federal register

Wednesday
April 1, 1998

Part II

Environmental Protection Agency

40 CFR Part 52

Promulgation of Federal Implementation Plan for Arizona-Phoenix Moderate Area PM–10; Disapproval of State Implementation Plan for Arizona—Phoenix Moderate Area PM–10; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[FRL–5987–8]

Promulgation of Federal Implementation Plan for Arizona—Phoenix Moderate Area PM–10; Disapproval of State Implementation Plan for Arizona—Phoenix Moderate Area PM–10

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rulemaking and withdrawal of 1996 proposed rule.

SUMMARY: Under the authority of section 110(c)(1) of the Clean Air Act (CAA or ''the Act''), EPA today proposes a federal implementation plan (FIP) to address the moderate area PM–10 requirements for the Phoenix PM–10 nonattainment area. Specifically, for both the annual and 24-hour PM–10 standards, EPA is proposing a demonstration that reasonably available control measures (RACM) will be implemented as soon as possible, a demonstration that it is impracticable for the area to attain the standards by the statutory attainment deadline and a demonstration that reasonable further progress (RFP) is being met. Pursuant to a court order, EPA's final FIP must be signed by the EPA Administrator no later than July 18, 1998.

As part of its proposed RACM demonstration, EPA is proposing a fugitive dust rule to control PM–10 emissions from vacant lots, unpaved parking lots and unpaved roads, and is also proposing an enforceable commitment to ensure that RACM for agricultural sources will be proposed by September 1999, finalized by April 2000 and implemented by June 2000.

In addition, in today's document, EPA is withdrawing a 1996 proposal to restore its approval of the RACM, RFP and impracticability demonstrations in Arizona's moderate area PM–10 plan for the annual PM–10 standard for Phoenix and is proposing to disapprove the impracticability and RACM demonstrations because those demonstrations do not adequately address the CAA's moderate area PM–10 requirements.

EPA recently established a new standard for PM–2.5 and also revised the PM–10 standards; however, today's proposal does not address these new standards.

DATES: Written comments will be accepted until May 18, 1998. EPA is scheduled to hold a public workshop followed by a public hearing at the following time:

Phoenix PM–10 Moderate Area FIP Workshop and Hearing

Thursday, April 16, 1998, Workshop, 9 a.m. to 11 a.m.

Hearing, Day Session—12 noon to 4:30 p.m., Evening Session—Convenes at 7 p.m.

ADDRESSES: Written comments on the EPA's proposed FIP and SIP actions must be received by EPA at the address below on or before May 18, 1998. Comments should be submitted (in duplicate, if possible) to: EPA Region 9, 75 Hawthorne Street (AIR2), San Francisco, CA 94105, Attn. Eleanor Kaplan, (Phone: 415–744–1287).

The public workshop and public hearing will be held at the Phoenix Corporate Center Auditorium, 3003 North Central Avenue, Phoenix, Arizona.

A copy of docket No. A–09–98, containing material relevant to EPA's proposed action, is available for review at: EPA Region 9, Air Division, 75 Hawthorne Street, San Francisco, CA 94105. Interested persons may make an appointment with Eleanor Kaplan (415) 744–1159 to inspect the docket at EPA's San Francisco office on weekdays between 9 a.m. and 4 p.m.

A copy of docket no. A–09–98 is also available to review at the Arizona Department of Environmental Quality, Library, 3033 N. Central Avenue, Phoenix, Arizona 85012. (602) 207–2217.

Electronic availability: This document is also available as an electronic file on EPA's Region 9 Web Page at http://www.epa.gov/region09.

FOR FURTHER INFORMATION CONTACT: For questions and issues regarding the proposed measure for agricultural fields and aprons contact John Ungvarsky (415) 744–1286; for questions and issues regarding the proposed rule for vacant lots, unpaved parking lots and unpaved roads contact Karen Irwin (415) 744–1903; for other general FIP and SIP questions and issues contact Doris Lo (415) 744–1287.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Executive Summary
A. Background
B. FIP Proposal
C. Public Involvement in the FIP Process
II. Background
A. Clean Air Act Requirements
1. Designation and Classification
2. Moderate Area Planning Requirements
3. Federal Implementation Plan Provisions
4. Indian Reservations
a. EPA's FIP Obligation
b. EPA and Tribal CAA Authority in Indian Country
B. History of Arizona's PM–10 Plans and Related EPA Actions
1. Arizona's Moderate Area PM–10 Plan
2. The Microscale Plan—the 24-hour Standard
3. EPA Actions on Arizona's Moderate Area PM–10 Plan Post-*Ober* With Respect to the Annual Standard
C. History of PM–10 FIP Litigation in Phoenix
III. SIP Actions
A. Proposed Disapproval of Moderate Area Plan
B. Withdrawal of Proposal to Restore Moderate Area Plan Demonstrations for the Annual PM–10 Standard
IV. Moderate Area PM–10 Planning Requirements for the FIP Proposal
A. Attainment/Impracticability Demonstration
B. RACM/RACT Demonstration
C. Reasonable Further Progress Demonstration
V. Summary of EPA's FIP Proposal
A. RACM/RACT Demonstration
1. RACT and PM–10 Precursors
a. RACT
b. PM–10 Precursors
2. RACM Approach
3. Federal Implementation Criteria
a. Applicability to the Phoenix Area
b. Existing RACM
c. Legal Authority
4. Application of Federal Implementation Criteria
5. RACM Criteria
a. De Minimus Source
b. Technological Feasibility
c. Cost of Implementation
6. Application of RACM Criteria
7. Proposed FIP measures
a. Commitment for Agricultural Sector
(1) Summary of Proposed Commitment and Approach
(2) Background
(3) RACM Analysis
(4) Proposed Commitment
(i) Discussions With Stakeholders
(ii) BMP Approach
(iii) FIP Proposal
(5) FIP Replacement
b. Rule for Unpaved Parking Lots, Unpaved Roads and Vacant Lots
(1) Summary of Proposed Rule
(2) Discussion
(3) Compliance Approach
(4) Replacement of FIP Rule
B. Impracticability Demonstration
1. Annual Standard
2. 24-hour Standard
C. Reasonable Further Progress (RFP) Demonstration
1. Annual Standard
2. 24-hour Standard
a. Gilbert Monitoring Site
b. West Chandler Monitoring Site
VI. Impact on Tribal Reservations
VII. Administrative Requirements
A. Executive Order (E.O.) 12866
B. Regulatory Flexibility Analysis
1. Regulatory Flexibility Act Requirements
2. RFA Analysis
a. Proposed Federal Rule for Unpaved Roads, Unpaved Parking Lots, and Vacant Lots

b. Proposed Federal Commitment for Agriculture
c. Certification
C. Unfunded Mandates Reform Act (UMRA)
D. Paperwork Reduction Act

I. Executive Summary

A. Background

The Phoenix area violates both the annual and 24-hour national health-based standards for particulate matter with diameters of 10 microns or less. Consequently, Maricopa County residents continue to breathe unhealthy air. Particulate matter affects the respiratory system and can cause damage to lung tissue and premature death. The elderly, children, and people with chronic lung disease, influenza, or asthma are especially sensitive to high levels of particulate matter. EPA recently established a new standard for particulate matter of diameters of 2.5 microns or less and also revised the PM–10 standards; however, today's proposal does not address these new standards.

The primary cause of the PM–10 problem is dust on paved roads kicked up by vehicle traffic, and windblown dust from construction sites, earth moving operations, unpaved parking lots and roads, disturbed vacant lots, agricultural fields and aprons, and other disturbed areas.

When an area violates a health-based standard, the Clean Air Act (CAA) requires that the area be designated as nonattainment for that pollutant. Phoenix was originally designated and classified as a moderate nonattainment area for particulate matter, and Arizona was required to develop a plan that put into place a basic set of control measures. These measures did not adequately control the particulate pollution problem. When the area failed to attain the standards in 1994 it was reclassified as a serious nonattainment area, and the State is now required to develop a plan with more comprehensive control measures.

Despite the fact that the State is now working on its serious area plan, EPA is under court order, as a result of a lawsuit by the Arizona Center for Law in the Public Interest (ACLPI), to develop a moderate area federal implementation plan (FIP) for the Maricopa area. EPA is required to prepare this FIP because the State does not have an approved moderate area plan. Under the court order, EPA has until March 20, 1998, to propose and July 18, 1998, to finalize the FIP.

EPA has determined that not all the basic controls on sources contributing to violations of the particulate standards are in place. While the State has implemented a number of measures including controls on construction and earth moving operations, as well as a vehicle emission inspection and maintenance program and a clean burning gasoline program, there remains a need for additional emissions reductions. Having considered its authority and resource constraints, EPA is proposing two measures in the FIP for the control of dust from unpaved roads, parking lots, and vacant lots and agricultural fields and aprons. These measures will contribute to the eventual attainment of both the annual and 24-hour PM–10 standards.

The State intends to submit its serious area particulate plan in the summer of 1998. If the plan includes control measures for the sources covered by the FIP and those measures are approved by EPA, the Agency will be able to withdraw the final FIP measures. EPA will continue working with the appropriate State and local agencies, as well as the agricultural community and the cities in the metropolitan area, to replace the FIP measures with State measures. EPA believes that clean air is likely to be achieved faster, and in greater harmony with local economic and community goals, if its role as a backstop is minimized by effective State and local actions. Because of the willingness of the State and local communities to identify and pursue solutions to their air quality problems, as evidenced by the Governor's Air Quality Strategies Task Force, EPA expects successful State and local action.

B. FIP Proposal

EPA's FIP proposal includes a fugitive dust rule and an enforceable commitment in regulatory form to implement control measures for agricultural PM–10 sources by July 2000. These are discussed in more detail below. During the development of these measures, EPA held numerous meetings with the affected community. The purpose of these meetings was not only to inform the public of EPA's FIP obligation and the need for the Agency to develop an adequate moderate area PM–10 plan, but also to help EPA craft air quality rules that meet both the public health and economic needs of this area. During all of these discussions there was an ongoing dialogue regarding what would be needed to replace the FIP with appropriate State measures. EPA appreciates the information that was provided by the community during the development phase of the proposed FIP, and the Agency will continue to work with the community in the development of the State's serious area plan. EPA is hopeful that the local planning effort will result in an approvable SIP that will allow EPA to withdraw its FIP.

Fugitive Dust Rule

Although EPA has approved a Maricopa County rule (MCESD Rule 310) which requires controls for unpaved roads, unpaved parking lots and vacant lots, the County is not adequately enforcing its rule for these three sources due to lack of resources. Therefore, EPA has developed a FIP rule that proposes specific controls that will ensure adequate enforcement for these sources. For each source category, the FIP rule includes three to four control measure options and allows submittal of alternative control measures subject to EPA approval. In addition to the FIP rule, EPA is addressing the resource issue by providing additional inspection resources to MCESD through a CAA section 105 grant. These resources will be used by the County to verify compliance with the FIP rule. In order to remove the FIP requirement, MCESD will have to submit to EPA a credible implementation strategy for Rule 310, including the provision of the additional inspection and enforcement resources needed to ensure implementation of its rule. Individual cities can reduce the scope of the FIP once EPA has approved ordinances submitted as SIP revisions that eliminate and/or control these sources.

Enforceable Commitment for Agriculture

As mentioned above, EPA has approved Maricopa County Rule 310 which requires control of fugitive dust sources, including agricultural sources. However, MCESD is not ensuring adequate enforcement of the rule for agricultural fields and aprons. Therefore, EPA has developed an enforceable commitment in regulatory form for the FIP that requires EPA to propose controls on agricultural sources by September 1999 and implement these controls by July 2000. In discussions with key stakeholders, general agreement was reached that these controls will be in the form of best management practices. EPA believes that this approach will ensure successful dust control in Maricopa's unique environment. In order to remove the FIP requirements, the State will need to submit and received approval of a SIP measure that replaces the enforceable commitment. EPA is working closely with the regulatory agencies and the agricultural community to accomplish this goal.

Tribal Issues

There are three Indian reservations located within the Phoenix nonattainment area and which therefore could be considered subject to the FIP. However, since this FIP is designed to fill a gap that exists in the State plan, and the State plan does not apply to sources within Indian country, EPA has decided it is inappropriate to include the Indian reservations in this FIP. All three tribes have expressed an interest in developing air quality programs. EPA will develop the data, in cooperation with the tribes, that is needed to properly assess whether controls are required to attain the standards. EPA will ensure that controls are implemented either through EPA-approved tribal measures or, if necessary, federal measures.

C. Public Involvement in the FIP Process

Each area has its own unique qualities and concerns. EPA can fully understand those concerns, and plans to take them into account, through direct participation by the affected community; therefore, in addition to the meetings that EPA has already had with the Phoenix community, there will be additional opportunities for public input. EPA wants to make the final plan a product of local involvement and consensus. EPA believes strongly that it can best fulfill the goal of the Clean Air Act—that is, clean and healthy air for everyone—and meet the Agency's court-ordered obligations by preparing this plan with the input of the local community.

After this proposed action is signed and published in the **Federal Register**, EPA will hold a workshop and public hearing on April 16, 1998 in the City of Phoenix. The workshop will provide an opportunity for EPA to explain to the community why it is imposing this FIP, what measures are included in this FIP, and who will potentially be impacted by the FIP. The workshop will also provide the community the opportunity to ask questions of EPA, and to make suggestions with respect to its proposed action. The public hearing will follow the workshop. During the public hearing, EPA will be taking formal comment on the FIP proposal. The public comment period will begin upon publication of the FIP proposal and will remain open for 30 days following the public hearing, or until May 18, 1998. EPA encourages everyone who has an interest in this proposed action to comment upon it. EPA will consider all comments received during the public comment period.

II. Background

A. Clean Air Act Requirements

1. Designation and Classification

On the date of enactment of the 1990 Clean Air Act Amendments, PM–10 areas, including portions of the pre-existing Maricopa County [1] PM–10 nonattainment area, meeting the conditions of section 107(d) of the Act were designated nonattainment for the PM–10 national ambient air quality standards (NAAQS) [2] by operation of law. Once an area is designated nonattainment, section 188 of the Clean Air Act (CAA) outlines the process for classification of the area and establishes the area's attainment date. In accordance with section 188(a), at the time of designation, all PM–10 nonattainment areas were initially classified as ''moderate'' by operation of law. 56 FR 11101 (March 15, 1991).

