42012–42014. Therefore, a separate analysis to determine if the measures also represent a RACM level of control is not necessary. However, in this particular case, we are proposing to withdraw the FIP rule in conjunction with our proposed approval of the MAG plan. In order to do this, we must determine under CAA section 110(l), that, among other things, withdrawing the FIP rule does not interfere with the RACM requirements in the CAA.

[16] The State may submit one or more control measures that collectively achieve a RACM level of control for a particular source, regardless of whether they apply the same strategy as our FIP rule. Furthermore, EPA's guidance indicates that a RACM evaluation includes considering ''the impact of the reasonableness of the measures on the municipal or other governmental entity that must bear the responsibility for their implementation.'' General Preamble at 13541.

[17] Permitted sources include any facility permitted by MCESD and are not limited solely to those facilities with earthmoving permits. Rule 310, section 102.

that Rule 310's threshold for coverage is more stringent.[18]

Vacant lots and open areas subject to Rule 310 and Rule 310.01 are required to meet the same surface stabilization standards/test methods as required in the Phoenix FIP rule.

In addition to requirements in Rule 310 and Rule 310.01, the MAG plan contains commitments made by several cities and towns to address vacant disturbed lots. For example, seven jurisdictions require or will require stabilization of disturbed vacant lots after 15 days of inactivity (as compared to Rule 310.01's 60-day compliance period); two (2) prohibit dumping of materials on vacant land; and two (2) will stabilize all city-owned vacant lots.

Because Rules 310 and 310.01 requirements are at least as stringent as the FIP rule requirements and MCESD has committed to improve compliance and enforcement of these rules, we propose that the MAG plan provides for the implementation of RACM on disturbed vacant land. Because these rules increase the number of lots subject to control thus collectively increasing the stringency of control on vacant disturbed lands, we propose that the MAG plan also provides for the implementation of BACM.

For its MSM comparison, the MAG plan identifies measures in Clark County (Las Vegas, Nevada) Rule 41 and South Coast Rule 403. See MSM Study, pp. C–11 and C–16,17. The plan concludes that neither measure is more stringent than the Maricopa measures because Rule 310 and 310.01 contain similar, equally, or more stringent requirements. We agree that the MCESD's rules are equally or more stringent.

We, therefore, propose to find that the MAG plan correctly concluded that there are no more stringent measures in other State plans or used in practice elsewhere that are applicable to the Phoenix area.

g. Unpaved roads. This category includes re-entrained dust from vehicle travel on unpaved roads. There are three classes of unpaved roads in the Maricopa nonattainment area: public roads, private roads that are publicly maintained (also referred to as minimally-maintained or courtesy grade), and private roads that are privately maintained.

The MAG plan includes three suggested measures for controlling fugitive dust from unpaved roads: Surface treatment to reduce dust from unpaved roads and alleys, traffic reduction/speed control plans for unpaved roads; and prohibition of unpaved haul roads. MAG plan, Table 5–2. The MAG plan did not identify any other State's measures that are more stringent than the ones already in the plan. We believe this list is complete and propose to find that the MAG plan evaluates a comprehensive set of potential BACM and MSM for unpaved roads.

In determining whether the MAG plan provides for the implementation of BACM for unpaved roads, we are also considering whether the Plan provides for the implementation of RACM for these sources. See Footnote 15. In our FIP, we promulgated a RACM fugitive dust rule applicable to unpaved roads in the Phoenix PM–10 nonattainment area and thus it provides a starting point for determining whether the MAG plan measures for unpaved roads meet RACM. It is not necessary for the MAG plan measures to be identical to the FIP rule in order to meet the CAA's RACM requirement, but only that they provide for implementation of RACM. See footnote 16. However, if the submitted measures for a particular source are identical to the FIP rule, we can determine without further analysis that the MAG plan has provided for RACM for that source.

As discussed below, we propose to find that the MAG plan provides for the implementation of RACM and BACM and the inclusion of MSM for unpaved roads.

Surface treatment to reduce dust from unpaved roads and alleys. The principle control for public unpaved roads and alleys is Rule 310.01, section 304, which requires all publicly-owned unpaved roads and alleys with 250 vehicles per day or more to be stabilized by June 10, 2000 and those with 150 vehicles per day or more to be stabilized by June 10, 2004.

Several cities have commitments that go beyond the requirements of Rule 310.01 for publicly-owned unpaved roads. For example, the City of Phoenix committed to, and recently accomplished, paving all 80 miles of its publicly-owned unpaved roads regardless of the level of vehicle travel. Phoenix Commitment, Measure 98–DC–7. Other cities, such as Tempe and Gilbert, have very few remaining miles of public unpaved roads/alleys. See Tempe Commitments, Measure 98–DC–7 and Gilbert Commitments, Measure 98–DC–7.

For private roads, Rule 310, section 308.6, requires that easements, rights-of-way, and access roads for utilities (electricity, natural gas, oil, water, and gas transmission) that receive 150 or more VPD must be paved, chemically stabilized, or graveled in compliance with the rule's standards.

Private unpaved roads are scattered throughout Maricopa County, within both County and city jurisdictions. A survey performed for us of unpaved roads in Maricopa County determined that the great majority of identified unpaved road mileage consists of privately-owned roads that receive minimal maintenance by the Maricopa County Department of Transportation (MCDOT).[19]

MAG and MCDOT have committed to pave County minimal maintenance roads within the nonattainment area that currently exceed 150 ADT and meet criteria to become public highways, using $22 million from Congestion Management/Air Quality and MCDOT funds.[20] MAG Commitment; Maricopa County Commitment, 1999 Revised Measure 17. This program will pave an estimated 60 miles of unpaved roadways in fiscal years 2001–2003 which is approximately 20 percent of the privately-owned, publicly-maintained County-jurisdiction roads and 40 percent of vehicle miles traveled on these roads. Maricopa County has also committed to continue to evaluate other roads for funding when traffic levels increase above 150 vehicle trips per day. Maricopa County Commitment, 1999 Revised Measure 17. We interpret this commitment to apply to any private roads within County jurisdiction, whether they currently receive minimal maintenance or not.

As the County evaluates roads for paving, it may make exceptions to its commitment to pave roads with vehicle trips that exceed 150 ADT. The County's evaluation process takes into account whether a road meets the proper criteria to become a public highway and whether estimated costs of paving are excessive (greater than $500,000 per mile).[21] When MCDOT identifies a road that meets these criteria (i.e. the road can be declared a public highway and

[18] Rule 310 requires any earthmoving operation that disturbs 0.1 acre or more to have a dust control plan, including weed abatement by discing or blading, whereas the Phoenix FIP rule weed abatement requirements only apply to disturbances equal to or greater than 0.5 acres. Rule 310, section 303.

[19] Pacific Environmental Services, ''Survey for Fugitive Dust Emission Sources,'' April 15, 1999.

[20] Congestion Management/Air Quality (CMAQ) funds are federal transportation funds awarded to certain nonattainment areas for congestion management or air quality-transportation projects such as paving unpaved roads.

[21] A private road begins to bear other than local traffic through extensions of other nearby public roads or the construction of an indirect source that attracts external drivers using the road as a short cut. See Maricopa County Commitments, 1999 Revised Measure 17.

costs are not excessive), it will recommend that the Board of Supervisors open and declare the road a public highway.

Because BACM implementation properly takes costs into account, we believe that MCDOT's criteria for selecting private roads to pave are suitable in the context of a strategy to implement BACM and will result in control of the great majority of high traffic unpaved roads. Although available information on private roads in city jurisdictions is limited, our existing information suggests that a typical privately owned unpaved road has low ADT.[22] As a result, we believe that the vast majority of private unpaved roads do not need to be controlled in order for us to determine that the MAG plan provides for the implementation of BACM for unpaved roads for the annual standard.

Traffic reduction/speed control plans for unpaved roads. Some jurisdictions committed to evaluate this measure. Two jurisdictions committed to posting 15 mph speed limit signs on private and public unpaved roads and access ways; one jurisdiction has posted 15 mph speed limits in all alleys. See MAG plan, Table 10–9. Also, under Rule 310, owners/operators of unpaved haul roads and utility roads who comply with the rule by limiting vehicle trips to 20 per day, must also limit vehicle speeds to 15 mph. While speed limit controls are only being implemented to a limited extent, we believe the plan measures to pave or otherwise stabilize unpaved roads in the Phoenix PM–10 nonattainment area establish the critical commitments for the implementation of RACM and BACM. This is because road stabilization ensures emission reductions whereas speed limits may or may not be observed.

Prohibition of unpaved haul roads. Rule 310 requires that unpaved haul roads meet both a 20 percent opacity standard and a silt content or silt loading standard. Rule 310, section 302.2. We propose to find that this requirement is sufficient for the implementation of BACM for these roads. We believe requiring compliance with both of these standards ensures that the BACM applied will have a stabilizing effect.

Evaluation of unpaved road measures in other areas found none that are more stringent than the measures for unpaved roads in the MAG plan. MAG plan, Table 10–7. We agree and propose to find that there are no other more stringent measures for unpaved roads than are already included in the MAG plan.

Please see the TSD section ''Implementation of BACM and Inclusion of MSM for Unpaved Roads'' for a more detailed discussion of our proposed findings.

h. Construction sites and activities. Sources of fugitive dust emissions at construction site sources include land clearing, earthmoving, excavating, construction, demolition, material handling, bulk material storage and/or transporting operations, material track out or spillage onto paved roads (which we have addressed in the paved road section), and vehicle use and movement on site (e.g., the operation of any equipment on unpaved surfaces, unpaved roads and unpaved parking areas). Windblown emissions from disturbed areas on construction sites are also a source of PM–10. Construction operations, which are mostly various forms of earthmoving, represent some 90 percent of the emissions in this source category.