A moderate area could subsequently be reclassified as ''serious'' under CAA section 188(b)(1), if, at any time, EPA determined that the area could not practicably attain the PM–10 NAAQS by the applicable attainment date for moderate areas, December 31, 1994. Moreover, a moderate area would be reclassified by operation of law if EPA determined after the applicable attainment date that, based on actual air quality data, the area was not in attainment after that date. CAA section 188(b)(2).

On May 10, 1996, EPA published a final reclassification of the Maricopa County PM–10 nonattainment area as a serious PM–10 nonattainment area based on actual air quality data. 61 FR 21372. Having been reclassified, the area is required to meet the serious area requirements in the CAA, including a demonstration that the area will attain the PM–10 NAAQS as expeditiously as practicable but no later than December 31, 2001. CAA sections 188(c)(2) and 189(b).[3] Pursuant to section 189(b)(2), the State of Arizona was required to submit a serious area plan addressing both PM–10 NAAQS for the area by December 10, 1997.[4]

2. Moderate Area Planning Requirements

The air quality planning requirements for PM–10 nonattainment areas are set out in subparts 1 and 4 of title I of the Clean Air Act. EPA has issued a ''General Preamble'' [5] describing EPA's preliminary views on how the Agency intends to review SIPs and SIP revisions submitted under Title I of the Act, including those state submittals containing moderate PM–10 nonattainment area SIP provisions.

Those states containing initial moderate PM–10 nonattainment areas were required to submit, among other things, the following provisions by November 15, 1991:

(a) Provisions to assure that reasonably available control measures (RACM) (including such reductions in emissions from existing sources in the area as may be obtained through the

[1] ''Maricopa,'' ''Maricopa County'' and ''Phoenix'' are used interchangeably throughout this proposal to refer to the nonattainment area.

[2] There are two PM–10 NAAQS, a 24-hour standard and an annual standard. 40 CFR 50.6. EPA promulgated these NAAQS on July 1, 1987 (52 FR 24672), replacing standards for total suspended particulate with new standards applying only to particulate matter up to 10 microns in diameter (PM–10). At that time, EPA established two PM–10 standards. The annual PM–10 standard is attained when the expected annual arithmetic average of the 24-hour samples for a period of one year does not exceed 50 micrograms per cubic meter ($\mu g/m^3$). The 24-hour PM–10 standard of 150 $\mu g/m^3$ is attained if samples taken for 24-hour periods have no more than one expected exceedance per year, averaged over 3 years. See 40 CFR 50.6 and 40 CFR part 50, Appendix K.

On July 18, 1997, EPA revised both the annual and the 24-hour PM–10 standards and also established two new standards for PM, both applying only to particulate matter up to 2.5 microns in diameter (PM–2.5)(62 FR 38651). While the revised suite of PM standards reflects an overall strengthening of the regulatory standard for particulate matter, the revised 24-hour PM–10 standard, viewed by itself, represents a relaxation of that standard. As such, for areas such as Phoenix that had not attained the pre-existing 24-hour standard at the time of the relaxation, CAA section 172(e) calls for application of controls to be promulgated by EPA that are no less stringent than would have been required for areas designated nonattainment prior to the relaxation. While today's proposed actions relate only to the CAA requirements concerning the 24-hour and annual PM–10 standards, as originally promulgated in 1987, the proposed FIP is consistent with the section 172(e) requirement.

[3] While the serious area PM–10 CAA requirements are referenced periodically throughout this notice, EPA's FIP obligation, the subject of today's proposal, relates only to the moderate area statutory requirements.

[4] By letter dated December 11, 1997 from Russell Rhoades, ADEQ, to Felicia Marcus, EPA, Arizona submitted revisions to the Arizona SIP for achieving and maintaining the PM–10 NAAQS. These revisions consist of particulate control measures in the document ''Serious Area Committed Particulate Control Measures for PM–10 for the Maricopa County Nonattainment Area and Support Technical Analysis,'' Maricopa Association of Governments (MAG), December 1997. On February 6, 1998, EPA found that these measures meet the Agency's completeness criteria as set forth at 40 CFR part 51, Appendix V, but has not yet approved or disapproved them. Also on February 6, 1998, EPA found, pursuant to CAA section 179(a), that Arizona had failed to submit the serious area nonattainment plan for Phoenix by the required date. In the same rule, EPA found that Arizona had failed to submit certain portions of the moderate area plan for the area. 63 FR 9423 (February 25, 1998). These moderate area portions are discussed further below.

[5] See ''State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,'' (General Preamble) 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992).

adoption, at a minimum, of reasonably available control technology (RACT)) shall be implemented no later than December 10, 1993 (CAA sections 172(c)(1) and 189(a)(1)(C));

(b) Provisions to assure implementation of RACT on major stationary sources of PM–10 precursors except where EPA has determined that such sources do not contribute significantly to exceedances of the PM–10 standards (CAA section 189(e));

(c) Either a demonstration (including air quality modeling) that the plan will provide for attainment as expeditiously as practicable but no later than December 31, 1994 or a demonstration that attainment by that date is impracticable (CAA section 189(a)(1)(B));

(d) For plan revisions demonstrating attainment, quantitative milestones which are to be achieved every 3 years and which demonstrate reasonable further progress (RFP), as defined in section 171(l), toward attainment by the applicable attainment date (CAA section 189(c));[6] and

(e) For plan revisions demonstrating impracticability, such annual incremental reductions in PM–10 emissions as are required by part D of the Act or may reasonably be required by the Administrator for the purpose of ensuring attainment of the PM–10 NAAQS by the applicable attainment date (CAA sections 172(c)(2) and 171(1)).

Moderate area plans were also required to meet the generally applicable SIP requirements for 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, and EPA guidance implementing these provisions.

3. Federal Implementation Plan Provisions

Section 110(c) of the CAA provides that:

(1) The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator—

(A) finds that the State has failed to make a required submission or finds that the plan or plan revision submitted by the State does not satisfy the minimum criteria established under section 110(k)(1)(A),[7] or

(B) disapproves a State implementation plan submission in whole or in part, unless the State corrects the deficiency, and the Administrator approves the plan or plan revision, before the Administrator promulgates such Federal implementation plan.

Section 302(y) defines the term ''Federal implementation plan'' in pertinent part, as:

A plan (or portion thereof) promulgated by the Administrator to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan, and which includes enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as marketable permits or auctions of emissions allowances).

EPA has wide-ranging authority under section 110(c) to fill in gaps left by a State failure. EPA's authority to prescribe FIP measures is of three types. First, EPA may promulgate any measure which it has authority to issue in a non-FIP context. Second, EPA may invoke section 110(c)'s general FIP authority and act to cure a planning inadequacy in any way not clearly prohibited by statute. Third, under section 110(c) the courts have held that EPA may exercise all authority that the State may exercise under the Act. For a more detailed discussion of these authorities and restrictions on EPA's FIP authorities, see 59 FR 23262, 23290–23292 (May 5, 1994).

4. Indian Reservations

a. EPA's FIP Obligation. As stated above, the purpose of EPA's proposed FIP is ''to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan,'' as specified in section 302(y). Because, except in the rare special circumstances that have not been shown to apply to Arizona, states have no jurisdiction to impose statutory or regulatory requirements in Indian country, the gaps in the Arizona PM–10 SIP for the Phoenix nonattainment area do not extend to tribal lands. As a result, EPA is not required in its proposed FIP to promulgate regulations for Indian lands within the Phoenix nonattainment area. While EPA is not proposing to extend the provisions of the proposed FIP to tribal lands, as discussed below, EPA and tribes, that are determined to be eligible by EPA, are authoriized under the CAA to protect air quality throughout Indian country.

b. EPA and Tribal CAA Authority in Indian Country. On February 12, 1998, EPA issued its final rule pursuant to CAA section 301(d) specifying the provisions of the Act for which Indian tribes may be treated in the same manner as states; the rule also authorizes eligible tribes to implement their own air programs under the Act. 63 FR 7254. In the proposed[8] and final rule, EPA discusses generally the legal basis under the CAA by which EPA and tribes are authorized to regulate sources of air pollution in Indian country.

In the rulemaking, EPA concluded that the CAA constitutes a statutory grant of jurisdictional authority to Indian tribes that allows them to develop air programs for EPA approval in the same manner as states. 63 FR at 7254–7259.

EPA also concluded that the CAA authorizes EPA to protect air quality throughout Indian country. See, e.g., CAA sections 101(b)(1), 301(a), and 502(d), (e), and (i). Therefore, EPA believes that it has broad legal authority to provide federal protection in Indian country when tribes choose not to develop a program, fail to adopt an adequate program or fail to adequately implement a program. In addition, section 301(d)(4) empowers EPA to directly administer CAA requirements in any case where EPA determines that treatment of tribes as identical to States is inappropriate or administratively infeasible. 63 FR at 7262. See also 59 FR at 43960.

It is EPA's policy to aid tribes in developing comprehensive and effective air quality management programs by providing technical and other assistance to them. EPA recognizes, however, that as it required many years to develop state and federal programs to cover lands subject to state jurisdiction, it will also require time to develop tribal and federal programs to cover reservations and other lands subject to tribal jurisdiction. 59 FR at 43961.

EPA promulgated 40 CFR 49.11 in the final Tribal rule, providing that the Agency will promulgate a FIP within a reasonable time if tribal efforts do not result in EPA-approved programs. 63 FR at 7273. EPA has also undertaken an initiative to develop a comprehensive strategy for implementing the CAA in Indian country that will articulate specific steps the Agency will take to ensure that air quality problems in Indian country are addressed either by EPA or the tribes themselves. This strategy is currently in draft form. EPA

[6] As will be seen below, the proposed PM–10 FIP for the Maricopa area does not demonstrate attainment by the applicable attainment deadline, but rather includes the alternative demonstration that attainment by that date is impracticable. Therefore, section 189(c) does not apply and is not discussed further in this notice.

[7] Section 110(k)(1)(A) requires the Administrator to promulgate minimum criteria that any plan submission must meet before EPA is required to act on the submission. These completeness criteria are set forth at 40 CFR part 51, Appendix V.

[8] See 59 FR 43956 (August 25, 1994).

also intends to issue national regulations covering various categories of air pollution sources that would apply in those situations in which a tribe does not have an approved program. 63 FR at 7262–7264.

In the final Tribal rule, the Agency emphasizes that its strategy for implementing the CAA in Indian country is multi-pronged, ''one prong of which is federal implementation * * * [t]he other prongs derive from a 'grass-roots' approach in which staff in the EPA regional offices work with individual tribes to assess the air quality problems and develop, in consultation with the tribes, either tribal or federal strategies for addressing the problems.'' 63 FR at 7264.[9]

EPA believes that the strategy that it has developed for tribal lands in the Phoenix nonattainment area, discussed in section VI below, is consistent with the approach outlined above. In short, EPA intends to provide technical and financial support to the Tribes in the area so that they may develop their own programs if they wish to do so, and to develop federal measures should it become necessary.

B. History of Arizona's PM–10 Plans and Related EPA Actions

1. Arizona's Moderate Area PM–10 Plan

The State of Arizona originally submitted a moderate area PM–10 plan revision to EPA on November 15, 1991. On March 4, 1992, EPA found that the plan did not meet the Agency's completeness criteria at 40 CFR part 51, Appendix V, in part because a proper public hearing on the plan had not been held. Thereafter the State held another public hearing and resubmitted the SIP revision on August 11, 1993. On September 7, 1993 EPA found this plan to be complete. The State submitted a revised and updated version of the plan on March 3, 1994. See generally 59 FR 38402, 38403 (July 28, 1994).

On April 10, 1995, EPA approved the State's moderate area PM–10 implementation plan revision for the Maricopa area. 60 FR 18010. Among other elements in that plan, EPA approved the State's RFP and RACM demonstrations as meeting the requirements of sections 171(1), 172(c)(1), 172(c)(2), and 189(a)(1)(C) of the CAA. Based on its approval of the RACM demonstration, EPA also proposed to approve, as meeting the requirements of section 189(a)(1)(B), the State's demonstration that even with the implementation of all RACM by December 10, 1993, it was impracticable for the Maricopa area to attain the PM–10 NAAQS by December 31, 1994.[10]

On May 1, 1995, the Arizona Center for Law in the Public Interest (ACLPI) filed a petition for review of EPA's April 10, 1995 approval of the State's moderate area PM–10 plan in the United States Court of Appeals for the Ninth Circuit.

On May 14, 1996, the Ninth Circuit vacated EPA's approval of the States's PM–10 moderate area plan. *Ober v. EPA*, 84 F.3d 304 (9th Cir. 1996). In short, the Court concluded that the State's moderate area plan failed to address the moderate area CAA requirements for attainment, RFP and RACM for the 24-hour standard and mandated that EPA require the State to do so. The Court also found that EPA had failed to provide the required opportunity for comment with respect to the RFP and RACM demonstrations for the annual standard. In response to the Court's opinion, EPA initiated the following actions.

2. The Microscale Plan—24-hour Standard

In the wake of the Ninth Circuit's *Ober* opinion, EPA considered how to appropriately implement the Court's directive in the context of the State's then-prevailing PM–10 planning efforts for the Maricopa area. The Maricopa area was reclassified as a serious PM–10 nonattainment area just days before the case was decided and, as noted above, the State was required to submit a new PM–10 plan meeting the serious area requirements by December 10, 1997.[11] Therefore EPA had to reconcile the Court's mandate that the State submit a plan correcting its moderate area plan deficiencies regarding the 24-hour standard concurrent with its responsibility to submit a plan meeting the serious area requirements for both NAAQS.

EPA concluded that, given the substantial overlap of the moderate and serious area planning requirements, it would not be in the public interest to require the State to divert its scarce resources into two independent planning exercises. At the same time, the Agency recognized that timely action (i.e., prior to the serious area plan submittal deadline of December 10, 1997) was required in order to be responsive to the Court's mandate. Therefore EPA, in consultation with the Arizona Department of Environmental Quality (ADEQ) and the MCESD, decided that the State would incorporate the moderate area plan elements for the 24-hour standard into the serious area plan, but would split that planning effort into two related parts. Accordingly, EPA, in a September 18, 1996 letter to ADEQ, required submittal of a limited, locally-targeted plan (microscale plan) analyzing air quality impacts at specific monitoring sites, and meeting both the moderate and serious area requirements for the 24-hour standard by May 9, 1997 (extended from an original deadline of April 18) and a full regional plan meeting those requirements for both the 24-hour and annual standards by December 10, 1997. Thus, the microscale and regional plans taken together would satisfy both the moderate area requirements mandated by the Court and the serious area planning requirements for both standards.

The State submitted the microscale plan to EPA on May 9, 1997 and on August 4, 1997, EPA approved the following portions of the plan:

(1) under sections 172(c)(1), 189(a)(1)(C) and 189(b)(1)(B), the provisions for implementing RACM and best available control technology (BACM) for the significant source categories of disturbed cleared areas, earth moving, and industrial haul roads; and

(2) under sections 189(a)(1)(B), 189(b)(1)(A), and 189(c), the attainment and RFP demonstrations for the Maryvale and Salt River monitoring sites.

(3) the resolution by the County of Maricopa to improve the administration of Maricopa County's fugitive dust control program and to foster interagency cooperation (adopted May 14, 1997);

(4) the resolutions of intent to work cooperatively with Maricopa County to control the generation of fugitive dust pollution adopted by the Cities of Phoenix (April 9, 1997), Tempe (March 27, 1997), Chandler (March 27, 1997), Glendale (March 25, 1997), Scottsdale (March 31, 1997), and Mesa (April 23, 1997) and the Town of Gilbert (April 15, 1997); and

(5) MCESD's Rule 310 (Open Fugitive Dust Sources), Rule 311 (Particulate Matter from

[9] EPA then elaborates on this grass-roots approach by discussing three components of the Agency's strategy: a needs assessment, including the development of emission inventories, outreach and communication, and training. 63 FR at 7264.

[10] The reader should refer to both the proposed approval, 59 FR 38402, and the final rule, 60 FR 18010, for EPA's interpretation of certain moderate area PM–10 requirements of the CAA and the Agency's application of these interpretations to the State's moderate area PM–10 plan. Those notices should also be consulted for the history of the State's PM–10 plan submittals and EPA's actions concerning them.

[11] For the CAA serious area PM–10 plan requirements, see section 189(b). EPA has issued an Addendum to the General Preamble (Addendum) describing the Agency's preliminary views on how it intends to review SIPs and SIP revisions containing serious area plan provisions. See ''State Implementation Plans for Serious PM–10 Nonattainment Areas, and Attainment Date Waivers for PM–10 Nonattainment Areas generally; Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,'' 59 FR 41998, 42011 (August 16, 1996).

Process Industries) and Rule 316 (Nonmetallic Mineral Mining and Processing).

In the same action, EPA disapproved the following provisions of the State's microscale plan:

(1) under sections 172(c)(1), 189(a)(1)(C) and 189(b)(1)(B), the provisions for implementing RACM and BACM for the significant source categories of agricultural fields, agricultural aprons, vacant lands, unpaved parking lots, and unpaved roads; and

(2) under sections 189(a)(1)(B), 189(b)(1)(A), and 189(c)(1), the attainment and RFP demonstrations at the West Chandler and Gilbert monitoring sites.[12]

3. EPA Actions on Arizona's Moderate Area PM–10 Plan Post-Ober With Respect to the Annual Standard

In response to the *Ober* decision, EPA provided an opportunity for public comment on the State's justifications for rejecting certain measures as RACM and on the emission reduction credit granted by the Agency for Rule 310 as it related to the State's RFP demonstration. EPA also proposed to restore its approval of the RACM, RFP and impracticability demonstrations in the State's moderate area plan with respect to the annual PM–10 standard. 61 FR 54972 (October 23, 1996).

As a result of the extensive technical work associated with the State's microscale plan, EPA has concluded, as discussed in detail in section III below, that it is no longer appropriate to restore its approval of the demonstrations in the State's moderate area plan for the annual standard. Therefore, EPA is proposing to withdraw its 1996 proposal and, instead, is now proposing to disapprove the impracticability and RACM demonstrations in that plan.

C. History of PM–10 FIP Litigation in Phoenix

On June 28, 1994, ACLPI filed, on behalf of two Phoenix residents, a complaint, No. CIV 94–1318 PHX PGR, in the United States District Court for the District of Arizona alleging that EPA was required, pursuant to section 110(c) of the CAA, to have promulgated a moderate area PM–10 FIP for Phoenix by March 4, 1994, two years after EPA's finding that the State's moderate area plan was incomplete. ACLPI sought, among other things, an order requiring EPA to promulgate a final FIP in 12 months. On February 28, 1995, the district court approved a consent decree requiring EPA to take final action on the moderate area plan by March 1, 1995. If EPA approved the plan, as turned out to be the case, the district court action would be stayed pending appellate review.

On May 1, 1995, ACLPI filed a petition for review of EPA's April 10, 1995 approval of Arizona's moderate area PM–10 plan for the Phoenix area in the United States Court of Appeals for the Ninth Circuit. *Ober v. EPA*, No. 95–70352. On May 14, 1996, the Court issued its opinion in the *Ober* case vacating EPA's approval of the State's plan.[13]

As a result of the Ninth Circuit's opinion in *Ober*, the stay of proceedings in the district court FIP case was lifted. On November 29, 1996 and March 25, 1997, respectively, the court approved a second consent decree and a modified second consent decree in which EPA agreed that if the Agency disapproved the State's microscale plan in whole or in part, the Administrator is required to sign by March 20, 1998 a Notice of Proposed Rulemaking (NPRM) that sets forth a proposed FIP for Phoenix that meets the moderate area PM–10 requirements for the annual and 24-hour standards for attainment, RACM and RFP as set forth in CAA sections 189(a)(1)(B) and (C), and 172(c)(2) or 189(c)(1). Under the decree, EPA must sign a Notice of Final Rulemaking (NFRM) setting forth the final FIP by July 18, 1998. EPA's FIP obligation is relieved as to any portion of the plan for which EPA signs a NFRM approving corrective SIP revisions by July 18, 1998.

III. SIP Actions

A. Proposed Disapproval of Moderate Area Plan

In its July 28, 1994 proposed approval of the State's moderate area plan, EPA noted that the plan's emission inventory identified fugitive dust sources as contributing more than 50 percent of the PM–10 emissions in the Phoenix area. These fugitive dust sources included, but were not limited to, construction and demolition activities, farming operations, uncovered haul trucks, and emissions from unpaved roads. 59 FR 38405. EPA also stated that it believed that Maricopa County's fugitive dust rule, Rule 310, fully addressed fugitive dust sources in the area. 59 FR 38404. Based in part on this belief and its evaluation of the balance of RACM in the plan, EPA proposed and eventually found that the moderate area plan assured timely implementation of RACM, and that these RACM were sufficient to demonstrate RFP but were insufficient to demonstrate attainment by the moderate area deadline of December 31, 1994. EPA, therefore, approved the RACM, RFP, and impracticability demonstrations in the State's moderate area plan. 60 FR 18010.

As discussed above, EPA's approval of the moderate area plan was subsequently vacated in *Ober*. In October 1996, EPA proposed to restore its approval of the RACM, RFP and impracticability demonstrations in the State's moderate area plan for the annual standard. 61 FR 54972. This proposal was based, in part, on the Agency's continued belief that Rule 310 represented RACM for fugitive dust sources in Maricopa County.

As described previously, EPA subsequently approved in part and disapproved in part the State's microscale plan for the 24-hour standard. In its evaluation of the microscale plan, EPA found that, in fact, Rule 310, due to inadequate commitment of resources by the State, does not assure enforcement of RACM on a number of fugitive dust sources, including unpaved roads and unpaved parking lots, that are legally subject to the rule. In addition, EPA found that there were no RACM that applied for agricultural sources. 62 FR 41862.

While these findings were made in the context of evaluating RACM for the 24-hour standard, the findings also apply to the annual standard. As noted above, EPA's 1994 approval of the State's moderate area plan relied in large part on the Agency's finding that Rule 310 constituted RACM for fugitive dust sources. As a result of its findings with respect to the microscale plan, EPA no longer considers Rule 310 to satisfy the Act's requirement for enforceable RACM for fugitive dust sources not permitted by the County under the rule; therefore, since the Agency can no longer find that the State's moderate area plan assures the required source compliance with Rule 310 and, hence, does not ensure enforcement of RACM as required by the Act, EPA, is proposing to disapprove the RACM demonstration for the annual standard in the State's moderate area plan.

In order for a moderate area plan to demonstrate that attainment is impracticable, it must make that showing in light of implementation of all RACM. 57 FR 13544. Since EPA is now proposing to disapprove the RACM

[12] See EPA's proposed and final actions on the State's microscale plan at 62 FR 31025 (June 6, 1997) and 62 FR 41856 (August 4, 1997).

[13] The reader is referred to the text of the opinion for the Court's disposition of the range of issues raised by ACLPI in its petition. See 84 F.3d 304 (9th Cir. 1996). See also 61 FR 54972 in which EPA preliminarily addresses the Court's opinion as it relates to the RACM, RFP and attainment demonstrations for the annual standard and 62 FR 31025 in which EPA discusses the opinion as it relates to the required demonstrations for the 24-hour standard.

demonstration in the State's moderate area plan, the Agency is also proposing to disapprove the demonstration contained in that plan that attainment by the moderate area deadline of December 31, 1994 was impracticable.[14]

EPA, however, is not proposing to disapprove the RFP demonstration in the State's moderate area plan. The estimated emission reductions from the implementation of Rule 310 on unpermitted sources accounted for less than 20 percent of the total emission reductions from the plan. Even without the reductions from the unpermitted sources, EPA believes that plan still contains sufficient emission reductions from other measures to demonstrate RFP for the annual standard and, therefore, disapproval is not warranted. This issue, however, is academic since, as noted before, EPA is withdrawing its proposal to restore approval of the RFP demonstration for the annual standard in the State's plan and is substituting its own proposed RFP demonstration for that standard.

B. Withdrawal of Proposal to Restore Moderate Area Plan Demonstrations for the Annual PM–10 Standard

As a consequence of the proposed disapprovals discussed above, EPA is today withdrawing its October 26, 1996 proposal (61 FR 54972) to restore the Agency's approval of the RACM and impracticability demonstrations for the annual standard in the State's moderate area plan.

EPA is today also withdrawing its proposal to restore approval of the RFP demonstration for the annual standard in the State's plan. While EPA continues to believe that the plan as a whole continues to demonstrate RFP, its previous analysis of the State's RFP demonstration is no longer valid because it relied in part upon emission reductions from the implementation of Rule 310 on a number of unpermitted source categories. Under its CAA section 110(c) authority, EPA is proposing its own RFP demonstration for the annual standard as described in section V.C.

IV. Moderate Area PM–10 Planning Requirements for the FIP Proposal

A. Attainment/Impracticability Demonstration

Because the moderate area attainment deadline, December 31, 1994, has passed, EPA is confronted with the issue of how to define the moderate area requirements applicable to the Agency's proposed FIP. EPA believes that because the Maricopa area was reclassified from a moderate to a serious nonattainment area, the moderate area requirements (demonstration of impracticability or attainment by no later than December 31, 1994) have been superseded by the serious area attainment requirement (attainment by no later than December 31, 2001) and are therefore now moot. Having reviewed the CAA's moderate and serious area PM–10 attainment provisions, EPA has concluded that when a moderate PM–10 area has been reclassified after the moderate area attainment deadline has passed and been replaced with a new deadline, the moderate area deadline no longer has any logical, practical or legal significance.

Thus, under this interpretation, there would be no need for the proposed FIP, to the extent that it is intended to meet the CAA's moderate area requirements, to demonstrate attainment. In other words, such an attainment demonstration would only be required when the State submits its complete serious area plan to comply with the section 189(b)(1) attainment demonstration requirement. EPA believes that its interpretation can be reconciled with the *Ober* Court's directive that EPA require the State to address the moderate area attainment requirements for the 24-hour standard and that such an interpretation is reasonable given the legal and factual context in which that case was decided. EPA's reasoning is explained in detail at 61 FR 54972, 54974–54975 (October 23, 1996). Nevertheless, EPA complied with the Court's remedies regarding the moderate area attainment requirements by directing the State to meet those requirements in the microscale plan.[15] Having complied with the Court opinion by directing that the State meet the moderate area attainment requirements in its planning efforts, EPA discerns no basis for applying different requirements to the Agency in promulgating a moderate area FIP that is intended to correct State planning deficiencies.

Having determined that the proposed FIP must meet the CAA's moderate area attainment requirements, EPA has concluded that since the December 31, 1994 deadline has passed and the Maricopa area has been reclassified, the only attainment deadline currently applicable to the area is the serious area deadline, that is, achievement of attainment as expeditiously as practicable, but no later than December 31, 2001. Thus, consistent with the terms of section 189(a)(1)(B), the moderate FIP must either demonstrate attainment of the PM–10 NAAQS as expeditiously as practicable but no later than December 31, 2001, or, alternatively demonstrate that attainment by that date is impracticable.

B. RACM/RACT Demonstration

Sections 172(c)(1) and 189(a)(1)(C) read together require that moderate area PM–10 plans include RACM and RACT for existing sources of PM–10. These plans were to provide for implementation of RACM/RACT no later than December 10, 1993. Since the moderate area deadline for the implementation of RACM/RACT has passed, EPA has concluded that the RACM/RACT required in the FIP must be implemented ''as soon as possible.'' *Delaney* v. *EPA*, 898 F.2d 687, 691 (9th Cir. 1990). EPA has interpreted this requirement to be ''as soon as practicable.'' See 55 FR 41204, 41210 (October 1, 1990).

The methodology for determining RACM/RACT is described in detail in the General Preamble. 57 FR 13498, 13540–13541. In summary, EPA suggests starting to define RACM with the list of available control measures for fugitive dust, residential wood combustion, and prescribed burning contained in Appendices C1, C2, and C3 of the General Preamble and adding to this list any additional control measures proposed and documented in public comments. Any measures that apply to emission sources of PM–10 and that are de minimis and any measures that are unreasonable for technology reasons or because of the cost of the control in the area can then be culled from the list. In addition, potential RACM may be culled from the list if a measure cannot be implemented on a schedule that would advance the date for attainment in the area. 57 13498, 13560.