The suggested measures in the MAG plan are actually various means of improving compliance with controls as opposed to new controls for construction sites. The controls for construction sites are found in MCESD's fugitive dust rule, Rule 310, revised on February 16, 2000.

Rule 310's requirements, effective on February 16, 2000, apply to any source required to obtain a permit under Maricopa County rules, which includes earthmoving operations of 0.10 acre or more and sources subject to Title V permits,[23] Non-Title V permits, or General Permits. In addition to rule requirements for fugitive dust sources located at any permitted source, Rule 310 requires that a Dust Control Plan (DCP) be submitted for any earthmoving operations of 0.10 acre or more, and that the DCP be approved prior to commencing any dust generating operation. The rule's definition of a dust generating operation includes any activity capable of generating fugitive dust including land clearing, earthmoving, weed abatement by discing or blading, excavating, construction, demolition, material handling, storage and/or transporting operations, vehicle use and movement, the operation of any outdoor equipment or unpaved parking lots. For other permitted sources, Rule 310 requires that a Dust Control Plan (DCP) be submitted and approved prior to commencing any routine dust generating activity, defined as any dust generating operation which occurs more than 4 times per year or lasts 30 cumulative days or more per year.[24]

Specific Rule 310 requirements include:

- a 20 percent opacity requirement for any dust generating operation
- wind event control measures
- implementation of control measures before, after and while conducting any dust generating operation, including weekends, after work hours and holidays
- required control measures and standards for:
- unpaved parking lots
- unpaved haul/access roads
- disturbed open areas and vacant lots
- bulk material hauling
- bulk material spillage, carry-out, erosion and track out
- open storage piles
- weed abatement by blading or discing a requirement in dust control plans for at least one primary and one contingency control measure for all fugitive dust sources; the contingency measure is to be immediately implemented if the primary control measure proves ineffective

In order to comply with the rule's 20 percent opacity standard and dust control plan requirements for implementing primary and/or contingency control measures for earthmoving activities,[25] sources need to apply one or more controls, which in most cases includes applying water or another dust suppressant before and during operations. Inactive disturbed surfaces must be stabilized to meet at least one of the rule's stabilization standards (*e.g.* visible crusting, 10 percent rock cover, etc.). Unpaved roads and unpaved parking lots must also be stabilized to meet both a 20 percent opacity standard and a silt content/loading standard.[26] Test methods associated with stabilization and

[22] Among the over 100 segments of unpaved privately-owned and maintained roads that were identified in the PES survey, the contractor estimated, using aerial photographs, that only 6 of these have ADTs that exceed 150. Tube counts, which are more accurate than other methods to estimate ADT, were not conducted on these roads.

[23] Title V permits are operating permits required by Title V of the Clean Air Act for major stationary sources and certain other stationary sources.

[24] This is in addition to the requirement to submit a DCP for any earthmoving operation that disturbs 0.10 acre or more even if the operation is subject to Title V or other permitting requirements.

[25] Earthmoving operations include cutting and filling, grading, leveling, excavating, trenching, loading or unloading of bulk materials, demolishing, blasting, drilling, adding to or removing bulk materials from open storage piles, back filling, soil mulching, landfill operations, or weed abatement by discing or blading.

[26] Unpaved roads must meet a 6 percent silt content standard or, alternatively, a 0.33 oz/ft^2 silt loading standard, while unpaved parking lots must meet an 8 percent silt content standard or, alternatively, a 0.33 oz/ft^2 silt loading standard.

opacity standards are contained in Appendix C, which was submitted with Rule 310.

The February 2000 revisions to Rule 310 that have increased the rule's stringency include the addition of specific work practice standards, the addition of stabilization standards and test methods for unpaved surfaces, and modifications to the opacity test method (adding an alternative opacity test method for unpaved roads and unpaved parking lots and modifying the opacity test method for other sources). We believe that the new and/or revised standards/test methods provide for a greater degree of control than under the previous SIP-approved version of Rule 310.

In addition to these Rule 310 revisions, MCESD has made three enforceable commitments to further strengthen requirements for construction sites that must be met by July 2001. These commitments, which all are part of Revised Measure 6 in Maricopa County's commitments, are to:
1. Research and develop a standard(s) and test method(s) for earthmoving sources, considering our field research, that are enforceable and meet BACM requirements on stringency and source coverage.

Currently, activities on construction sites must meet an opacity standard of 20 percent. If research on the standards and test methods find problems with the existing opacity standard's enforceability, feasibility, or stringency for some or all earthmoving operations, MCESD will revise the rule to modify the existing opacity test method to address the problems as warranted or adopt a new standard(s) and test method(s) to deal with any problems that cannot be addressed by modifying the opacity test method;

2. Research, develop and incorporate additional requirements for dust suppression practices/equipment for construction activities into dust control plans and/or Rule 310;

3. Revise the sample daily recordkeeping logs for new and renewed Rule 310 permits to be consistent with rule revisions and to provide sufficient detail documenting the implementation of dust control measures required by Rule 310 and the dust control plan. Distribute sample log sheets with issued permits and conduct outreach to sources.

The first enforceable commitment addresses our concern that the existing opacity standard and test method for earthmoving operations may not always be sufficient to control construction site dust to BACM levels. MCESD has already revised the opacity test method to deal partially with this concern (see Rule 310, Appendix C), but we believe that additional standards/test methods are needed to fully assure that sources are effectively controlled. We have already sponsored a field study to address this issue and are considering additional field work in Summer, 2000. We believe that additional time is needed for Maricopa County to investigate options in coordination with us, and then revise the rule. Therefore, a commitment is the appropriate method of addressing this issue.

The second enforceable commitment addresses our concern that dust control plans (DCPs) lack specific criteria for dust suppressant application. For example, a source engaged in grading or cut-and-fill earthmoving for a multi-acre project may choose to comply with Rule 310 by applying water. However, neither the rule nor DCPs establishes minimum criteria for the number of water trucks/water application systems and water truck capacity for any given size construction site or a ratio of earthmoving equipment to water trucks. The rule also does not contain a pre-wetting requirement, although research may show this to be necessary to successfully control dust on certain soil types.

Establishing criteria for dust control is complicated by variations in soils, meteorological conditions, equipment size/use, project phase, and level of activity. All these factors can impact the amount of water (or other controls) needed to control fugitive dust on a particular site on a particular day, making it difficult to establish criteria that apply to all sites at all times. This explains why more time is needed for MCESD to develop criteria to address a multitude of circumstances.

The third enforceable commitment addresses our concern that while Rule 310 currently contains an acceptable recordkeeping requirement, a more specific recordkeeping requirement would help improve compliance. Currently neither the rule nor DCPs specify what information should be included in a daily log. MCESD has committed to revising and distributing to permitted sources daily recordkeeping log sheets to provide sufficient detail documenting the implementation of dust control measures.

Based on our evaluation of revised Rule 310 and the additional commitments made by MCESD, we propose to find that the rule and commitments together include a comprehensive set of BACM level controls for construction sites. The rule is comprehensive in scope in that each dust source is subject to a set of requirements under Rule 310 (*e.g.* storage piles, dirt trackout, haul truck loads, disturbed areas, earthmoving operations). In addition, the Rule 310 requirements are sufficiently stringent to provide for the implementation of RACM and BACM, with the exception of certain aspects of the rule that are addressed in the commitments made by MCESD. Thus, between the submitted rule requirements and commitments, we propose to find that the MAG Plan meets the CAA's RACM and BACM requirements for construction sites.

The MAG plan identifies potentially more stringent construction site fugitive dust measures either in or under consideration for inclusion in others SIP. See MSM Study, Table 1–2 and Table 3–1.

Most of the potential MSMs are provisions in South Coast fugitive dust rule, Rule 403. The MAG plan indicates that each of the South Coast and MCESD's rules are more stringent than the other in certain respects. MAG plan, p. 10–35. The MAG plan acknowledges that Rule 403 contains more stringent control measure requirements than those imposed by Rule 310. For example, Rule 403 requires that water be applied to soil not more than 15 minutes prior to moving the soil and requires open storage piles to be watered twice per hour or covered. However, the MAG plan indicates that Rule 310's 20 percent opacity limit is generally more restrictive than Rule 403's property line standard because a 20 percent opacity fugitive dust plume typically disperses to zero visibility within 50 feet downwind of a source. MSM Study, p. C–12. The MAG plan concludes that, on balance, Rule 310 is equally stringent compared to Rule 403's construction site requirements. We agree with this conclusion with the caveat that we believe Rule 310 and/or dust control plans require additional control measures for dust suppression. This caveat is addressed in the MAG plan's commitment to research, develop and incorporate additional requirements for dust suppression practices/equipment for construction activities into dust control plans and/or Rule 310.

The MAG plan does not discuss any construction site measures from other areas as potentially more stringent measures. Based on our work with the Las Vegas area, we have identified requirements in Clark County Health District permits that are potentially more stringent than Maricopa County's

measures.[27] These requirements include stand tanks on projects that are 10 acres or more in size, an additional, separate water truck when using a trencher or when screening, a separate water truck or pull during landscaping, maintaining all stockpiles in a moist condition, *etc.*

We propose to find that Rule 310's existing provisions and Maricopa County's second enforceable commitment to research, develop and incorporate additional requirements for dust suppression practices/equipment into Rule 310 and/or DCPs are consistent with Clark County's requirements.