In addressing cost issues, the General Preamble suggests that in case of public sector sources and control measures, the cost evaluation should consider the impact of the reasonableness of the measures on the governmental entity that must bear the responsibility for their implementation. 57 FR 13541.

The General Preamble does not define ''de minimis'' except to say that it would be unreasonable to apply

[14] The discussion in section IV.A. regarding EPA's views of the status of the CAA's moderate area attainment requirements following an area's reclassification to serious is applicable here and the reader is referred to that section.

[15] While EPA could have sought clarification on this issue from the Ninth Circuit, the Agency did not do so because such a review would necessarily have occurred without benefit of a thorough briefing on the issue and in the absence of an administrative record. The Agency does, however, reserve its right to assert its interpretation in any challenge to EPA's implementation of the Court's remedies or in the context of other reclassifications.

controls to sources that are negligible contributors to ambient concentrations. 57 FR 13540, footnote 18. The regulatory scheme for PM in subpart 4 of the CAA establishes two graduated levels of controls, RACM and BACM, depending on the severity of the area's air quality. See CAA section 189(a) and (b). These statutory requirements, applicable to moderate and serious areas, respectively, clearly contemplate that smaller PM sources need not, in the first instance, bear the burden of emission reductions. Thus, in determining the initial level of control, it is appropriate to focus on what is reasonable and practicable for significant sources of PM emissions.

For its proposed FIP, EPA is proposing to rely on the criteria applied to define significant contributors under its new source permitting programs (40 CFR 51.165(b)) as a surrogate for determining which source categories require the application of RACM. Under EPA's new source permitting programs, a PM–10 source is considered to be a ''significant contributor'' if it contributes 5 $\mu g/m^3$ or more of PM–10 to a location of expected 24-hour exceedances and 1 $\mu g/m^3$ or more to a location of expected annual violation. Therefore, a de minimis source category for the purposes of defining which source categories require the application of RACM under section 189(a)(1)(C), is proposed to be one that contributes less than 5 $\mu g/m^3$ of PM–10 to a location of expected 24-hour exceedances and less than 1 $\mu g/m^3$ to a location of expected annual violations.

It should be emphasized that the de minimis criterion is invoked solely for the purposes of determining which source categories need RACM and not for determining which source categories need controls for attainment. In establishing this RACM de minimis criterion, EPA is not taking the position that de minimis RACM source categories can escape controls if such controls are needed for attainment or RFP. In that case, it is the Agency's position that the level of control on such insignificant sources need only be at the level required to demonstrate reasonable further progress and expeditious attainment and that this level need not be justified under section 189(a)(1)(C) as RACM.

For any RACM that EPA rejects for reasons of technology, cost, size of source category or timing of implementation as described above, the Agency must provide a reasoned justification for the rejection. Once the final list of RACM is defined, each RACM must be converted into a legally enforceable vehicle such as a rule, permit, or other enforceable document. 57 FR 13498, 13541.

C. Reasonable Further Progress (RFP) Demonstration to Follow

EPA has concluded that for PM–10 plans that demonstrate that it is impracticable for an area to attain the NAAQS by the applicable attainment date, the governing statutory requirement for RFP is section 172(c)(2) as defined by section 171(l).[16] Section 172(c)(2) of the Act states that nonattainment plans shall require reasonable further progress (RFP). RFP is defined in section 171(1) as ''such annual incremental reductions in emissions of the relevant air pollutant as are required by this part [D] or may reasonably be required by [EPA] for the purpose of ensuring attainment of the applicable [NAAQS] by the applicable date.''

EPA has interpreted the RFP requirement for areas demonstrating impracticability as being met by a showing that the implementation of all RACM has resulted in incremental emission reductions below pre-implementation levels. EPA believes that this interpretation is consistent with the definition in section 171(l) and with the statutory term ''reasonable further progress.''

V. Summary of EPA's FIP Proposal

As a moderate area plan, EPA's proposed FIP must demonstrate attainment of both the annual and 24-hour PM–10 standards by December 31, 2001 (as a result of the passing of the moderate area deadline and the reclassification to serious) and provide for expeditious implementation of RACM for all significant source categories, or demonstrate that even with RACM it is impracticable for the area to attain by that date. The proposed FIP must also demonstrate RFP consistent with the attainment or impracticability demonstration.[17]

EPA's FIP obligation arises only as to SIP provisions that are not approved. As discussed previously in section II.B.2., EPA has already approved RACM, attainment, and RFP demonstrations for certain sources of source categories in the Phoenix area. Specifically, EPA has already approved RACM for disturbed cleared areas (e.g., construction sources), earth moving, industrial haul roads, and stationary sources and the attainment and RFP demonstrations for the 24-hour standard at the Maryvale and Salt River monitoring sites. 62 FR 41856. As a result, this proposed FIP does not address these SIP elements.

EPA, however, has disapproved the State's RACM demonstrations for the significant source categories of unpaved roads, unpaved parking lots, vacant lots, and agricultural fields and aprons as well as its attainment and RFP demonstrations for the 24-hour standard at the Gilbert and West Chandler monitoring sites. 62 FR 41856. In addition, EPA is proposing to disapprove the RACM and attainment/impracticability demonstrations for the annual standard in the State's moderate area plan and to revise the State's RFP demonstration for this standard.[18] See Section III.A.

The following sections describe EPA's proposals to address each of the outstanding elements of the Phoenix moderate plan: RACM/RACT demonstration, attainment/impracticability demonstrations, and RFP demonstrations.

A. RACM/RACT Demonstration

1. RACT and PM–10 Precursors

a. RACT. In the General Preamble, EPA recommends that major stationary sources of PM–10 be the starting point for a reasonably available control technology (RACT) analysis. 57 FR 13541. Stationary sources of PM–10 in the Phoenix area include power plants, concrete manufacturing, sand and gravel operations, and cotton ginning. MCESD has adopted regulations requiring RACT for stationary sources of PM–10: Rule 311, ''Particulate Matter from Process Industries,'' and Rule 316, ''Nonmetallic Mineral Mining and Processing.'' These measures were approved by EPA in 1995 as RACT for PM–10 stationary sources as part of the moderate area plan approval. 60 FR 18009. While not at issue in the litigation regarding that plan's approval, EPA's approval of these rules was also incidentally vacated by the *Ober* decision. The Agency restored these RACT rules to the SIP as part of its action on the microscale plan. 62 FR 41862.

[16] EPA originally set forth preliminary guidance on the RFP requirements for such plans in its final rule approving the Arizona moderate area PM–10 plan for the Phoenix area. See 60 FR 18010, 18013. The Agency subsequently clarified portions of that guidance in its proposal to restore the annual standard demonstrations in the State's moderate area plan following the Ninth Circuit's Ober decision. See 61 FR 54972, 54973–54974. The reader is referred to these notices for an expanded discussion of the Agency's interpretation of the RFP requirements for moderate PM–10 areas demonstrating impracticability.

[17] See section IV. above.

[18] EPA's FIP obligation was initially triggered by an incompleteness finding on the State's moderate area plan submittal. Although EPA subsequently determined the submittal to be complete, the FIP obligation continues until there is a fully approved SIP in place.

b. PM–10 Precursors. Under CAA section 189(e), the control requirements applicable to major stationary sources of PM–10 must also be applied to major stationary sources of PM–10 precursors, unless EPA determines such sources do not contribute significantly to PM–10 levels in excess of the NAAQS in the area. ''Significantly'' is not defined in either the Act or in the General Preamble. Rather, for moderate areas, the determination is to be made on a case-by-case basis. 57 FR at 13539. For this action, EPA proposes to rely on the criteria applied under its new source permitting programs (40 CFR 51.165(b)) to guide its review of whether major stationary sources of PM–10 precursors significantly contribute to PM–10 levels in excess of the standard. See Section IV.B. A major stationary source in a moderate area is one that emits or has the potential to emit 100 tons per year or more of PM–10 or a PM–10 precursor. 57 FR 13538.

PM–10 precursors can include sulfur oxides (SO_X), nitrogen oxides (NO_X), ammonia, and volatile organic compounds (VOCs). In the Phoenix area, VOCs are not important in secondary particulate formation. Sulfur oxide emissions in the area are dominated by emissions from non-road engines and thus major sources of SO_X account for less than 10 percent of the total inventory. Nitrogen oxide emissions are almost entirely (90 percent) from on- and non-road engines, with major stationary sources accounting for only 4.3 percent of the total inventory. Livestock operations (which are not considered major point sources) account for 99.8 percent of ammonia emissions. See Tables 2–2 and B3–1 in ''1994 Regional PM–10 Emission Inventory for the Maricopa County Nonattainment Area,'' Draft Final Report, MAG, May 1997. In total, major point sources account for less than 7 percent of the total precursor inventory.

Draft PM–10 air quality modeling for the Phoenix nonattainment area indicates that exceedances of both the 24-hour and annual standards are attributable chiefly to direct particulate matter emissions from re-entrained dust from paved roads and fugitive dust from disturbed surfaces such as construction sites and agricultural fields. The draft modeling also indicates that secondary particulate formation from all sources of precursors (including natural background) contributes from 3.6 to 9.4 $\mu g/m^3$ to the modeled 24-hour episodes. See ''Technical Support Document for the Regional PM–10 Modeling in Support of the 1997 Serious Area PM–10 Plan for Maricopa County Nonattainment Area,'' Draft Report, MAG, October 1997, Table 3–26 (MAG Modeling TSD). No contribution from secondary particulates to the annual standard was estimated in the draft modeling; however, based on a crude average of the results of the eight 24-hour episodes modeled, the annual total impact (including background) of secondary particulates is around 5.6 $\mu g/m^3$.

From these modeling results, and assuming that a source's contribution to secondary particulate levels is proportional to its presence in the inventory, major stationary sources of PM–10 precursors contribute no more than 0.6 $\mu g/m^3$ to the 24-hour standard and 0.3 $\mu g/m^3$ to the annual standard (the actual contribution is likely to be less when the background levels of secondary particulates are factored out). Both these levels are well below the 5 $\mu g/m^3$ 24-hour standard and 1 $\mu g/m^3$ annual standard significance levels; therefore, EPA proposes to find, based on existing modeling, that major stationary sources of PM–10 precursors do not contribute significantly to PM–10 levels in the Maricopa area which exceed the PM–10 NAAQS, and therefore, RACT on these major sources is not required under section 189(e). With this proposal, which is based on an assessment of the current mix of sources and meteorological patterns, EPA is not drawing any conclusions on the potential future need or desirability of controls on major sources of PM–10 precursors to assure eventual attainment of the PM–10 standard in the Phoenix area.

2. RACM Approach

As discussed in section IV.B. above, EPA's General Preamble suggests determining RACM by beginning with the list of measures found in Appendix C to the General Preamble and adding to that list any measures which have been suggested by public comments. Any measures that are determined to apply to emission sources of PM–10 that are de minimis and any measures that are technologically infeasible or have unreasonable costs can then be culled from the list. A reasoned justification must be provided for each measure that is rejected as RACM. 57 FR 13498, 13540.

EPA has identified a list of 99 potential control measures. This list of measures is taken from the list of measures developed for the State's 1991 moderate area plan and includes the measures found in Appendix C to the General Preamble as well as measures recommended by the Maricopa air agencies and in public comments on the moderate area plan.[19] The measures range from fugitive dust and transportation control measures to measures which achieve reductions from national transportation sources such as aircraft and trains.

Before evaluating measures as RACM, EPA first screened the list of 99 measures to determine which measures were applicable to the Phoenix area and for which EPA had legal authority. EPA then screened the list to determine which measures it has already approved as State RACM or adopted at the federal level and considers RACM. Where EPA has already determined a measure to be RACM, no further analysis of the measure is necessary. Finally, the Agency evaluated the resulting shorter list of measures based on the General Preamble's RACM criteria to identify which measures constituted RACM for the Phoenix area.

Readers should note that the following analysis is meant to apply only in the limited instance of this moderate area PM–10 FIP for the Maricopa County area and only to the determination of the availability and reasonableness of controls for adoption and implementation by EPA and not by the State of Arizona, its local jurisdictions or other states. In contrast to EPA's regulatory authority as a federal executive-branch agency, the concept of ''state'' as used in the Clean Air Act embodies both the state's executive and more extensive legislative functions and therefore includes the authority not only to regulate but also to establish new legal authority and to raise funds for necessary programs. As a result, it is likely that the State could adopt and implement a broader range of RACM.

Because there are both a 24-hour and an annual PM–10 standard, EPA must evaluate whether each measure is reasonably available for each standard. However, except for the de minimis criterion discussed later, the criteria EPA used to determine potential RACM are equally applicable to both PM–10 standards, that is, each criterion and the results of applying the criterion to a measure do not vary depending on whether the measure is being evaluated for the 24-hour or annual standard. As a result, a completely separate RACM analysis for each standard is not warranted and has not been performed.

[19] The 1991 MAG plan identified 79 potential RACM with an additional 82 potential measures identified from public comment. Many of these public comment measures, however, duplicated measures on the original list of 79.

3. Federal Implementation Criteria

a. Applicability to the Phoenix Area. Before a measure can be considered as potential RACM, EPA must first determine if the measure would have any inherent potential to reduce PM–10 emissions in the Phoenix area. Some of the listed measures cover sources that are not represented in the Phoenix area, such as marine vessel operations [20] and deicing materials, and were rejected from further evaluation on this basis.