We have also identified a requirement in Imperial County Regulation VIII that is potentially more stringent than Maricopa County's measures. Imperial County Regulation VIII requires that water be applied 15 minutes prior to handling or transferring bulk material, chemical/physical stabilization, or sheltering/enclosure of the operation and transfer line. We propose to find that Maricopa County's second enforceable commitment to research, develop and incorporate additional requirements for dust suppression practices/equipment into Rule 310 and/or DCPs is consistent with Imperial County's requirements.

For these reasons, we propose to find that the MAG plan provides for the inclusion of the MSM applicable to the Phoenix area for construction sites and activities.

i. Agricultural sources. The agriculture source category covers all dust generating activities and sources on farms and ranches in the Maricopa nonattainment area. These activities and sources include land planning, tilling, harvesting, fallow fields, prepared fields, field aprons, and unpaved roads.

Maricopa County is rapidly urbanizing with agricultural land being converted into other uses at a rate of approximately 6,000 acres per year. Cathy Arthur, MAG, December, 1997. Despite the conversion of agricultural lands to other uses, agricultural sources are expected to continue to contribute to PM–10 emissions for the foreseeable future, especially in relation to the PM–10 24-hour standard.

The MAG plan identifies a number of potential BACM for agricultural sources. MAG plan, pp. 5–66 thru 5–72 and pp. 6–12 through 6–13.

In 1998, Arizona passed legislation establishing an Agricultural Best Management Practices (BMP) committee for the purpose of adopting by rule by June 10, 2000, an agricultural general permit specifying BMPs for regulated agricultural activities to reduce PM–10 emissions in the Maricopa PM–10 nonattainment area. The Committee also is required to adopt and implement an education program by June 10, 2000, and affected agricultural sources are required to implement at least one BMP by December 31, 2001. A.R.S. 49–457.A–H, M. On June 29, 1999, we approved this legislation as a SIP revision meeting the requirement for the implementation of RACM in 189(a)(1)(C) and at the same time withdrew our commitment to adopt RACM controls for agricultural that we included in the 1998 PM–10 FIP. 64 FR 34726.

The MAG plan relies on the State's commitment in A.R.S. 49–457 to adopt and implement BMPs to meet the requirement to provide for the implementation of BACM for agricultural sources. MAG plan, p. 7–156 and Letter from ADEQ to EPA, September, 1998, submitting the commitment as a SIP revision. The plan also relies on the statutory commitment to meet the MSM requirement in CAA section 188(e). MAG plan, p.10–25.

Arizona's statutory BMP commitment is similar to the commitment we made in our 1998 PM–10 FIP. 63 FR 41326 (August 3, 1998). As part of the RACM demonstration in the FIP, we promulgated a commitment, codified at 40 CFR 52.127, to ensure that RACM for agricultural sources will be expeditiously adopted and implemented. For agricultural sources, the State is using a similar strategy to address the RACM, BACM and MSM requirements.

We propose to find that the State's commitment to adopt and implement agricultural BMPs adequately addresses requirement to implement BACM and include MSM. The potential BACM explicitly identified in the MAG plan will be considered during the BMP development process.

We have, beginning with the proposed rulemaking for our 1998 PM–10 FIP and culminating in Ninth Circuit litigation on both the FIP and our SIP approval, explained at length our reasoning that a commitment to implement PM–10 controls beginning in June 2000 for agricultural fields and aprons in the Phoenix PM–10 nonattainment area rather than the immediate implementation of fully-developed regulations for those sources meets the RACM requirement in CAA section 189(a)(1)C). See 63 FR 15920, 15935–15936 (April 1, 1998); 63 FR 41332–41334; 63 FR 71817. See also Brief for Respondents in *Ober* v. *Browner,* No. 98–71158, at 43–59 (9th Cir., filed Oct. 2, 1998) (petition for review challenging EPA's FIP commitment to adopt and implement RACM for agricultural sources), and Brief for Respondents in *Ober* v. *Browner,* No. 99–71107, at 16–40 (9th Cir., filed Aug. 26, 1999) (petition for review challenging EPA's approval of the State's commitment to adopt and implement agricultural BMPs as meeting the RACM requirement of the CAA).

In the context of this proposed action, our reasoning in short is that a legally binding commitment—embodied in the State statute establishing a committee that is required to adopt a general permit specifying BMPs and identifying specific deadlines for their implementation—meets the statutory requirement in CAA section 189(b)(1)(C) since it is a ''provision to assure that best available control measures'' are implemented by a fixed deadline. While in preparing the FIP, we reviewed measures adopted by the South Coast for the control of PM–10 emissions from agricultural sources, we concluded that agricultural sources in the United States vary by factors such as regional climate, soil type, growing season, crop type, water availability, and relation to urban centers, therefore, each PM–10 agricultural strategy is uniquely based on local circumstances. As a result, we could not, without further analysis, conclude that the South Coast controls should be immediately implemented in the Maricopa area.

Furthermore, we determined that the goal of attaining the PM–10 standards in Maricopa County with respect to agricultural sources would be best served by engaging all interested stakeholders in a joint comprehensive process on the appropriate mix of agricultural controls to implement in Maricopa County. We stated our belief that this process, despite the additional time needed to work through it, will ultimately result in the best and most cost-effective controls on agricultural sources in the County.

While A.R.S. 49–457 does not use the term ''best available control measure,'' its definition of BMPs is consistent with the criteria in EPA's guidance. ''Best management practices'' are defined in A.R.S. 49–457.N.3 as ''techniques verified by scientific research, that on a case by case basis are practical, economically feasible and effective in reducing PM–10 particulate emissions from a regulated agricultural activity.'' The broad definition of BMPs in the Arizona statute authorizes the BMP committee to adopt measures that will comply with our definition of BACM.

[27] These requirements are not in Clark County's fugitive dust rule, but rather are required practices in dust control permits.

Moreover, as noted above, the statute provides for BMP implementation that begins with an education program by June 10, 2000 and culminates in full implementation of the BMPs by December 31, 2001. [28]

Similarly, we have concluded that the definition of BMPs in the Arizona statute is broad enough to authorize the BMP committee to adopt measures that meet the level of control in the requirement to include MSM in CAA section 188(e) as we propose to interpret it in this proposed action. In reviewing measures in other SIPs and/or that have been adopted elsewhere, MAG determined that cessation of high wind tilling and soil erosion control plans were the most stringent measures available that had potential application for agricultural sources in Maricopa County. MAG plan p. 10–47. These measures are included in South Coast Rule 403 which requires PM–10 controls for all fugitive dust sources, including agricultural sources. In December 1998, South Coast adopted a set of conservation practices for agricultural sources to use to reduce fugitive dust. These practices were developed in consultation with affected stakeholder groups. See Guide to Agricultural PM–10 Dust Control Practices. The BMP task force will consider these measures during the development of the BMPs. MAG plan p. 10–47. After the BMPs and supporting technical documents are submitted to EPA, we will review them to determine if their level of control is as stringent as the South Coast rule or adequately justifies why such level would not be feasible in the Maricopa area.

As discussed elsewhere in this TSD, we propose to interpret section 188(e) to require implementation of MSM as expeditiously as practicable. For the reasons stated above, in our FIP, and in our approval of the State legislation as meeting the RACM requirements of the CAA, we conclude that the implementation schedule in the State statute meets that test. Finally, we conclude that the commitment in the State legislation meets the requirement that ''the plan *include*[s] the most stringent measures * * *.'' Emphasis added.

j. Residential wood combustion. The residential wood combustion (RWC) category includes emissions from the burning of solid fuel in residential fireplaces and woodstoves as well as barbecues and firepits.

Measures to control PM–10 from residential woodburning include public education program, woodburning curtailment programs, retrofit requirements and restrictions or bans on the installation of woodburning stoves and/or fireplace. In total the MAG plan list 11 potential BACM and 10 potential MSM. MAG plan Tables 5–2 and 1–7. We believe this list is complete and propose to find that the MAG plan evaluates a comprehensive set of residential woodburning measures.

MCESD Rule 318, Approval of Residential Woodburning Devices, establishes standards for the approval of residential woodburning devices that can be used during restricted-burn periods. Maricopa County's Residential Woodburning Restriction Ordinance provides that restricted-burn periods are declared by the Control Officer when the Control Officer determines that air pollution levels could exceed the CO standard and/or the PM standard (150 $\mu g/m^3$). We approved Rule 318 and an earlier version of the ordinance (revised April 21, 1999) as providing for the implementation of RACM. See 64 FR 60678 (November 8, 1999).

MCESD revised the ordinance on November 17, 1999 to allow the Control Officer to declare restricted-burn periods when the particulate matter pollution levels could exceed the ''particulate matter no-burn standard'' of 120 $\mu g/m^3$. In addition, A.R.S. section 9–500.16 and A.R.S. section 11–875 (1998) require cities and the County to adopt by December 31, 1998, an ordinance that prohibits the installation or construction of a fireplace or wood stove unless it is a fireplace with a permanently installed gas or electric log insert, a fireplace or wood stove that meets EPA's Phase II wood stove requirements, or a fireplace with a wood stove insert that meets EPA's Phase II stove requirements. Most jurisdictions have adopted or have committed to or indicated that State law requires them to adopt the required ordinance. See MAG Plan, pp. 7–55 to 7–64.

With these additional controls, the overall residential woodburning restriction program is strengthened and goes beyond the existing RACM-level program. Both strengthening and expanding existing programs are key criteria for demonstrating the implementation of BACM. See Addendum at 42013. Where the MAG plan has rejected potential BACM, it provides a reasoned justification for the rejection.

The MAG plan identified a number of potential MSM for residential wood combustion. Except for the adoption of a lower threshold for calling no burn episodes, the plan does not provide for the adoption of any of these measures but provides reasoned and acceptable justifications for their rejection. Therefore, we propose to find that the MAG plan provides for the inclusion of MSM.

k. Secondary ammonium nitrate. Secondary ammonium nitrate is formed by a chemical reaction in the atmosphere between oxides of nitrogen (NO_X) and ammonia (NH_3). Ninety percent of NO_X comes from motor vehicle exhaust (both on and off road) and 99.9 percent of NH_3 comes from animal wastes. See MAG plan, Table 3–1.

Two potential BACM were identified for ammonia nitrate control: Reduce emissions of ammonia and nitrates from agricultural operations and require animal waste management plans for farms/ranches with more than 50 animals. The first measure involves tilling in of manure used as fertilizer within 48 hours of application. MAG plan, Table 6–1, measure 97–AG–3. The second measure would focus on reducing ammonia emissions from livestock waste during the winter months when conditions are most conducive to ammonium nitrate formation. MAG plan, Appendix B, Exhibit 5, p. 5–70. For MSM, no measures were found that required animal waste management plans for farms or ranches and no other measures were identified. See MAG plan, Table 10–7. A large number of measures that could reduce NO_x emissions were identified and have been evaluated for on-road motor vehicles and nonroad engines. We believe these list of measures is complete and propose to find that the MAG plan evaluates a comprehensive set of potential controls for ammonium nitrate.

Data from earlier studies indicate that ammonia emissions would need to be reduced by 80 percent to have an appreciable impact on ambient concentrations of ammonium nitrate. MAG plan, Appendix B, Exhibit 5, p. C–1. Essentially all ammonia emissions in the inventory are from livestock and not from the application of manure to agricultural fields. As result, controls on the application of manure are very unlikely to have any impact on PM–10 levels the Phoenix area and therefore are not technologically feasible. [29] The estimated reduction in ammonia from

[28] Of course, once adopted and submitted to EPA as a SIP revision, the individual BMPs will have to be evaluated to determine if they comply in their specifics with the BACM requirement. Here we need only determine that the Arizona statute provides sufficient authority to assure that BACM will be implemented by June 10, 2000.

[29] We consider a measure technologically feasible for an area only if it has the potential to reduce emissions in manner that reduces ambient concentrations in the area.

implementing waste management plans is 30 percent, far short of the 80 percent needed to show impact on PM–10 levels (MAG plan, Appendix B, Exhibit 5, p. 5–72), so we also believe that this measure is currently not technologically feasible.

Other than the on-road vehicle and nonroad engine categories, we do not believe that there are any other sources of NO_x that should be called significant in terms of contributing to ammonium nitrate levels.

Because the MAG plan includes an extensive number of measures for controlling NO_x sources and no measure are identified for the control of ammonia as technologically feasible, we propose to find that the MAG plan provides for the implementation of RACM and BACM and for the inclusion of MSM for secondary ammonium nitrates.

l. MCESD's commitments to improve compliance and enforcement of its fugitive dust rules. MCESD has committed to expanding and improving the compliance and enforcement program for its fugitive dust rules. These commitments are found in Maricopa County, 1999 Revised Measure 6, adopted December 15, 1999. A narrative description of the commitments and other program changes are found in Appendix IV, Exhibit 3 to the MAG plan's modeling TSD. MCESD has also committed to continuing to improve Rule 310 and Rule 310.01. These commitments are described in section F.3.g. ''Construction Sites and Activities.''

These improvements include increased public outreach and education, increased funding and staffing, increased inspection frequency, revised enforcement policies, and commitments to program evaluations and improvements. They address many of the program areas that are key to improving compliance and we believe form a solid program for increasing the effectiveness of the County's fugitive dust program.

Staffing. By the end of January, 2000, the inspection staff will increase to eight inspectors, 1 supervisor, 1 aide and 2 enforcement officers. By April, 2000, the County Attorney's office will hire an attorney to expedite civil litigation and to assist with prosecuting Class One Misdemeanor cases. A coordinator will be added to the Small Business Environmental Assistance Program to assist smaller builders and construction companies and to help develop and implement education programs. In total, resources devoted to the fugitive dust program will be 15 positions, a 25 percent increase over previous levels. This level of staffing is in contrast to the less than 1 staff position devoted to the program in 1996.

After reaching the committed staffing level, MCESD will review the program in March 2000 to evaluate its effectiveness and the potential need to add more staff.

Organization. A new enforcement section has been created under the direct supervision of the MCESD Director/Air Pollution Control Officer (APCO). This position streamlines enforcement by reducing senior management review and approval of enforcement actions and allows enforcement officers to submit directly to the APCO's desk all enforcement actions requiring APCO approval.

In addition, inspectors will be located in two new regional offices to provide quicker response times to dust-related complaints and allow more time in the field.

Funding. Revenue for fugitive dust program is estimated at $1.12 million from annual earth moving permit fees, a $772,000 increase over the previous level that is due to the permit fee increases adopted in 1998.

Inspection program. MCESD will develop by April, 2000 inspection priorities for vacant lots and unpaved parking lots that consider lot size and number of sources, with larger lots being inspected first and smaller lots in succeeding years. A number of cities have municipal programs to address these sources; therefore, the Department will initially direct its inspections to cities lacking such programs. It will also track the city plans that are required by State statute to stabilize target unpaved roads, alleys and unpaved shoulders.

MCESD has also increased inspection rates and improved procedures for permitted sources such as construction sites including:

- Proactively inspecting sites larger than 10 acres, 3 to 6 times per year and inspect smaller sites once within 30 days of project start date.
- Scheduling weekend inspections randomly once per month.
- Providing a shortened complaint response time with a goal of 8 hours for high priority complaints and maintaining the current goal of 24 hours for others.
- Revising standard operating procedures and checklists for fugitive dust inspections to be consistent with the revised rules.
- Revising inspection standard operating procedures to have inspectors check for records and inspect fugitive dust sources at permitted stationary sources.

Enforcement program. By April 2000, MCESD will revise it fugitive dust enforcement policy to

- include guidelines for initiating various enforcement actions
- include guidelines for reinspecting define timely and appropriate action by laying out guidelines for which type of violation is appropriate for specific enforcement actions and for the time frames for escalating enforcement actions when appropriate
- identify priority violations
- include guidelines for when to seek penalties reflecting the economic benefit of noncompliance, if feasible
- include guidelines for seeking and determining higher penalties for repeat violators
- guidelines for inspectors to handle predetermined citation categories form observation to justice court Enforcement action options include issuing an Order of Abatement, filing a Misdemeanor Complaint in Justice court, or asking the County Attorney to seek a civil penalty in Superior Court.

Inspectors will handle certain predetermined citation category violations and will be responsible for case development from observance of a violation to filing of the actual citation in the justice court. Having the inspectors handle routine cases will enable the enforcement officers to work on resolving cases involving more serious and complicated violations.

Public outreach/education. Public outreach and education consists of staff training, educating the regulated parties, developing good working relationships with other involved parties such as the cities, and making the program more understandable. Increased education of both inspectors and the regulated industry increases compliance.

Among the public outreach and education efforts will be:

- Inspector training on case development.
- Inspector training on revised test methods.
- City staff training on preparing inspection reports and notices of violation.
- On-going training at the local community college.
- Making information available on MCESD website.
- Distribution of information through city building departments and other sources.

Program evaluation and tracking. MCESD will track the number of inspections, number and type of enforcement actions, amount of penalties assessed, and amount of penalties collected. It will also conduct mid-year reviews of the program in

September, 2000 and again in March 2001 to evaluate progress and future needs.

G. Attainment Date Extension

1. Apply for an Extension

We interpret this requirement to mean that the State must apply in writing for an extension and that the extension request must accompany the SIP submittal containing the demonstration that the area will attain by the most expeditious alternative date practicable. The public must be provided reasonable notice and a public hearing on the request before it is submitted.

MAG, as the lead air quality planning agency for the Phoenix metropolitan area, formally requested an extension of the PM–10 nonattainment deadline to December 31, 2006 based on documentation in Chapter 10 of the MAG plan and Appendix C, Exhibit 5 of the MAG plan. MAG plan, p. 10–2. This extension request is an integral part of the MAG plan and was subject to public hearing along with the rest of the plan.

2. Demonstrate the Impracticability of Attainment by December 31, 2001

In order to demonstrate impracticability, the plan must show that the implementation of BACM (as determined by our guidance) on significant sources categories will not bring the area into attainment by December 31, 2001.

To demonstrate the impracticability of attainment by 2001, the MAG plan derived from the air quality modeling a change in PM–10 concentrations per change in emissions using the modeled concentration for the year 2006 and observed concentration for the year 1995 at Greenwood monitor and the overall change in emissions between the two years. MAG plan, p. 8–10. Using this information, the plan estimates that the annual concentration in 2001 will be 52.21 $\mu g/m^3$ after implementation of BACM. Because the projected 2001 annual concentration is still above the 50 $\mu g/m^3$ annual NAAQS, the MAG plan concluded that it was impracticable to attain by 2001.[30] MAG plan, p. 8–10.

Based on our analysis of control measures in the MAG plan as described in the preceding sections, we propose to find that the MAG plan provides for implementation of BACM as required by CAA section 189(b)(1)(C). Based on the modeling analysis in the plan, we also propose to find that the MAG plan also demonstrates that attainment by 2001 is impracticable with the implementation of BACM.