In addition, many of the 99 measures were taken from the ozone or CO air quality plans for the Phoenix area and are primarily intended to reduce CO or ozone precursor emissions. Several of these measures do not reduce PM–10 emissions. For example, since PM–10 emissions from both tailpipes and re-entrained dust from paved roads are independent of the speed of vehicles, measures that simply improve traffic flow and thus improve overall traffic speeds have no effect on primarily-emitted PM–10. [21]

Note that this criterion is not addressing whether the measure could be implemented in the Phoenix area in a manner that would achieve PM–10 emission reductions. Implementation feasibility will be considered as part of the technical feasibility criterion below.

b. Existing RACM. In some instances, EPA has already SIP-approved a measure or very similar measure as RACM or has promulgated at the federal level a measure that it considers to be RACM. Where EPA has already determined a measure to be RACM, no further analysis of the measure is necessary.

c. Legal Authority. EPA must have the legal authority under the Clean Air Act to promulgate, implement and enforce a measure, and must not be preempted from promulgating, implementing, or enforcing it by other federal statutes, regulations or court orders before it considers a measure reasonably available. EPA's FIP authority under CAA section 110(c) is broad (see section II.A.3. above); however, the Agency is constrained in specific instances by the Act itself. See e.g., CAA section 110(a)(5)(A)(i) (prohibition on indirect source review programs) and section 110(c)(2)(B) (prohibition on parking surcharges).

Additionally, EPA's authority to promulgate measures in a FIP which would require the State to enact legislation or expend state funds is limited. EPA may require the State to enact legislation or expend its funds if the FIP measures affect the pollution-creating activities of the State, but may not do so if the effect is to govern the pollution-creating activities of others. For example, EPA could not require a state to expand a mass transit system in order to reduce emissions from private automobiles. EPA could, however, require a state to retrofit state-owned buses to reduce emissions from those buses. For a detailed discussion of this issue, see 52 FR 23263, 23291–23292 (February 5, 1994) (proposed ozone and CO FIP for the South Coast Air Basin).

4. Application of Federal Implementation Criteria

Table 1 provides an overview of the application of the above federal implementation criteria to the 99 measures. Table 1 also identifies which measures EPA has already approved as RACM or has already promulgated a federal measure that it considers RACM (e.g., diesel fuel standards). Of the 99 measures, 21 were eliminated because the sources do not exist in the Phoenix area or the measure does not beneficially affect PM–10 emissions, 11 because EPA had already approved or promulgated RACM, and 11 measures because EPA does not have the legal authority to adopt and/or implement the measure. Consequently, 56 measures were considered for inclusion in the proposed FIP. A more detailed discussion of EPA's reasons for rejecting a measure can be found in the Technical Support Document for today's proposed action.

In order to evaluate its ability to implement each of these measures, EPA had to first identify how it would implement the measure. EPA considered three basic methods of implementation: (1) by rule requiring the owner/operator of the source to implement the control, (2) by direct action (e.g., EPA would pave a road), or (3) by providing additional funding to the State or local agency to implement the measure (e.g., expand MAG ridesharing). The implementation method(s) assumed for a measure is indicated in Table 1 by the number in parentheses after the description of the measure. These numbers correspond to the numbers above.

Note: Where a measure is not applicable to the Phoenix area or where the Agency lacks legal authority, EPA has not analyzed the measure for the remaining criteria. This is indicated by dashes in a column. A question mark in a legal authority column indicates that EPA's legal authority is uncertain at this time; however, for the purposes of this analysis, question marks are treated as yeses.

TABLE 1.—MEASURES APPROPRIATE FOR FEDERAL IMPLEMENTATION

Source category and measure	Appropriate to PHX PM–10	No approved RACM	Legal authorization	Available federal measures
A.1. Paved Road Dust—Reduce Dust (Silt) Loading				
1. Pave, vegetate, or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads (1)	Y	Y	Y	Y
2. Require haul trucks to be covered (1)	Y	Y	Y	Y
3. Provide for traffic rerouting/rapid clean-up of temporary sources of dust (water erosion, track out, material spills) (1)	Y	Y/N	Y	Y
4. Improved material specification for deicing materials (1)	N	.....	.....	N
5 Require curbing and pave or stabilize road shoulders (1)	Y	Y	?	Y
6. Provide for stormwater drainage to prevent water erosion onto paved roads (2/3)	Y	Y	?	Y
7. Mitigation of freeway construction impacts (1)	Y	Y/N	Y	Y
A.2. Paved Road Dust/Tailpipe Emissions—Reduce VMT				
1. Implement short range transit improvements (2/3)	Y	Y	?	Y
2. Implement long range transit improvements (2/3)	Y	Y	?	Y

[20] Marine vessel operations here mean commercial port traffic operations and not pleasure or recreational boating operations. Emissions from pleasure/recreational boat engines are covered under non-road engine standards.

[21] Nor do such flow improvements have a beneficial effect on secondary particulate levels since emissions of the major PM–10 precursor from on-road motor vehicles, NOx, increase with speed.

TABLE 1.—MEASURES APPROPRIATE FOR FEDERAL IMPLEMENTATION—Continued

Source category and measure	Appropriate to PHX PM–10	No approved RACM	Legal authorization	Available federal measures
3. Require exclusive bus lanes on arterials and freeways (2/3)	Y	Y	?	Y
4. Expand MAG rideshare program (2/3)	Y	Y	Y	Y
5. Adopt trip reduction ordinance	Y	Y	Y	Y
6. Establish voluntary no drive days (2/3)	Y	Y	Y	Y
7. Establish an areawide public awareness program (2/3)	Y	Y	Y	Y
8. Build/establish park and ride lots (2/3)	Y	Y	Y	Y
9. Provide employees financial incentives (e.g., zero bus fares) in lieu of parking (1)	Y	Y	Y	Y
10. Require employers to provide preferential parking for car and van pools (1)	Y	Y	Y	Y
11. Require mandatory parking charges for employees (1)	.....	.....	N	N
12. Build HOV lanes on freeways (3)	Y	Y	?	Y
13. Build HOV lanes on arterials (3)	Y	Y	?	Y
14. Build HOV ramps which bypass metering signals (3)	Y	Y	?	Y
15. Promote increased bicycle use (3)	Y	Y	Y	Y
16. Provide or require bicycle travel (e.g., lanes) and support facilities (e.g., lockers and racks) (3)	Y	Y	?	Y
17. Promote pedestrian travel through provisions of pedestrian facilities (e.g. sidewalks) (3)	Y	Y	?	Y
18. Provide pedestrian overpasses (3)	Y	Y	?	Y
19. Promote the use of/require employers to provide alternative work hours (1)	Y	Y	Y	Y
20. Promote the use of/require employers to provide alternative work weeks (1)	Y	Y	Y	Y
21. Promote the use of telecommuting (1)	Y	Y	Y	Y
22. Promote the use of teleconferencing (1/2/3)	Y	Y	Y	Y
23. Provide auto free zones and pedestrian malls (2/3)	Y	Y	N	N
24. Provide vanpool purchase incentives such as tax breaks (1)	Y	Y	N	N
25. Require merchants to provide alternative transportation incentives to customers (1)	Y	Y	Y	Y
26. Implement congestion pricing (2/3)	Y	Y	N	N
27. Require non-employee parking to be priced (1)	Y	Y	N	N
28. Impose fee on vehicles related to emissions (smog fees) (1)	Y	Y	Y	Y
29. Encourage private sector transit by state deregulation (1)	N	.....	.....	N
30. Evaluate & mitigate air quality impacts from new development (indirect source review) (1)	Y	Y	N	N
31. Require increased land use density along transit routes (1)	Y	Y	N	N
32. Provide a fee-based tradable travel permit program (1/2)	Y	Y	N	N
33. Set up system of road pricing (2/3)	Y	Y	N	N
B. On-Road Vehicle Exhaust—Tailpipe and Non-VMT Reduction Measures				
1. Expand current I/M to all model years (1/2/3)	Y	Y	Y	Y
2. Expand the current I/M program statewide (1/2/3)	Y	Y	Y	Y
3. Expand the current I/M program countywide (1/2/3)	Y	Y	Y	Y
4. Require the use of No. 1 diesel fuel (1)	Y	N	Y	N
5. Require clean fuels for fleet vehicles (1)	Y	Y	Y	Y
6. CA new car standards (1)	Y	Y	Y	Y
7. Reduce cold start emissions (1)	N	.....	.....	N
8. Scrap higher polluting vehicles (2/3)	Y	Y	Y	Y
9. Reduce idling at drive up facilities (1)	N	.....	.....	N
10. More strictly enforce traffic, parking, air pollution regulations (2) [1]	Y	Y	N	N
11. Freeway surveillance (2/3)	N	.....	.....	N
12. Ramp metering & signage (2/3)	N	.....	.....	N
13. Traffic signal synchronization (1/2/3)	N	.....	.....	N
14. Reversible lanes on arterials (1/2/3)	N	.....	.....	N
15. One way streets (1/2/3)	N	.....	.....	N
16. Truck restrictions during peak periods (1/2/3)	N	.....	.....	N
17. Intersection improvements (2/3)	N	.....	.....	N
18. On street parking restrictions (1/2/3)	N	.....	.....	N
19. Bus pullouts in curbs (1/2/3)	N	.....	.....	N
20. Alternative fuels for buses/electric shuttle buses (1)	Y	Y	Y	Y
21. Emission controls on public diesel vehicles (1)	Y	N	.....	N
C. Dust from Unpaved Road/Parking Lot/Disturbed Vacant Lots				
1. Pave or otherwise stabilize permanent unpaved haul roads, and parking or staging areas at commercial, municipal, or industrial facilities (1)	Y	N	.....	N
2. Require sources to submit dust control plans (1)	Y	[2] N/Y	Y	Y
3. Develop traffic reduction plans on unpaved roads (1)	Y	Y	Y	Y
4. Limit use of recreational vehicles on open land (1)	Y	Y	Y	Y
5. Pave or stabilize unpaved roads (1)	Y	Y	Y	Y
6. Pave or stabilize unpaved parking areas (1)	Y	Y	Y	Y
7. Require controls on material storage piles (1)	Y	N	.....	N

TABLE 1.—MEASURES APPROPRIATE FOR FEDERAL IMPLEMENTATION—Continued

Source category and measure	Appropriate to PHX PM–10	No approved RACM	Legal authorization	Available federal measures
8. Require stabilization of wind erodible soils (1)	Y	Y	Y	Y
9. Require windbreaks, watering, paving, vegetating for windblown dust (1)	Y	Y	Y	Y
10. Restrict blowers for landscaping (1)	Y	Y	Y	Y
D. Agricultural Sources				
1. Rely on soil conservation requirements (e.g., conservation plans) of the Food Security Act (1)	Y	Y	Y	Y
2. Require windbreaks for agricultural sources (1)	Y	Y	Y	Y
E. Residential Wood Combustion (RWC)				
1. Establish an episodic curtailment program for RWC (1/2/3)	Y	N	.....	N
2. Establish a public education/information program for RWC (2/3)	Y	N	.....	N
3. Encourage the improved performance of RWC devices (1)	Y	N	.....	N
4. Provide inducements to reduce number of RWC devices (1/2/3)	Y	N	.....	N
F. Other Area Sources				
1. Develop a smoke management program for prescribed burns (1)	Y	N	.....	N
G. Point Sources				
1. RACT for stationary sources (1)	Y	N	.....	N
H. Marine Vessel/Ports				
1. Divert port related truck traffic to rail (1)	N	.....	.....	N
2. Control emissions from ship berthing facilities (1)	N	.....	.....	N
3. Control fugitive emissions from marine vessels (1)	N	.....	.....	N
4. Control emissions from marine diesel operations (1)	N	.....	.....	N
5. Limit the sulfur content of marine fuel (1)	N	.....	.....	N
I. Locomotives				
1. Reduce rail crossings (1)	Y	Y	N	N
2. Control switching locomotives (1)	Y	Y	Y	Y
3. Electrify rail lines (1)	Y	Y	Y	Y
J. Airplanes/Airport Ground Equipment				
1. Centralized airport ground power systems (1)	Y	Y	Y	Y
2. Reduce emissions from airport ground access vehicles (1)	Y	Y	Y	Y
3. Establish tighter emissions standards for new jet engines (1)	Y	Y	Y	Y
4. Control emissions from aircraft and ground service vehicles (1)	Y	Y	Y	Y
5. Require replacement of high emitting aircraft (1)	Y	Y	Y	Y
6. Require general aviation vapor recovery (1)	N	.....	.....	N
K. Other Non-Road Engines				
1. Establish emission standards for small utility equipment (1)	Y	N	.....	N
2. Establish emission standards for new heavy duty construction equipment (1)	Y	Y	.....	Y
3. Establish emission standards for off road motorcycles (1)	Y	Y	Y	Y
L. Miscellaneous Measures				
1. Expand PM–10 monitoring network (2/3)	N	.....	.....	N
2. Move state fair to a different time of the year (1)	N	.....	.....	N
3. Winter daylight savings time (1)	N	.....	.....	N

[1] EPA has no legal authority to enforce local measures, such as traffic and parking regulations, which are not approved into the SIP. Most PM–10 air pollution regulations are separately listed in this table.

[2] Dust control plans are a requirement for sources which are required to obtain a permit from the County, but are not a requirement for unpermitted sources. A dust control plan is a method for identifying, implementing and enforcing dust control measures for and on a particular source, rather than a dust control measure in and of itself.

5. RACM Criteria

The General Preamble suggests three criteria for excluding measures as RACM: de minimis source, technological infeasibility, and the cost of control in the nonattainment area. EPA's proposed definitions for each of these criteria are described below.

a. De Minimis Source. EPA proposes to rely on the criteria applied under its new source permitting programs (40 CFR 51.165(b)) as a guide in determining when a source category is de minimis for the purposes of determining whether RACM must be applied: a de minimis source or source category is one that contributes less than

5 g/μ_3 of PM–10 to a location of expected 24-hour exceedances and 1 μg/m^3 to a location of expected annual violation. To be a considered a de minimis source for the purposes of this RACM analysis, the source had to be de minimis for both the 24-hour and annual standard. As discussed previously in section IV.B., focusing on what is reasonable and practicable for significant sources is consistent with the CAA's scheme of graduated controls for PM.

EPA has used the results from the State's microscale plan to identify which source categories are significant and de minimis for the 24-hour standard for the purposes of RACM analysis. As discussed in EPA's final action on the microscale plan (62 FR 41856), the significant source categories for the 24-hour standard are unpaved roads, unpaved parking lots, disturbed cleared areas (i.e., vacant lots), agricultural fields, and agricultural aprons. 62 FR 31031. De minimis source categories for the 24-hour standard are industrial yards, surface mining, other industrial activities, paved roads, trackout, and paved parking lots.