3. Complied With Commitments and Requirements in the SIP

We interpret this criterion to mean that the State has implemented the control measures in prior SIP revisions it has submitted to address the CAA requirements in sections 172 and 189 for PM–10 nonattainment areas. It does not include measures being approved in this action.

The two SIP revisions that Arizona has submitted to address PM–10 are the 1991 MAG moderate area plan and the 1997 microscale plan.

The 1991 MAG plan includes a broad range of measures to address PM–10 including controls for constructions sites, paved road, unpaved roads, unpaved parking areas, vacant lots, and woodburning. The plan also included reasonably available control technology for stationary sources and a wide range of transportation control measures. The implementation of the measures in this plan are described in the MAG plan at pp. 10–10 to 10–25. The principal controls in this plan were Rule 310 and the County woodburning ordinances. The plan also contained a large number of commitments from the local jurisdictions to various measures. Most of the measures represented ''business as usual'' actions by the jurisdictions to do infrastructure (*e.g.,* road) improvements, to implement existing building codes or take actions already underway for the carbon monoxide plan. MAG plan, pp. 10–13 through 10–24.

The 1997 Microscale plan focused on fugitive dust sources such as construction sites, vacant lots, unpaved roads, unpaved parking lots, and agriculture. The principal controls in this plan were improvements to the implementation of Rule 310 and coordination with the cities to improve fugitive dust control. Implementation of the measures in the Microscale plan are discussed in Maricopa County commitments, 1998 Revised Measure 6.

From available information in the MAG plan, we believe that the commitments and requirements in these plans have been met. We, therefore, propose to find that the State has complied with the requirements and commitments in its implementation plan.

4. Include the Most Stringent Measures

The MAG plan excluded no source categories of directly-emitted PM–10 from its MSM analysis instead simply started its evaluation of MSM by identifying candidate measures for any source category of PM–10 present in the Phoenix area. MAG plan, p. 10–25. To identify candidate MSM, MAG's contractor Sierra Research interviewed people knowledgeable about PM–10 controls, reviewed the documents used to develop the candidate list of BACM and obtained copies of current air quality control measures from most other States including both SIP and non-SIP measures. MSM Study, p. 1–2.

After a comprehensive list of candidate MSM was developed, each measure was screened against the corresponding Maricopa measure to identify those with more restrictive emission limitations, more extensive list of affected sources, fewer exemptions, and/or one or more substantive regulatory provisions not found in the Maricopa measure. The remaining MSM were grouped by source category and were either included in the plan or a reasoned justification for rejecting the measure was provided. MSM study, Table 3–1 and MAG plan, p. 10–46.

We propose to find that the MAG plan demonstrate to our satisfaction that it includes the most stringent measures that are included in the implementation plan of any State, or are achieved in practice in any State, and can be feasibly be implemented in the Phoenix area.

We have discussed identification and adoption of MSM and the rejection of any MSM for each category deemed significant for BACM earlier in this preamble. The MAG plan identifies three MSMs for categories considered de minimis in the BACM analysis. These categories are cattle feed lots, incinerators, and charbroilers.

Cattle feed lots: MCESD Rule 310.01 requires that owners/operators of commercial feedlots and/or livestock areas apply dust suppressants, apply gravel, or install shrubs and/or trees within 50 to 100 feet of animal pens. The MAG plan identifies South Coast Rule 1186 requirements for livestock operations as a potentially more stringent requirements than Rule 310.01. However, the two rules control different sources at commercial feedlots/livestock areas. South Coast Rule 1186 requires controlling unpaved roads and hay grinding at dairy and horse farms but does not address fugitive dust emissions from disturbed open areas. MCESD Rule 310.01 controls fugitive dust emissions from disturbed open areas at dairies and cattle lots, but not unpaved roads and hay grinding.

In the Maricopa County PM–10 nonattainment area, there is only one cattle feedlot and less than half the

[30] In addition the MAG plan shows that implementation of controls on the de minimis source categories would not produce enough emission reductions to show attainment in 2001. MAG plan, p. 9–11.

number of dairies compared to those subject to South Coast Rule 1186. Similar to South Coast, unpaved roads at dairies are low travel (10 to 20 ADT) and represent a very small source of emissions in the Phoenix area and controls on them would not advance the attainment date. We, therefore, believe we can find that the MAG plan provides for the implementation of MSM to our satisfaction without Rule 1186 provisions for unpaved roads at cattle feed lots. In Maricopa County, hay grinding activities occur primarily at feed mills (as opposed to dairies) which are permitted sources and thus already subject to control requirements.

Incinerators: The MAG plan identifies Clark County's Rule 26 as having a more stringent opacity limit than MCESD's Rule 313. Clark County limits opacity from existing incinerators to 5 percent while Maricopa's limit is 20 percent. MAG plan, Table 10–7. Incinerators are a very small source in the Phoenix nonattainment area. In 1994 there were 32 incinerators that together emitted 2.56 metric tons per *year* (7.1 kg per day). 1994 Regional PM–10 Inventory, p. 4–17. Because incinerators are so small a source and controls on them would not advance the attainment date, we propose to find that the MAG plan provide for the inclusion of MSM to our satisfaction without including Clark County's opacity limit for incinerators.

Charbroiling: Emissions from charbroiling and frying meat are estimated to 0.6 mtpd or 227 mtpy. 1994 Regional PM–10 Inventory, p. 4–25. This is 0.4 percent of the daily directly-emitted PM–10 inventory in 1994 and 0.4 percent of the annual inventory in 1994. MCESD has committed to develop a new rule to require existing and new chain-driven and underfired charbroilers, typically found in restaurants specializing in grilled meat products, to be equipped with emission control equipment. South Coast is developing a new rule to deal with underfired charbroilers and MCESD will wait until South Coast completes its rulemaking to adopt this measure. MCESD is projecting adoption of its rule in Spring, 2001. Maricopa County commitments, Revised Measure 23. We propose to find that implementation of this rule is expeditious. Waiting on South Coast to complete its rulemaking, which will establish control requirements for underfired charbroilers, is appropriate given that the South Coast rule when adopted will set the standard for control on these types of charbroilers.

5. Demonstrate Expeditious Attainment

For the reasons discussed below, we propose to find that the MAG plan demonstrates attainment by the earliest date practicable after December 31, 2001 as required by section 189(b)(1)(A)(ii) of the CAA. We also propose to find that the attainment demonstration relies on control measures that either are approved or are being proposed for approval and meet our SIP enforceability criteria; that the emissions estimates assigned these measures in the attainment demonstration are reasonable; and the measures are being implemented on a schedule that is as expeditious as practicable and will result in attainment by the earliest practicable date. See discussion below.

a. Air quality modeling. A modeled attainment demonstration for the PM–10 annual standard should first estimate the temporal and spatial distribution of PM–10 and PM–10 precursor emissions that result from the adopted control measures by the attainment date. It should then simulate the ambient air concentration of these emissions in an air quality model and show that all locations within the nonattainment area have annual average PM–10 concentrations below the level of the annual PM–10 standard of 50 μg/m3. See ''Guidelines on Air Quality Models,'' 40 CFR part 51 appendix W, section 7.2.2. and ''PM–10 SIP Development Guideline,'' EPA–450/2–86–001, June 1987.

To provide context for our evaluation of the air quality modeling in the MAG plan, we will first briefly describe the steps in developing a modeled attainment demonstration and how the MAG plan performed each step.

Step 1. A modeling base case is developed to replicate PM–10 concentrations for specific recent days by simulating the emissions and meteorology that occurred for those days, by hour and by location throughout the area being modeled (that is, the model domain). For some input parameters, alternative plausible values are tried in a diagnostic process to ensure that the model is performing in a physically reasonable way. PM–10 concentrations from the model output are compared to monitored values to evaluate the performance of the model.

The base case for the MAG plan consisted of the application of the urban airshed model with the limited chemistry module (UAM/LC) to each of 65 days during 1995. The results from modeling each of these days are then averaged together to get the modeled annual PM–10 concentration. 1995 was used as the base year because an intensive inventory and monitoring study was performed during it; the 65 days coincided with the available PM–10 24-hour average monitoring data, which are collected once every 6 days. During 1995 the peak monitored annual PM–10 concentration was 60.01 $\mu g/m^3$ at the Greenwood monitor while the model predicted a peak concentration of 75.91 $\mu g/m_3$ at a location away from the Greenwood monitor. MAG TSD, Chapter III.[31]

Step 2. After the base case model is developed, emissions are projected into the future. Projections are based on particular facilities's expansion plans, business and socioeconomic projections, and projections of the effect of changing technology and of the control measures that are already in place. The model simulation is repeated with these future emissions but with the same meteorological inputs as before. This simulation shows how a day meteorologically conducive to high PM–10 concentrations will look in the future if no new controls are implemented. The resulting modeled concentrations can be used to derive an estimate of the additional emission reductions needed to attain the air quality standard.

For the MAG plan, emissions are projected to 2006 (which MAG found to be the earliest practicable attainment year). Before additional controls, the 2006 future peak PM–10 annual average was simulated to be 86.72 $\mu g/m^3$. Because this was above the NAAQS of 50 $\mu g/m^3$, the modeling showed that additional control measures were needed. MAG plan, p. 8–6.

Step 3. The effect of control measures on ambient concentrations are simulated by changing the model emission inputs for future years to reflect higher implementation rates or larger emission reductions from additional controls. Additional measures are tried if PM–10 concentrations are still above the standards.

Attainment is demonstrated when sufficient emission reductions are in place so that modeled concentrations in every grid square are below the standard.

MAG showed that with additional controls, the peak annual PM–10 concentration in 2006 is 49.70 $\mu g/m^3$, which is below the annual PM–10 NAAQS of 50 49.70 $\mu g/m^3$, thus

[31] The MAG TSD is the ''Revised Technical Support Document for Regional PM–10 Modeling in Support of the Revised MAG 1999 Serious Area Particulate Plan for PM–10 for the Maricopa County Nonattainment Area,'' MAG, February 2000 found in Appendix A, Exhibit 7 of the MAG plan.

demonstrating attainment. MAG plan, p. 8–12.

In evaluating the air quality modeling in the MAG plan, we reviewed the choice of models; the selection of episodes to model, the selection of the modeling domain and grid resolution, the methods of preparing wind, temperature, and mixing height fields data; the selected initial and boundary conditions values; the modeling emission inventories; the procedures for and results of quality assurance, diagnostic testing and sensitivity testing; and selected modeling performance goals and model results vis a vis these goals. We have found them all generally acceptable. See our detailed evaluation in EPA TSD section ''Demonstrate Attainment by the Most Expeditious Alternative Date Practicable after December 31, 2001.''

The modeling performed for the MAG plan is as sophisticated as any that has been performed for a PM–10 SIP. While there are several problems associated with the model's performance for secondary particulates and several other shortcomings of the modeling and its documentation, the dominance of the contribution of primary particulates from fugitive dust to PM–10 concentrations in the Phoenix area obviates these concerns. At worst the MAG plan's modeling is akin to modified rollback, an approach that is acceptable under EPA modeling guidance for PM–10. We therefore propose to approve the modeling for the annual NAAQS because it provides a credible demonstration that the credited control measures will provide for attainment of the annual standard by 2006.

b. Control measures relied on for attainment. For demonstrating attainment, the MAG plan relies on reductions in directly-emitted PM–10 from 12 measures. MAG plan, Table 8–2. We have listed each measure; the rule, commitment or state statute through which it is implemented, and its emission reductions in Table 1–1.

TABLE 1–1.—CONTROL MEASURES RELIED ON IN THE ATTAINMENT DEMONSTRATION

Measure	Implementation mechanism	Emission reduction (mtpd)
Strengthening and Better Enforcement of Fugitive Dust Rules (Construction sites).	Rule 310 and Maricopa County Commitments, 1999 Revised Measure 6.	60.6
Unpaved roads and alleys	Rules 310 and 310.01, Maricopa County Commitments, 199 Revised Measures 6 & 17, City/Town Commitments for Unpaved Roads and Alleys.	12.2
Unpaved parking lots	Rules 310 and 310.01 and Maricopa County Commitments, 1999 Revised Measure.	3.7
Vacant disturbed lots	Rules 310 and 310.01 and Maricopa County Commitments, 1999 Revised Measure 6.	1.8
01PM–10 efficient street sweepers (MAG)	MAG Commitment, ''PM–10 Efficient Street Sweepers'' City/Town/County Commitments for Street Sweeping.	1.1
Curbing, paving, or stabilizing shoulders on paved roads	City/Town/County Commitments for Stabilizing Shoulders	1
Curbing paving or stabilizing unpaved access points	City/Town/County Commitments for Stabilizing Unpaved Access Points.	0.4
PM–10 episode thresholds	Maricopa County Residential Woodburning Restriction Ordinance.	0.07
Restaurant charbroiler controls (Maricopa County commitment)	Maricopa County Commitment, 1999 Revised Measure 23	0.07
Cleaner Burning Gasoline	ADEQ Regulations (already SIP approved)	0.03
Pre-1988 Heavy-Duty Diesel Vehicle Standards	A.R.S. 49–542 F.7.	0.02
Coordinate traffic signals	City/Town/County Commitments for synchronizing traffic lights.	0.01

We have evaluated each of these measure to ensure that it meets our SIP enforceability criteria. These criteria ensure that the measure's compliance requirements'applicability, performance standards, compliance schedule, and monitoring methods—are clear.

We have also evaluated the emission reductions credited to each measure to ensure they are reasonable. In particular, we looked at the reduction estimates for Rules 310 and 310.01.

The MAG plan assumes an incremental increase in rule effectiveness for these rules from 66 percent in 1998 to 80 percent in 2006. MAG TSD, Appendix IV, Exhibit 1, Committed Measure 1. Rule effectiveness (RE) accounts for emission reductions lost because of noncompliance, control equipment downtime, failure to apply adequate controls, or failure to use control equipment properly. One hundred percent rule effectiveness is the ability of a regulatory program to achieve all the emission reductions that could be achieved by full compliance with the applicable regulations at all sources at all times.

We have established policies on applying rule effectiveness factors for both base year and projected year inventories of volatile organic compounds (VOC), a precursor to ozone. See General Preamble at 13503 and ''Rule Effectiveness Guidance: Integration of Inventory, Compliance, and Assessment Applications.'' USEPA, OAQPS, EPA–452/R–94–001, January 1994, (RE Guidance). In general, we encourage states to derive local category-specific RE factors. If there are no such local RE factors, we require the use of an 80 percent effectiveness default value in VOC inventories. General Preamble at 13503.

We have not established any explicit guidance for applying RE to particulate matter sources. We know, however, that PM sources like VOC sources are not in full compliance with applicable rules at all times; therefore, some RE factor needs to be applied. For this rulemaking, we have applied the existing Agency RE guidance for VOC sources to emission reduction estimates for Rule 310 and Rule 310.01.

The items that influence compliance with a rule and thus the appropriate RE factor are the clarity of the rule, its compliance requirements and the complexity of the controls required by the rule; the source's actions; and the implementing agency's actions. See RE Guidance, pp. Table 1–1 and Appendix C.

Under our guidance, a state is allowed and required to use a 80 percent RE factor absent evidence to the contrary. General Preamble at 13503. In this case,

the evidence that we have is that compliance for Rule 310 was below this level as of early 1998. MAG, with concurrence of MCESD, assumed a 30 percent compliance rate for the Rule 310 in the 1995 base year modeling. Inspections by MCESD in early 1998 indicated that the compliance rate with the rule was 66 percent. MAG TSD, Appendix II, Exhibit 6, ''Documentation on Assumption of Rule 310 Control Efficiency and Compliance Rate.''

Over the last few years, MCESD has made substantial changes to its fugitive dust control program, many designed to improve compliance. MCESD has also committed to a number of additional changes which we have described earlier. We believe that an 80 percent rule effectiveness in 2006 is appropriate given these changes and MCESD's commitments to improve compliance with Rules 310 and 310.01. These improvements cover rule and test method revisions, increased public outreach and education, increased funding and staffing, increased inspection frequency, revised enforcement policies, and commitments to program evaluations and improvements. They address many of the program areas that are key to improving compliance.

In our TSD (in the section ''Extension Request-Demonstrate Attainment by the Most Expeditious Alternative Date Practicable after December 31, 2001''), we have compared the MCESD's fugitive dust program in 1996 to the program that will be in place by 2006 based on MCESD's commitments in the MAG plan and its actions to date. This comparison clearly shows the scope of improvements to the MCESD's fugitive dust program and supports our proposed finding that an 80 percent RE in 2006 for Rule 310 and Rule 310.01 is appropriate.[32]

Finally, we have looked at the implementation schedule for each measure to assure that the MAG plan provides for expeditious implementation. Except for paving of some unpaved roads, adoption of the charbroiler rule, heavy duty diesel standards, and the purchase and deployment of the PM–10 efficient street sweepers, all the measures relied on in the attainment demonstration are currently in effect.

However, attainment of the PM–10 annual standard in the Phoenix area depends on a high level of compliance with MCESD's fugitive dust rules. The MAG plan assumes this level increases from 66 percent in 1998 to 80 percent in 2006. MAG TSD, Appendix IV, Exhibit 1, Committed Measure 1. This level of compliance depends in turn on education of the regulated community and increased enforcement modifying source behavior. Both of these take time to effect, therefore, we believe that it is reasonable to allow a period of time to achieve a high level of compliance with these rules. We thus believe that the emission reductions are being achieved as expeditiously as practicable.

6. Other Factors That EPA may Consider

CAA section 188(e) list five additional factors that we may consider in deciding whether to grant an extension and the length of that extension.