To determine significant and de minimis sources for the annual standard for this RACM analysis, EPA has relied on the results at the Greenwood monitoring site in the State's Urban Airshed Model (UAM) simulation, performed as part of ongoing work for Maricopa's serious area PM–10 plan, see MAG Modeling TSD, Table 6.9. The complete list of significant and de minimis sources for this RACM determination can be found in Table 2 below. Where the air quality modeling provides only a single impact number for a group of source categories (e.g., ''other area sources'' which contains area source fuel combustion, open burning, and emissions from charbroiling), EPA has assumed that the impact of an individual source category is proportional to its presence in the inventory for that group of source categories. In total, the de minimis categories account for less than 10 percent of the total exceedance value at the Greenwood monitor.[22–24, 25]

TABLE 2.—SIGNIFICANT AND DE MINIMIS SOURCE CATEGORIES FOR DETERMINING RACM FOR THE ANNUAL STANDARD

PM–10 Source category	Annual impact at the Greenwood Monitor (μg/m^3)
Significant Source Categories	
Paved road dust	20.0
Unpaved road dust	2.9
Construction/earthmoving	5.4
Non-road engines	1.2
De Minimis Source Categories	
On-road mobile sources:	
Gasoline-powered	0.3
Diesel-powered	0.9
Agricultural dust	0.2
Residential wood combustion	0.4
Other area sources:	
Fuel combustion	0.4
Charbroiling	0.5
Other	0.5
Other non-road engines:	
Locomotives	0.1
Airport ground support	0.1
Major Point Sources	0.2
Windblown dust	0.4

b. Technological Feasibility. As the term is proposed to be used here, technological feasibility means that the control measure is currently available and being implemented elsewhere and that the measure can achieve PM–10 emission reductions in Maricopa County prior to the attainment deadline of December 31, 2001. EPA has long held that it would not consider a measure ''reasonable'' if it could not be implemented on a schedule that would advance the date for attainment in the area. See 57 FR 13498, 13560.

For some measures (e.g., trip reduction ordinances), the State has already implemented SIP-approved controls. For these measures, EPA has evaluated the potential emission reduction benefit of additional federal controls from a baseline that reflects the existing controls.

Finally, one measure on the list, restrictions on blowers for landscaping, would in order to be effective require a complete ban on leaf blowers. EPA does not believe that, under the CAA's graduated level of controls for PM–10, that eliminating a source completely constitutes a reasonable level of control.

c. Cost of Implementation. In considering the cost of implementing a measure in an area, the General Preamble suggests that in case of public sector sources and control measures, the cost evaluation should consider the impact of the reasonableness of the measures on the governmental entity that must bear the responsibility for their implementation. 57 FR 13541. This statement in the General Preamble is a recognition, as noted in section IV.B.,

[22–24] This de minimis RACM criterion is invoked here solely for the purposes of determining which source categories need RACM and not for determining which source categories need controls for attainment. See Section IV.B.

[25] EPA has already approved RACM for some of the de minimis sources, e.g., major stationary sources, residential wood combustion, non-road engines). Also, EPA notes that some de minimis source categories already have substantial SIP-approved controls on them (e.g., clean fuels and inspection and maintenance program for on-road mobile sources) although EPA has not formally found these controls to be RACM under the moderate area PM–10 RACM requirement in section 189(a)(1)(C).

that the regulatory scheme for PM–10 in subpart 4 establishes two graduated levels of control, RACM and BACM, depending on the severity of the air quality problem. As such, greater latitude is given responsible entities to determine what is feasible and practicable when selecting their initial RACM control strategy. Thus the nature and scope of a potential control measure, including such factors as the degree of capital expenditures required and lead-time needed for legislative consideration, operational and/or infrastructural development needs, etc., are appropriate determinants of what measures may be ''reasonably available.''

In promulgating a FIP, EPA is the primary implementing entity. As such, EPA must evaluate the reasonableness of potential RACM based on its financial and resource capabilities (in the manner described above for other governmental entities) to implement the measure . The Agency notes that its duty to promulgate and implement FIPs is in addition to rather than a replacement of its other duties under the Clean Air Act. As such, where implementing a potental RACM FIP measure would require the Agency to expend substantial efforts to acquire needed resources, including financial resources, EPA could also take such factors into consideration in determining whether the measure is practicable and, thus, reasonable to implement.

A general discussion of the above-described types of constraints in implementing measures for the Phoenix area can be found in the 1990 CO FIP proposal. 55 FR 41210. While EPA may undertake the necessary steps to acquire resources and funding, e.g., by diverting personnel and funds or by submitting budget supplement requests to Congress, to implement and enforce a FIP in Maricopa County or anywhere else in the nation, the feasibility of such efforts, depending on the nature and scope of the work needed to implement the proposed measure, may well exceed what may fairly be considered reasonable or practicable. EPA has also discussed generally the resource constraints associated with federal implementation of transportation control measures in its proposal of an ozone and CO FIP for the Los Angeles area. See 55 FR 36458, 36517 (September 5, 1990).

Examples of measures on the list that are generally not reasonably within EPA's current resource constraints to implement are measures which require substantial capital or operational expenditures. Examples of measures in this category include building high occupancy vehicle lanes, funding expansion of mass transit, and constructing substantial traffic flow improvements.

6. Application of RACM Criteria

EPA applied these proposed RACM criteria to the 56 measures in Table 1 that were found to be appropriate for federal implementation. The results of this RACM screening are given in Table 3. Of the 56 measures, 46 were eliminated: 17 because they apply to de minimis sources; 20 because a federal measure would not improve on the emission reduction benefit from a SIP-approved measure; 5 because the measure could not be feasibly implemented prior to the attainment date, one because the measure required elimination of the source completely which EPA believes is unreasonable, and 3 because of cost considerations. A more detailed discussion of EPA's justifications for rejecting potential RACM measures based on these RACM criteria can be found in the TSD for this proposed rulemaking.

As seen from Table 3, ten measures remain after the application of the RACM criteria. These measures are a variety of potential fugitive dust controls for unpaved roads, unpaved parking lots, disturbed cleared land, and agriculture. Therefore, as described in detail in section V.A.7, EPA is proposing federal RACM measures to address these fugitive dust sources including a federal fugitive dust rule and an enforceable commitment for the agricultural sector.[26]

TABLE 3.—FIP RACM EVALUATION [1]

Source category and measure	De Minim is Source	Technically feasible	Reasonable implementation cost	FIP RACM
A.1. Paved Road Dust—Reduce Dust (Silt) Loading				
1. Pave, vegetate, or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads (1)	N	Y	Y	Y
2. Require haul trucks to be covered (1)	Unk [2]	N–1	.....	N
3. Provide for traffic rerouting/rapid clean-up of temporary sources of dust (water erosion, track out, material spills) (1)	Unk	N–1	.....	N
5. Require curbing and pave or stabilize road shoulders (1)	Unk	N–1	.....	N
6. Provide for stormwater drainage to prevent water erosion onto paved roads (2/3)	N	N–1	N	N
7. Mitigation of freeway construction impacts (1)	Unk	N–1	.....	N
A.2. Paved Road Dust/Tailpipe Emissions—Reduce VMT				
1. Implement short range transit improvements (2/3)	N	Y	N	N
2. Implement long range transit improvements (2/3)	N	N–2	N	N
3. Require exclusive bus lanes on arterials and freeways (2/3)	N	N–2	N	N
4. Expand MAG rideshare program (2/3)	N	Y	N	N
5. Adopt trip reduction ordinance (1)	N	N–1	.....	N
6. Establish a voluntary no drive days (1)	N	N–1	.....	N
7. Establish an areawide public awareness program (1)	N	N–1	.....	N
8. Build/establish park and ride lots	N	N–1	N	N
9. Provide employees financial incentives (e.g., zero bus fares) in lieu of parking (1)	N	N–1	.....	N

[26] One significant source category for the annual standard, paved roads, is not currently being addressed comprehensively through SIP-approved RACM or proposed FIP RACM. While EPA analyzed 40 potential measures for this source category (see categories A.1. and A.2. on Table 1), only one of these measures was found to be a FIP RACM. EPA notes, however, that the State has a number of SIP-approved measures already in place, including a trip reduction program, that reduce emissions from this category.

TABLE 3.—FIP RACM EVALUATION [1]—Continued

Source category and measure	De Minim is Source	Technically feasible	Reasonable implementation cost	FIP RACM
10. Require employers to provide preferential parking for car and van pools (1)	N	N–1	.....	N
12. Build HOV lanes on freeways (3)	N	N–1	N	N
13. Build HOV lanes on arterials (3)	N	N–2	N	N
14. Build HOV ramps which bypass metering signals (3)	N	N–1	N	N
15. Promote increased bicycle use (3)	N	N–1	N	N
16. Provide or require bicycle travel (e.g., lanes) and support facilities (e.g., lockers and racks) (3)	N	N–1	N	N
17. Promote pedestrian travel through provisions of pedestrian facilities (e.g. sidewalks) (3)	N	N–1	N	N
18. Provide pedestrian overpasses (3)	N	N–1	N	N
19. Promote the use of/require employers to provide alternative work hours (1)	N	N–1	.....	N
20. Promote the use of/require employers to provide alternative work weeks (1)	N	N–1	.....	N
21. Promote the use of telecommuting (1)	N	N–1	.....	N
22. Promote the use of teleconferencing (1/2/3)	N	N–1	.....	N
25. Require merchant to provide alternative transportation incentives to customers (1)	N	N–2	.....	N
28. Impose fee on vehicles related to emissions (smog fees) (1)	N	N–2	.....	N
B. On-Road Vehicle Exhaust—Tailpipe and Non-VMT Reduction Measures				
1. Expand current I/M to all model years (1/2/3)	Y	.....	.....	N
2. Expand the current I/M program state wide (1/2/3)	Y	.....	.....	N
3. Expand the current I/M program county wide	Y	.....	.....	N
5. Require clean fuels for fleet vehicles	Y	.....	.....	N
6. CA new car standards	Y	.....	.....	N
8. Scrap higher polluting vehicles (2/3)	Y	.....	.....	N
20. Alternative fuels for buses/electric shuttle buses (1)	Y	.....	.....	N
21. Emission controls on public diesel vehicles (1)	Y	.....	.....	N
C. Dust from Unpaved Road/Parking Lot/Disturbed Vacant Lots				
2. Require sources to submit dust control plans (1)	N	Y	Y	Y
3. Develop traffic reduction plans on unpaved roads (1)	N	Y	Y	Y
4. Limit use of recreational vehicles on open land (1)	N	Y	Y	Y
5. Pave or stabilize unpaved roads (1)	N	Y	Y	Y
6. Pave or stabilize unpaved parking areas (1)	N	Y	Y	Y
8. Require stabilization of wind erodible soils (1)	N	Y	Y	Y
9. Require windbreaks, watering, paving, vegetating for windblown dust (1)	N	Y	Y	Y
10. Restrict blowers for landscaping (1)	Unk.	N–3	.....	N
D. Agricultural Sources				
1. Rely on soil conservation requirements (e.g., conservation plans) of the Food Security Act (1)	N	Y	Y	Y
2. Require windbreaks for agricultural sources (1)	N	Y	Y	Y
I. Locomotives				
2. Control switching locomotives (1)	Y	.....	.....	N
3. Require electrification of rail lines (1)	Y	.....	.....	N
J. Airplanes/Airport Ground Equipment				
1. Centralized airport ground power systems (1)	Y	.....	.....	N
2. Reduce emissions from airport ground access vehicles (1)	Y	.....	.....	N
3. Establish tighter emissions standards for new jet engines (1)	Y	.....	.....	N
4. Control emissions from aircraft and ground service vehicles (1)	Y	.....	.....	N
5. Require replacement of high emitting aircraft (1)	Y	.....	.....	N
K. Other Non-Road Engines				
2. Establish emission standards for new heavy duty construction equipment (1)	Y	.....	.....	N
3. Establish emission standards for off-road motorcycles (1)	Y	.....	.....	N

[1] Technological feasibility codes on Table 3 are:

N–1. Measure is already in place in local jurisdiction. Additional federal rule would not result in additional emission reductions.

N–2. Measure is very unlikely to result in measurable emission reductions in the Phoenix area because technology is not available and/or demonstrated, technology will not be available prior to the attainment date, and/or supporting infrastructure is absent (e.g., a viable transit system is necessary in order for merchant transportation incentives to be effective).

N–3. Measure involves elimination of the source and therefore does not represent a reasonable level of control.

[2] While paved (i.e., re-entrained) road dust is clearly a significant source of PM–10 in the Phoenix nonattainment area, the contribution of unpaved shoulders, material from haul trucks, all track out and accidental spills to this source category is unknown.

a. Commitment for Agricultural Sector. (1) Summary of Proposed Commitment and Approach EPA's RACM analysis above indicates that RACM controls are needed for agricultural sources of PM–10. Currently, RACM is not being fully implemented for agricultural fields and aprons in the Phoenix area.[27–29] Therefore, federal measures are needed to reduce PM–10 from these sources.

EPA is proposing an enforceable commitment to adopt and implement RACM as required by CAA section 189(a)(1)(C) for the agricultural sector. In order to develop the RACM, as discussed below, EPA intends to use a stakeholder approach which, it is anticipated, will result in the development of best management practices (BMPs) that provide PM–10 emission reductions from agricultural sources in the nonattainment area.

(2) Background. The microscale plan[30] demonstrated that wind-blown dust from agricultural fields and aprons (i.e., farm access roads and equipment turnaround areas) significantly contributes to exceedances of the 24-hour standard at the Gilbert and West Chandler monitoring sites. These sites are representative of the numerous agricultural-urban interface areas located in the nonattainment area.

The Gilbert monitoring site is located on the grounds of the City of Gilbert's wastewater treatment plant and has agricultural fields and aprons to its north, an unpaved and paved parking lots to the north and west, and a city park to the south. Modeling showed that windblown dust from agricultural fields and unpaved parking lots was the largest contributor to the exceedance at the Gilbert monitor. The West Chandler monitoring site is bordered on the west by agricultural fields and the right of way for the Price Road/Freeway, which was under construction in early 1995. Modeling showed that windblown dust, mainly from agricultural fields and road construction, was the largest contributor to the exceedance at the West Chandler monitor.

There are approximately 600 growers farming approximately 300,000 acres of land in Maricopa County. An estimated 63 percent of the agricultural activity in Maricopa County occurs within the nonattainment area. Upland cotton (112,000 acres), alfalfa (54,000 acres), and durum wheat (45,000 acres) comprised over two-thirds of the crop acreage in Maricopa County during 1996. Cash receipts for crops grown in 1996 totaled over $440 million, ranking Maricopa County second in the state. The area is characterized by very low rainfall (7 inches per year) and desert conditions.

Maricopa County is undergoing rapid urbanization with agricultural land being converted into other uses at a rate of approximately 6,000 acres per year. As this urbanization continues, the amount of PM–10 associated with agricultural lands will decrease because the amount of land being farmed within Maricopa County is shrinking. The 1996 Farm Bill has also affected farming practices in the Maricopa County nonattainment area. See 16 U.S.C. 3801 *et seq.* After 1994, land which had been set aside under a prior U.S. Department of Agriculture (USDA) program was placed in production (primarily alfalfa). The switch from unplanted set-aside to planted alfalfa resulted in a relatively small decrease in PM–10 emissions. Despite the conversion of agricultural lands to other uses and the small increase in agricultural land being put back into production, agricultural sources are expected to continue to contribute to PM–10 emissions for the foreseeable future.

(3) RACM Analysis. EPA evaluated existing agriculture measures in the South Coast Air Basin (SCAB)[31] to assess potential RACM for agriculture for the Phoenix nonattainment area.[32] However, it is important to note that because 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, each PM–10 agricultural strategy is uniquely based on local circumstances. Unlike many stationary sources, which can have many common design features, whether located in California or New Jersey, agricultural sources and activities vary greatly throughout the country.

With respect to Phoenix and the Los Angeles area, EPA determined that the two areas differ in a number of key characteristics (e.g., crops grown, soil types, climate, and number of growers affected). In assessing RACM for agricultural sources, EPA considered the uniqueness of the myriad factors affecting agricultural activity in the nonattainment area. 57 FR 13498, 13540–13541. Based on this initial screening, EPA decided that it would not be responsible to propose the SCAQMD rules at this time because the Agency could not reasonably conclude that their implementation would in fact result in air quality benefits for the nonattainment area. Instead, the SCAQMD rules will be further assessed as part of the BMP development process. This process will allow EPA to take advantage of various local and national agricultural expertise to more fully evaluate whether the SCAQMD rules, portions thereof, or other unique emission reduction strategies would contribute to attainment and, therefore, should be applied in Maricopa County.

[27–29] Application of Rule 310 to agricultural sources including fields and aprons is affected by a provision in section 102 of the rule which incorporates A.R.S. 49–504.4. Section 102 provides that Rule 310 ''shall not be construed so as to prevent normal farm cultural practices.'' Therefore, applicability of the rule to such sources depends on the nature of the dust-generating operation. As such, Rule 310 applies to some operations on agricultural fields and aprons and not to others.

[30] In addition to EPA's standard AP–42 emission methodologies and some other prior special studies for particular source categories, the microscale study included field surveys, aerial photography, examination of activity logs, and interviews with source operators. The study resulted in a substantially better emissions inventory data than is usually available.

[31] EPA identified South Coast Air Quality Management District (SCAQMD) Rule 403.1—Wind Entrainment of Fugitive Dust. This rule applies to any activities which can generate fugitive dust when winds exceed twenty-five miles per hour (mph) in the Coachella Valley Planning PM–10 nonattainment area. Rule 403.1 requires that any person involved in activities which both occur in the Coachella Valley Blowsand Zone and are capable of generating fugitive dust to stabilize deposits using water or dust suppressants, or install wind breaks, and also restricts agricultural tilling when wind speeds exceed twenty-five mph and requires that inactive disturbed surface areas be stabilized using water or dust suppressants.

EPA also identified SCAQMD 403—Fugitive Dust (amended February 14, 1997), which requires any person generating fugitive dust from an active operation, open storage pile, or disturbed surface to implement RACM or BACM listed in the rule to minimize fugitive dust (e.g., apply chemical stabilizers on disturbed surface areas; apply water to unstabilized areas three times per day). Subject sources may submit a dust control plan in lieu of the control measures listed in the rule.

Finally, EPA identified SCAQMD Rule 1186—PM10 Emissions From Paved and Unpaved Roads, and Livestock Operations, which is intended to reduce PM–10 entrained in the ambient air as a result of vehicular travel on paved and unpaved roads, and at livestock operations. The requirements affecting livestock operations include: cease hay grinding between 2 and 5 p.m. if visible emissions extend 50 feet from the source; and treat unpaved access connections and unpaved feed access areas using either pavement, gravel, or asphalt.

A more detailed discussion of the provisions found in these rules can be found in the Technical Support Document for today's proposed action.

[32] EPA recognizes the role of USDA's Natural Resources Conservation Service (NRCS) in working with individual growers to voluntarily develop Soil Conservation Plans (SCPs). Because SCPs in the Maricopa County area are voluntary (approximately one-third of the growers have a SCP), grower-initiated, and have very minimal air quality benefits as currently designed, the use of SCPs in Maricopa County was determined to not meet RACM and thus not considered a viable option for the proposed FIP. See 57 FR 13498, 13541. In addition, representatives from NRCS and the Arizona Farm Bureau Federation have indicated to EPA that they do not support using SCPs for RACM.

(4) Proposed Commitment

(i) Discussions With Stakeholders. In recognition of the need to address agriculture's contribution to the PM–10 exceedences, the microscale plan included a March 27, 1997 letter signed by the Arizona Department of Environmental Quality (ADEQ), MCESD and the NRCS. The letter stated the intent of the three agencies to work cooperatively toward strategies that address PM–10 emissions from agricultural lands within Maricopa County. The three agencies sponsored meetings in March and May, 1997 which brought stakeholders together to discuss agriculture and PM–10. At the same time, and into the summer of 1997, MAG was working with the Maricopa County Farm Bureau on possible emission controls for agricultural lands as part of the PM–10 serious area plan development. Also during the summer of 1997, EPA held meetings with ADEQ, MAG, MCESD, and NRCS to discuss potential strategies to reduce PM–10 from agricultural lands.

Because there were two separate ongoing efforts with respect to PM–10 emissions from agricultural sources, as described above, EPA used these meetings to keep apprised of the progress of the two efforts, as well as to discuss implementation issues related to agricultural control measures. The MAG discussions with the Maricopa Farm Bureau resulted in the identification of several potential PM–10 control measures by early fall, 1997. These measures were voted on and approved by the Maricopa County Farm Bureau Board in September, 1997. At that time, EPA decided that a joint discussion with ADEQ, MCSED, MAG, NRCS, and the Farm Bureau would be beneficial to both the FIP and SIP processes.

Thereafter, EPA contacted the NRCS, the Arizona Farm Bureau Federation, and other stakeholders and arranged for a November 12–14, 1997 tour of agricultural activities to better understand their impact in Maricopa County. Several meetings were held with these same stakeholders. The meetings provided an opportunity for EPA to discuss the upcoming FIP proposal and the need to work collaboratively [33] on strategies addressing agriculture and PM–10. The tour and subsequent meetings allowed EPA to work directly with the leaders in the Maricopa County agricultural and regulatory community and set the stage for future discussions on possible strategies for reducing PM–10 from agriculture in the area. Subsequent meetings on December 2 and 16, 1997 among EPA, Farm Bureau representatives, farmers, NRCS, ADEQ, MCESD, and MAG resulted in a general consensus on using a BMP approach to develop measures to reduce PM–10 from agriculture. On January 7, 1998, EPA Region IX sent a letter to the Maricopa County Farm Bureau stating EPA's intention to include the BMP approach in the proposed FIP. On January 21, 1998, the Maricopa County Farm Bureau sent a letter to EPA Region IX indicating their general support for the BMP approach. The letter also provided their recommendations on milestones and timeframe needed for a successful BMP approach.

(ii) BMP Approach. The proposed BMP approach for addressing PM–10 from agricultural sources could be modeled after an analogous BMP approach used for managing fertilizer applications and protecting groundwater in Arizona. Under the nitrogen fertilizer BMP program, legislation was passed in the late 1980s giving the Director of ADEQ the authority to oversee the development and implementation of BMPs. An Advisory Committee, comprised of representatives from key government agencies, universities, and the agricultural community was established to develop and recommend BMPs for adoption by ADEQ. After adoption of the BMPs, supplemental guidance documents were developed by the University of Arizona to assist growers, and an extensive grower education campaign was undertaken to increase the likelihood for successful BMP implementation. The BMPs eventually became part of the Arizona Administrative Code (Title 18, Chapter 9, Article 2), which requires that all persons engaged in the application of nitrogen fertilizers be issued a general permit and comply with the six agricultural BMPs stated in the law. A similar approach was also used to develop BMPs for concentrated animal feeding operations in Arizona.

(iii) FIP Proposal. EPA is proposing an enforceable commitment to adopt and implement RACM to reduce PM–10 emissions from agricultural sources. The proposed FIP commitment includes a series of enforceable milestones and due dates listed in Table 4 to assure adoption and implementation of RACM. EPA would initially convene a stakeholder-based process to begin formal development of draft BMPs. Stakeholder groups represented will likely include but not be limited to the Arizona Farm Bureau Federation, Maricopa County Farm Bureau, ADEQ, MAG, MCESD, NRCS, Cooperative Extension, the University of Arizona, tribes, and environmental and/or public health organizations. This effort would build upon the stakeholder-based discussions which occurred in 1997 and early 1998. By September 1998, the stakeholders would begin to draft BMPs. Potential BMPs likely to be considered include but are not limited to: windbreaks, vegetative covers, chemical or physical soil stabilizers, improved tillage practices, tillage limitations during high wind events, speed reductions on unpaved or untreated farm roads, and tillage pre-irrigation. The milestones by which EPA proposes to complete various aspects of BMP development and implementation are as follows. By September 1999, EPA will have drafted the BMPs developed for official public comment, which will occur through a Notice of Proposed Rulemaking. After public comment and additional stakeholder meetings, EPA will finalize the BMPs in a Notice of Final Rulemaking. In June 2000, BMP implementation will begin with an extensive collaborative public outreach and education campaign. Guidance documents would be developed to assist growers with implementation of the BMPs. Compliance assistance would also be a key element of the BMP program.

TABLE 4.—PROPOSED DEADLINES FOR EPA ADOPTION/IMPLEMENTATION OF RACM FOR AGRICULTURE IN MARICOPA

Milestones	Due date
Notice of Proposed Rulemaking for RACM	September 1999.
Notice of Final Rulemaking for RACM	April 2000.

[33] In early 1997, the USDA's Agricultural Air Quality Task Force began discussions with EPA on issues related to agriculture and air quality. Over the course of the year, the Task Force drafted a Memorandum of Understanding (MOU) between USDA and EPA that establishes a formal relationship for sharing expertise and involving the agricultural community in air quality issues. The MOU was signed by EPA on February 25, 1998 and by the USDA on 1/14/98. EPA believes that the BMP approach follows the cooperative spirit outlined in the MOU.

TABLE 4.—PROPOSED DEADLINES FOR EPA ADOPTION/IMPLEMENTATION OF RACM FOR AGRICULTURE IN MARICOPA—Continued

Milestones	Due date
RACM implementation	June 2000.

(5) FIP Replacement.

Although EPA is only required in the FIP to meet the CAA RACM requirement, the State is expected, as required for PM–10 serious nonattainment areas, to develop BACM for agricultural sources. The State expects the BACM developed for the serious area plan to also Satisfy any remaining CAA RACM requirements. EPA is committed to working with ADEQ and the other stakeholders to develop a SIP measure to replace the proposed enforceable commitment.

While EPA's intended BMP approach is designed to meet the RACM requirement, the Agency believes it can serve as a potential starting point and model for the development of a State-led SIP process for addressing BACM for agricultural sources. Thus, the stakeholders could potentially build upon the BMP approach initiated for the FIP to address both RACM and BACM requirements for the agricultural sector in the SIP. The Arizona Farm Bureau Federation, the Maricopa County Farm Bureau, NRCS, ADEQ, and other regulatory agencies are currently working collaboratively to develop a State-led BMP process for that purpose. EPA strongly endorses such a process. However, because EPA has not received to date an adequate SIP submittal addressing the implementation of RACM by June 2000 for agricultural sources of PM–10, EPA is proposing an enforceable commitment for those sources as described above.

b. Rule for Unpaved Parking Lots, Unpaved Roads and Vacant Lots. Fugitive dust from unpaved parking lots and unpaved roads is primarily caused by vehicle traffic. When vehicles travel over unpaved surfaces, they raise the silt content (i.e., grind up dirt so as to result in a greater abundance of finer particles). The more vehicles (and the faster they travel) on unpaved surfaces, the more PM–10 is stirred up in clouds of fugitive dust.

On vacant lots, fugitive dust emissions are caused by virtually any activity which disturbs an otherwise naturally stable parcel of land, including earth-moving activities, weed abatement, material dumping and vehicle traffic. Once disturbed, the vacant lot may continuously generate dust until it is restabilized. Since wind conditions affect the amount of dust raised on vacant lots, PM–10 emission impacts may not be fully realized until several days following a disturbance.

MCESD's Rule 310 requires RACM for fugitive dust sources; however, EPA has determined that the County does not enforce the rule for three source categories within the Phoenix PM–10 nonattainment area: unpaved parking lots, unpaved roads and vacant lots. As a result, EPA is having to fulfill the role of primary enforcer of the RACM requirement for these sources and has developed its own proposed rule addressing RACM for these sources.

EPA's regional office in San Francisco, California (EPA Region 9) will have primary responsibility for enforcement of the proposed FIP rule. Given the difficulties that Region 9 will inevitably face in enforcing the RACM requirement in Arizona, EPA has designed a RACM rule that ensures EPA enforcement of the rule will be practicable. Furthermore, EPA believes that the proposed rule will be useful to MCESD in future SIP efforts to control dust from these sources.