The MAG plan provides information addressing each of the factors in Chapter 10 of the plan. We have already proposed to determine that the MAG plan provides for the implementation of RACM and BACM, includes the MSM, and attainment of the annual PM–10 standard by the earliest practicable date of December 31, 2006. In the next section, we will also propose to find that the plan provides for reasonable further progress. Nothing in the additional information presented on the five factors suggest that granting an extension of the attainment date for the Phoenix area to 2006 is inappropriate.

a. Nature and extent of nonattainment. Over the past 5 years, violations of the annual standard have occurred routinely at three sites (MAG plan, Table 10–11):

1. Greenwood, an urban site heavily impacted by transportation sources,

2. Chandler, an urban fringe site heavily impacted by fugitive dust sources such as construction and agriculture, and

3. Salt River, a site heavily impacted by industrial sources.

Areas similar to the first two sites can be found throughout the Phoenix nonattainment area, so we would expect that there are similarly elevated PM–10 levels throughout the Phoenix area; therefore, controls need to be uniformly implemented throughout the nonattainment area, a task that generally requires longer to achieve than implementing controls in few localized areas.

b. Types and numbers of sources or other emitting activities. Primary contributors to elevated PM–10 levels are fugitive dust sources including paved road dust, unpaved roads, construction activities, disturbed vacant lands, unpaved parking lots, and agricultural sources. MAG plan, p. 10–51. These sources are ubiquitous in the nonattainment area and collectively number in the thousands. (For example, MCESD issued 2500 construction permits in 1999; we mailed 50,000 letters to owners of vacant lots in the nonattainment area; there are 12,000 miles of roadway in the nonattainment area.)

c. Population exposure to concentrations above the standard. The MAG plan estimates population exposure to elevated levels of PM–10 (both annual and 24-hr) to be from 78,000 to 163,000 (1995 figure), p. 10–13. This population exposure is calculated using estimates of disturbed land versus population in subareas of the nonattainment area. According to this calculation, 84 percent of Maricopa's population lives in areas where 10 percent or less of the land is open. MAG plan, Table 10–13. This exposure number does not seem to include populations exposed to dust from paved and unpaved roads and therefore may underestimate overall population exposure. However, the plan does provide for implementation of RACM, BACM, and MSM on disturbed land (including construction) and paved and unpaved roads with much of the emission reductions being achieved in the first few years, all these factors will reduce population exposure as quickly as practicable.

d. Presence and concentration of potentially toxic substances in the particulate. The primary source of airborne cancer risk in the Maricopa area is internal combustion engine exhaust from both on- and non-road engines. This risk is from all pollutants emitted from these sources (gaseous and particulate). MAG plan, p. 10–61. The MAG plan concludes that the cancer risk in the Phoenix area is comparable to that in California cities, p. 10–61. The MAG plan and other Arizona programs (*e.g.*, cleaner burning gasoline, national emission standards for non-road engines) target emissions from on- and non-road engines.

Almost all of the PM–10 emission reductions in the out years of the MAG plan (2003 and later) are and need to be from fugitive dust sources in order to show attainment of the annual PM–10 standard and not fron on- and non-road engines; therefore, extending the attainment date does not affect the degree of public exposure to the major source of toxic risk because shortening the extension would not accelerate controls on the major source of toxic risk, on- and nonroad engines.

e. Technological and economic feasibility of controls. Fugitive dust sources dominate the emission inventory in the Maricopa

[32] The cities and towns in Maricopa County are also increasing their efforts to address fugitive dust sources, such as unpaved parking lots and disturbed vacant lots. These efforts also support an overall 80 percent rule effectiveness.

nonattainment area. Controls for these sources are well known (paving, wetting surfaces, etc.) and have been adopted; however, the number of sources and nature of sources make education and outreach necessary to assure full compliance with those controls. In addition, costs for paving roads, purchasing street sweepers, and other capital improvements necessary to reduce PM–10 emissions are high and necessary funds are only available over a number of years. These factors generally support a longer time frame for attainment.

7. Conclusion on Extension Request

Based on our review of the MAG plan and our proposed determination that it meets the requirements necessary for granting an extension of the attainment date under CAA section 188(e), we are proposing to grant a five-year extension of the serious attainment date for the Phoenix PM–10 serious nonattainment area from December 31, 2001 to December 31, 2006.

H. Reasonable Further Progress (RFP) and Quantitative Milestones

We propose to find that the MAG plan provides for RFP and meets the quantitative milestone requirements of the Act.

1. Reasonable Further Progress

The MAG plan provides for annual progress so that emissions levels in each year from 1995 to 2006 that are at or below the level needed to maintain linear progress toward attainment. It demonstrates that regional PM–10 emission levels will drop from 191 mtpd in 1995 to 130 mtpd in 2006 with two-thirds of the reduction occurring before 2001. MAG plan, Figure 8–4. Total regional emissions decrease annually at a rate of approximately 6.5 mtpd per year from 1995 through 2001 and 4.4 mtpd per year from 2002 to 2006. The assumptions that underlie the RFP demonstration regarding control measures' implementation and effectiveness are reasonable.

The plan does not provide emission reduction information for each year between the base modeling year of 1995 and the attainment year of 2006. We do not believe that this level of detail is necessary or meaningful. The principal control measures in the plan (such as improving compliance with the fugitive dust rules, progressive paving of unpaved roads, and annual replacement of part of the street sweeper fleet with PM–10 efficient units) produce year to year incremental increases in emission reductions sufficient to meet the statutory requirement for RFP. See MAG plan, Figure 8–4 and EPA TSD, Figure RFP–1. Therefore, we propose to find that the MAG plan provides for ''such annual incremental reductions in emissions of the relevant air pollutant as are required by this part [part D of title I] or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date'' as required by section 172(c)(2) of the Act.

2. Quantitative Milestones

Our guidance provides for a quantitative milestone for the year 2000. Addendum at 42016. Based on the statutory requirement for milestones every three years, the years 2003 and 2006 are the next two milestones for areas with an attainment date extension under section 188(e). The MAG plan provides milestones for 2003 and 2006 but substitutes 2001 for 2000. We believe this minor deviation from our guidance is appropriate and acceptable for the following reasons.

First, we set the milestone schedule in our serious PM–10 area guidance assuming the area involved was one of the initial moderate areas and its moderate area plan demonstrates attainment by December 31, 1994. General Preamble at 13539 and Addendum at 42016. Although the Phoenix area was one of the initial moderate nonattainment areas, its moderate area plan did not demonstrate attainment.[33] As a result, our guidance on the appropriate milestone years is not strictly applicable to the MAG serious area plan.

We also believe that the statutory purpose for including milestones in PM–10 plans is best served in the Phoenix area by having the milestone year be 2001 rather than 2000. Under the Act, states are to submit a demonstration 90 days after a milestone date that the state has implemented all measures in its approved plan and has met the milestone. See CAA section 189(c)(2). If a state fails to submit a report or we determine that the area has not met a milestone, then the state must submit a plan revision that assures that the next milestone will be met. See CAA section 189(c)(3).

It is clear from the statutory requirements, that the milestone requirement functions as a mid-course evaluation of the PM–10 plan and an opportunity to make corrections to the plan to assure that there is no delay in attainment due to failures to implement or achieve needed reductions. As such, the milestones should be keyed, to the extent possible, to major implementation deadlines in a manner that allows for a realistic and comprehensive look at the effectiveness of the implemented measures.

The BACM implementation deadline for Phoenix is June 10, 2000. A December 31, 2000 milestone allows for the evaluation of only a half-year of implementation, which is little time to see if implementation is going to achieve the expected emission reductions. Setting the milestone one year later on December 31, 2001 as the MAG plan does, provides for a full year of implementation allowing for a more realistic assessment of the effectiveness of BACM yet still leaving ample time to make any corrections needed to assure timely attainment. Therefore, we believe that strict adherence to the 2000 milestone date in our guidance would be less beneficial to attainment in the Phoenix area than setting the date at 2001.

The next milestone in the MAG plan after the 2001 one is in 2003. MAG plan, Figure 8–4. This second milestone is only 2 years after the first, instead of 3 years arguably required by the Act. However, we believe that the 3-year milestone increment in CAA section 189(c) is the maximum allowable time between milestones and nothing in the section prohibits states from setting milestones dates that are closer together.

The assumptions regarding control measures' implementation and effectiveness that underlie the quantitative milestones are reasonable and consistent with the RFP demonstration.

For these reasons, we propose to find that the MAG plan meets the quantitative milestone requirement in CAA section 189(c)(1).

I. General SIP Requirements

Section 110(a)(2)(E)(i) of the Clean Air Act requires that implementation plan provide necessary assurances that the State (or the general purpose local government) will have adequate personnel, funding and authority under State law. Requirements for legal authority are further defined in 40 CFR part 51, subpart L (section 51.230–232) and for resources in 40 CFR 51.280.

States and responsible local agencies must demonstrate that they have the legal authority to adopt and enforce provisions of the SIP and to obtain information necessary to determine

[33] The moderate area plan submitted by the State in 1991 and revised in 1993 and 1994 demonstrated the impracticability of attainment by December 31, 1994. While we have subsequently disapproved this impracticability demonstration because the plan did not include RACM, we confirmed that attainment was impracticable in our 1998 FIP. 63 FR 41340.

compliance. SIPs must also describe the resources that are available or will be available to the State and local agencies to carry out the plan, both at the time of submittal and during the 5-year period following submittal.

We propose to find that the implementing agencies for the MAG plan have adequate resources for implementing their respective commitments. We also propose to find that the MAG plan adequately describes the resources that are available or will be available to the State and local agencies to carry out the Plan, both now and over the next 5 years. See discussion of the individual commitments and control measures in the TSD.

All agencies and jurisdictions appear to have adequate authority under Arizona state law to implement their respected commitments and, where applicable, to obtain information necessary to determine compliance. We, therefore, propose to find that these agencies/jurisdictions have demonstrated that they have adequate legal authority to implement the MAG plan.

Section 110(a)(2)(C) requires SIPs to include a program to provide for the enforcement of SIP measures. The implementing regulation for this section is found at 40 CFR 51.111(a) and requires control strategies to include a description of enforcement methods including (1) procedures for monitoring compliance with each of the selected control measures, (2) procedures for handling violations, and (3) the designation of the agency responsible for enforcement.

The principle control measures in the plan are MCESD's Rules 310 and 310.01. Procedures for monitoring compliance (*i.e.,* the inspection strategy) with these rules are described in Maricopa County's commitments. See Maricopa County commitment, 1999 Revised Measure 6.

Based on the review of MCESD's enforcement procedures, we propose to find that the MAG plan adequately provides for the enforcement of the principle measures relied on for attainment and that the plan includes an adequate description of enforcement methods as required by our regulations.

Section 110(a)(2)(E)(iii) requires SIPs to include necessary assurances that where a State has relied on a local or regional government, agency or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of the such plan provision.

We have previously found that Arizona law includes the necessary assurances that where a State has relied on a local or regional government, agency or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of the such plan provision. 60 FR 18010, 18019 (April 10, 1995).

Proposed Actions on Maricopa County Rules

A. Rule 310

Rule 310 establishes requirements for fugitive dust sources on facilities that have or are required to have air quality permits from MCESD. These facilities include construction sites, stationary sources, and any other facility or operation that is required to have a permit under MCESD rules. The rule requires earthmoving activities that disturb 0.10 acre or more to apply for and get approval of a Dust Control Plan (DCP) and requires other permitted sources to obtain a DCP prior to commencing any routine dust generating activity. We have described many of the Rule's specific requirements earlier in this preamble.

The current SIP approved version of Rule 310 is the version adopted on September 9, 1994. We approved this version of Rule 310 into the SIP on August 4, 1997 as part of the Microscale plan. 62 FR 41856

MCESD adopted a revised version of Rule 310 and Appendix C to MCESD rules on February 16, 2000 and Arizona submitted both as a revision to the Arizona SIP on March 2, 2000. Appendix C contains the test methods relied on in Rule 310.

The revised Rule 310 is considerably different from the current SIP-approved version. The greatest change has been to split the old rule into two new rules: the revised Rule 310 that addresses permitted facilities and a new Rule 310.01 that addresses nonpermitted sources. We evaluate Rule 310.01 in the next section. MCESD also revised Rule 310 to strengthen it compared to the current SIP-approved version. These rule improvements include:

- Improved enforceability of control measures and dust control permits (DCPs),
- Improvements to existing test methods (in Appendix C),
- New performance standards and test methods,
- Clearer definitions,
- More specific work practice requirements

MCESD has also committed to continue to strengthen and improve Rule 310 through research on test methods, dust control methods, and revised recordkeeping requirements. See discussion in section F.3.g., ''Construction Sites and Activities.''

We believe that the revised Rule 310 is a considerable improvement over the SIP-approved version and, combined with MCESD commitments to continue to improve the Rule and to improve enforcement and compliance with it, provides for implementation of RACM and BACM and the inclusion of the MSM on the sources subject to it. We, therefore, propose to approve Rule 310 and Appendix C as adopted on February 16, 2000 and submitted on March 2, 2000, into the Arizona SIP.

We have described in more detail the improvements and other revisions to Rule 310 in section 6 of our TSD.

B. Rule 310.01

Rule 310.01 establishes requirements for fugitive dust emitted from nonpermitted sources, including unpaved public roads, unpaved parking lots, open areas and vacant lots, erosion-caused deposits of bulk materials onto paved surfaces, and commercial feedlots and/or commercial livestock areas.

The provision of Rule 310.01 are currently in the SIP as sections of former Rule 310. We approved this version of Rule 310 into the SIP on August 4, 1997 as part of the microscale plan. 62 FR 41856.

MCESD adopted Rule 310.01 on February 16, 2000 and Arizona submitted it as a revision to the Arizona SIP on March 2, 2000. As with Rule 310, Rule 310.01 relies on the test methods in Appendix C.

Rule 310.01's provisions are strengthened compared to the similar provisions in the SIP. These rule improvements and other rule changes include:

- The revised rule requires that unpaved roads and unpaved parking lots comply with both: (1) a 20 percent opacity standard; and (2) a silt content or a silt loading standard.
- A new opacity test method has been added to Appendix C to determine compliance with the rule's 20 percent opacity standard for unpaved haul/access roads and unpaved parking lots which is better tailored to these sources.
- Test methods for determining compliance with the new silt content/loading standards has been added to Appendix C.
- Owners/operators of disturbed vacant lots and open areas must maintain a visible crust or meet at least one other applicable stabilization standard, according to new test methods included in the rule and Appendix C.

• Specific control measures for commercial feedlots and/or commercial livestock areas have been added, including: application of dust suppressants or gravel, or installation of shrubs and/or trees within 50 to 100 feet of animal pens.

• The revised rule specifies that unpaved roads with vehicular traffic of 250 or more must be stabilized by June 10, 2000 and unpaved roads with vehicular traffic of 150 or more must be stabilized by June 10, 2004.

• The revised rule specifies that requirements to prevent vehicle trespassing (section 301) apply to vacant lots and open areas that are 0.10 acre or larger and have a cumulative of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles.

• The revised rule specifies that requirements to stabilize disturbed vacant lots and open areas (section 302) apply to lots/areas with 0.5 acre or more of disturbed surface.

We believe that Rule 310.01 is a considerable improvement over the SIP-approved version and, combined with MCESD's commitments to continue to improve the Rule and enforcement and compliance with it and the commitments by the County and local jurisdictions to address unpaved roads, unpaved parking lots, and vacant lots, provides for implementation of RACM and BACM and the inclusion of the MSM on the sources subject to it. We, therefore, propose to approve Rule 310.01 as adopted on February 16, 2000 and submitted on March 2, 2000, into the Arizona SIP.

We have described in more detail the strengthenings and other revisions to Rule 310.01 in section 6 of our TSD.

C. Residential Woodburning Restriction Ordinance

Combined with MCESD Rule 318 ''Approval of Residential Woodburning Devices'' (adopted April 21, 1999; approved November 8, 1999 (64 FR 60678)), Maricopa County's Residential Woodburning Restriction Ordinance implements a mandatory woodburning curtailment program. The curtailment program restricts the types of woodburning devices that can be used during periods of high PM–10 concentrations. The ordinance allows the Control Officer to declare restricted-burn periods when the particulate matter pollution levels could exceed the ''particulate matter no-burn standard.''

The SIP-approved ordinance provides that restricted-burn periods are declared by the Control Officer when the Control Officer determines that air pollution levels could exceed the 24-hour PM standard at 150 $\mu g/m^3$. The revised ordinance allows the Control Officer to declare restricted-burn periods when the particulate matter pollution levels could exceed the ''particulate matter no-burn standard'' of 120 $\mu g/m^3$. The lower of the particulate matter no burn standard to 120 $\mu g/m^3$ is the only change made to the ordinance as it is currently approved in the SIP.

Because approving this revision will strengthen the SIP and when combined with the MAG plan's other provision for residential woodburning will provide for the implementation of BACM and the inclusion of the MSM, we are proposing to approve it into the SIP. See section F.3.j. ''Residential Wood Combustion.''

D. CAA Section 110(l) Finding

CAA section 110(l) prohibits us from approving a revision to the applicable implementation plan if that revision would interfere with any applicable requirement concerning attainment and reasonable further progress (RFP) or any other applicable requirement of the Act. We interpret section 110(l) to mean that we cannot approve a plan revision if that revision would mean that the plan would no longer provide for attainment or RFP as these are required by the CAA for that plan or if the revision would mean that the plan would no longer meet another requirement of the Act that applies to the plan. For a further discussion of this interpretation, see 61 FR 51599, 51608 (October 3, 1996).

We are proposing to revise the Arizona SIP to incorporate the revised Rule 310, Rule 310.01 and the Maricopa County Residential Woodburning Ordinance in replacement of the previous version of Rule 310 approved in August, 1997 and of the ordinance approved in November, 1999. In addition to the effect on attainment and RFP, the ''other applicable requirement of the Act'' that we must be concerned with for this proposal is the Act's requirements for implementation of RACM and BACM and the inclusion of the MSM.

We are proposing to approve the expeditious attainment and RFP demonstrations in the MAG plan. These demonstrations are in part dependent on approval of the revised Rule 310, Rule 310.01, and the woodburning ordinance.

We are also proposing to find that the MAG plan provides for the implementation of RACM and BACM and the inclusion of the MSM for construction sites, unpaved roads, unpaved parking lots, and disturbed vacant lands. Again, these findings are in large part dependent on approval of the revised Rule 310 and Rule 310.01. We, therefore, propose to find that approval of the revised Rule 310 and Rule 310.01 will not interfere with plan's compliance with the Clean Air Act's requirements for attainment, RFP, implementation of RACM and BACM, and inclusion of the MSM as they apply to construction sites, unpaved roads, unpaved parking lots, and disturbed vacant lands.

Finally, we are proposing to find that the MAG plan provides for the implementation of BACM and for the inclusion of MSM for residential woodburning. These proposed findings are made in part based on the revised ordinance. Therefore, we propose to find that our approving the ordinance will not interfere with the plan's compliance with the Act's requirements for the implementation of BACM and the inclusion of MSM as they apply to residential woodburning.

We have previously found that the Arizona SIP provided for the implementation of RACM for residential woodburning. 64 FR 60678 (November 8, 1999). The State has now strengthened its residential woodburning program, in part with the revised ordinance; therefore, we propose that approval of the revised ordinance will not interfere with the Arizona SIP's compliance with the requirement for the implementation of RACM as it applies to residential woodburning.

Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this proposed action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. This proposed action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*).

Because this rule proposes to approve pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does 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).

For the same reason, this proposed rule also does not significantly or uniquely affect the communities of tribal governments, as specified by

Executive Order 13084 (63 FR 27655, May 10, 1998). This proposed rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act.

This proposed rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, our role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), we have no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for us, when reviewing a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272) do not apply.

As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this proposed rule, we have taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct.

We have complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the executive order.

This proposed rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

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

Dated: April 3, 2000.

Laura Yoshii,

Acting Regional Administrator, Region IX.

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