In general, EPA believes that all of the RACM requirements of the proposed FIP rule can also be required through enforcement of Rule 310. However, the rule's lack of specificity makes it more likely that the agency enforcing the rule will routinely be called upon to address which RACM should be applied to which source categories. By addressing this issue in the FIP rule itself through detailing specific RACM requirements, EPA hopes to reduce the extent to which sources and others may have to consult with the Agency to determine which RACM are appropriate for a particular source or source category.

The only proposed FIP rule requirement that is not required in Rule 310 is a recordkeeping requirement for owners/operators to maintain records of controls implemented on unpaved roads, unpaved parking lots, and vacant lots in order for EPA to ensure compliance with the rule.[34] The proposed recordkeeping requirements in the FIP rule are simple and straightforward. In many cases, the owner/operator need only retain a purchase receipt or contractor work order for the controls implemented. More information is required when chemical stabilization is applied as a control measure, however, this information is readily available from vendors or easily determined at the time of application.

(1) Summary of Proposed Rule. In developing the proposed FIP rule, EPA utilized the RACM in Rule 310 while drawing upon several additional sources to increase specificity of the measures. A detailed discussion of EPA determinations and references for the proposed rule can be found in the Technical Support Document. Specific requirements of the proposed rule are summarized below.

Unpaved parking lots: Any owners/operators of unpaved parking lots greater than 5,000 square feet are required to pave, chemically stabilize, or apply gravel to the lot within eight months of the rule's effective date. For unpaved parking lots that are used no more than 35 days per year, owners/operators may choose to apply chemical stabilizers within 20 days prior to any day in which over 100 vehicles enter the lot.

Unpaved roads: Any owners/operators of existing public unpaved roads with average daily trip volumes of 150 vehicles or greater are required to pave, chemically stabilize, or apply gravel to the unpaved road by June 10, 2000.

Vacant lots: (1) A Dust Control Plan (as described in section 503) is required for weed abatement operations on vacant lots that disturb 0.10 acres or more of soil by blading, disking, plowing under or other means (excluding mowing, cutting or similar processes in which soil is not disturbed), unless such operations receive an approved permit from Maricopa County Environmental Services Department. (2) Any owners/operators of an urban or suburban open area vacant lot with 0.10 acres or more of disturbed surface area which is unused or undeveloped for more than 15 days are required to establish vegetation, apply dust suppressants, restore to a natural state, or apply gravel to all disturbed surfaces within eight months following the effective date of the proposed rule or within eight months following the initial 15 day

[34] Rule 310 only requires recordkeeping for permitted dust-generating operations.

period of inactivity, whichever is later. (3) Any owners/operators of an urban or suburban open area vacant lot which has a disturbed surface due to motor vehicles (including off-road vehicles) are required to place signs, fencing, shrubs, trees, or cement barriers to prohibit vehicle entry along the access perimeter.

The threshold level of 0.10 acres for weed abatement and disturbed surface areas is the same threshold level for the permitting of construction sites in Rule 310.[35] Currently Rule 310 does not contain a threshold exemption for vacant lots. EPA is requesting comments on whether the 0.1 acre threshold is the appropriate threshold for determining when controls on vacant lots is required.

All categories: As an alternative to compliance with any of the FIP rule requirements (with the exception of the weed abatement provision), owners/operators may use alternative control measures approved by EPA. Proposed alternative control measures must be submitted to EPA for approval prior to the rule's deadline for RACM implementation for the source. Should EPA disapprove an alternative control measure, the owner/operator must begin implementing RACM as required in the rule no later than 60 days after receiving notice of disapproval.

Recordkeeping: Owners/operators are required to maintain records of controls implemented on unpaved roads, unpaved parking lots, and vacant lots.

(2) Discussion. The proposed FIP rule includes three to four RACM options for each source category. In order to ensure that emission reductions are achieved, the FIP rule only specifies control measures which have a reasonably high level of certainty in their control effectiveness and enforcement. However, EPA is willing to consider other measures, and is therefore allowing submittal of alternative control measures for any of the source categories subject to EPA approval.

Surveys of fugitive dust sources and control measures are required to be conducted by EPA or its contractor in the proposed FIP rule in order to improve knowledge of the universe of sources and provide feedback on the rule's effectiveness. The surveys will enable regulators to better estimate the contribution of unpaved roads, unpaved parking lots and vacant lots to Maricopa County's PM–10 inventory, identify control measures that are the most frequently implemented, and study the effectiveness of these measures in controlling fugitive dust.

Tests in order to determine compliance with the proposed FIP rule would be conducted by EPA or its contractor, and do not pose additional requirements on sources subject to the rule. Implementation of some control measures, such as paving unpaved roads, are obvious upon inspection and tests are not necessary to determine compliance. For other control measures, such as application of chemical stabilizers and gravel, a test is needed to determine whether the surface is sufficiently stabilized to prevent or minimize fugitive dust emissions.

For determining whether unpaved roads and unpaved parking lots are stabilized, EPA is proposing visible opacity test methods associated with vehicle use (Reference Method 9, Methods 203A, 203B, and 203C), with opacity readings conducted according to 203C. These methods incorporate a fugitive dust element to Reference Method 9, which is most appropriate for measuring emissions from stationary sources of PM–10. Method 203C allows ''instantaneous'' readings averaged over a period of one minute, taken at 5 second intervals. EPA first proposed Reference Method 9, Methods 203 A, B, and C in 1993 (Appendix M, part 51) and has incorporated public comments into the test methods. While EPA has not yet promulgated the methods, for purposes of federal enforcement of the FIP rule, they can be used as credible evidence until such time as EPA publishes a final rulemaking for the test methods (40 CFR part 52.12).

For determining whether vacant lots have stabilized surfaces, EPA is proposing and requesting comment on test methods concerning visible crusts, vegetation, and threshold friction velocity of soil samples. Information on test methods proposed for this FIP is available in the TSD and the rulemaking docket.

The proposed FIP rule does not preclude the right of any State or locality to adopt or enforce an emission standard or limitation which is more stringent than this rule (Clean Air Act section 116).

(3) Compliance Approach. Upon promulgation of the FIP, EPA will implement its rule for unpaved parking lots, unpaved roads, and vacant lots. Thus, EPA will take on responsibilities that are normally performed by the local air quality regulatory agency, in this case, MCESD. These responsibilities would include such activities as: refining EPA's information on the universe of sources subject to the rule, developing an outreach/compliance assistance program for the affected community, inspecting sources subject to the rule, and following up with an appropriate enforcement response in the event of rule violations.

Although the cities in the Phoenix area have provided information on the sources within their jurisdictions, EPA will be using contractual assistance to obtain additional information on the sources subject to the FIP rule. This information will be used by EPA to perform the surveys described above, to evaluate the rule's effectiveness, and to identify sources for potential inspections. This information can also be used (and EPA will encourage its use) by Maricopa County to better implement Rule 310.

EPA will be implementing the FIP rule by providing resources directly from the Regional Office in San Francisco. Working with the information provided by the contractor, Region 9 will develop a compliance assistance strategy that will ensure that sources subject to the FIP rule are informed about the rule, and understand how the rule applies to them, what their compliance options are, and the need to comply with the provisions in the rule. Once EPA compliance assistance efforts are underway, EPA will inspect these sources for compliance with the FIP rule.

In addition, EPA exercises a traditional oversight role over state and local air quality programs by making periodic visits to the states within Region 9 and conducting joint inspections with the state and/or local regulatory agencies. These joint inspections can cover a variety of sources, and, in the future, will include sources covered by the FIP rule.

Also, because MCESD does not have sufficient resources to enforce Rule 310 for unpaved roads, unpaved parking lots, and vacant lots, EPA intends to provide two additional inspection resources to MCESD by supplementing the MCESD CAA section 105 grant in October 1998. These additional inspectors will perform inspections for EPA with respect to the three source categories subject to the FIP Rule. These additional resources will be provided to MCESD as long as the FIP is in place.

(4) Replacement of FIP Rule. MCESD is currently trying to obtain additional resources to expand implementation of Rule 310. If MCESD obtains the additional resources and is able to develop an enforcement strategy for the vacant lot, unpaved parking lot and unpaved road sources covered by the FIP rule, this strategy may be submitted to EPA for approval as meeting the

[35] MCESD is currently preparing a revision to Rule 310 which would require dust control plans for weed abatement operations that disturb soil surfaces of 0.1 acres or greater.

CAA's RACM requirement for these sources. As part of any implementation strategy that MCESD submits for EPA approval, the County will need to provide evidence that it has adequate resources of its own to ensure that Rule 310 is fully enforced for all fugitive dust sources. If approved, such a strategy will allow EPA to rescind its FIP rule.

B. Impracticability Demonstration.

The Clean Air Act requires moderate PM–10 nonattainment areas to demonstrate attainment of the PM–10 annual and 24-hour standards, or to show that attainment by December 31, 2001 is impracticable (see section IV.B. of this notice). For this proposed FIP, EPA is making the latter demonstration. Based on modeling work performed by the State, existing State controls together with the RACM being proposed by EPA are not sufficient for attainment of either the 24-hour or the annual PM–10 standard by December 31, 2001.

1. Annual Standard

For the annual standard attainment analysis, EPA relied on the State's simulation of the 1995 year found in the MAG Modeling TSD which was performed as part of ongoing work for Maricopa's PM–10 serious area plan. This work used a variant of the Urban Airshed Model (UAM), which is the EPA-recommended model for attainment demonstrations for ozone and carbon monoxide, though it can be used to model any pollutant. The UAM results were scaled using factors derived from observed PM–10 concentrations and from emissions projected to 2001. Because the Greenwood monitoring site had the highest simulated annual concentrations, EPA has used this site as the basis for the annual standard impracticability demonstration.

As can be seen in Table 5, even assuming 100 percent control for sources subject to the proposed FIP rule (an unrealistic level of control, actual control levels will be less [36]), simulated concentrations are still over the annual standard of 50 μg/m³. Thus, EPA proposes to find that attainment of the annual PM–10 standard is impracticable with the implementation of RACM.

TABLE 5.—ANNUAL STANDARD IMPRACTICABILITY DEMONSTRATION

Source category	Concentration after SIP controls μg/m³	Maximum possible control (percent)	Concentration after FIP controls μg/m³
Paved road dust	20.0	.....	20.0
Unpaved road dust	2.9	100	0.0
Gasoline and Diesel vehicle exhaust	1.2	.....	1.2
Agricultural dust	0.2	100	0.0
Other area sources	1.4	.....	1.4
Residential wood combustion	0.4	.....	0.4
Construction/earth moving	5.4	.....	5.4
Construction equipment, locomotives, other non-road engines	1.4	.....	1.4
Major point sources	0.2	.....	0.2
Windblown dust	0.4	100	0.0
Anthropogenic Total	33.5	.....	30.0
Background	22	.....	22
Total	55.5	.....	52.0

2. 24-hour Standard

For its 24-hour standard attainment analysis, EPA relied on the modeling in Arizona's microscale plan. This modeling used the ISCST (Industrial Source Complex, Short Term) model, an EPA guideline model often used for stationary source permit applications, and well-suited to the locally-driven exceedances that were the focus of the microscale plan. ISCST was used to simulate PM–10 concentrations at representative sites subject to emissions from various source types and at which 24-hour exceedances had been observed. These monitoring sites were: 1) Salt River, in an industrial area; 2) Gilbert, affected by agricultural and unpaved parking lot fugitive dust emissions; 3) Maryvale, with disturbed cleared areas nearby due to construction of a park; and 4) West Chandler, near a highway construction project. These sites were selected to represent a variety of conditions within the Maricopa nonattainment area.

The microscale plan demonstrated attainment at the Salt River and Maryvale sites, and EPA approved the attainment demonstrations at these sites at the time it took final action on the microscale plan. 62 FR 41856. The microscale plan did not demonstrate attainment at the West Chandler and Gilbert sites. These sites will be addressed here.

The proposed FIP rule requires RACM for unpaved roads, vacant lots, and unpaved parking lots. These sources in total contribute 25 percent of the emissions to the exceedance at the Gilbert site and just 1 percent of the emissions to the exceedance at the West Chandler site. (For both sites, fugitive dust from agricultural sources is the largest contributor to the exceedances.) The proposed FIP rule has a substantial impact for the Gilbert site, reducing ambient concentrations from 213 to 176 μg/m³ but much less effect at West Chandler, reducing concentrations from 332 to just 316 μg/m³. See Table 6. Because the proposed RACM do not result in attainment at either site, EPA is proposing to find that attainment of the 24-hour standard is impracticable with the implementation of RACM.

As can be seen from Table 6, attainment at both sites will require substantial reductions from agricultural sources in addition to reductions from unpaved roads, unpaved parking lots, and vacant lots. While reductions from agricultural sources are expected through the implementation of BMPs by 2001, EPA is unable to quantify the impact of these BMPs at this time because they have not been defined sufficiently to determine the expected level of control. Once the BMPs have been defined, EPA will better be able to estimate reductions from agricultural sources and will revisit any final impracticability demonstration for the 24-hour standard and modify the demonstrations as necessary.

[36] Estimated regional emission reductions from the proposed FIP rule are discussed in Section V.C.1.

TABLE 6.—IMPRACTICABILITY DEMONSTRATION FOR THE 24-HOUR PM–10 STANDARD

Source category	Concentration after SIP controls μg/m3		FIP control (percent)	Concentration after FIP controls μg/m3	
	Chandler	Gilbert		Chandler	Gilbert
Agricultural fields	194.7	——	——	194.7	——
Agricultural aprons	21.7	55.6	——	21.7	55.6
Road construction	6.9	——	——	6.9	——
Unpaved roads	0.5	0.5	64	0.2	0.2
Paved Roads	0.2	1.6	——	0.2	1.6
Unpaved parking lots	.....	51.3	56	.....	22.6
Vacant lots	28.1	14.5	56	12.4	6.4
Anthropogenic Total	252.1	123.4	.....	236.1	86.3
Background	80	90	.....	80	90
Total	332.1	213.4	.....	316.1	176.3

See section V.C. immediately below for a discussion of the estimated emission reductions from the FIP control measures.

C. Reasonable Further Progress (RFP) Demonstration

As discussed previously in Section IV.C. of this preamble, EPA interprets the RFP requirement for areas demonstrating impracticability as being met by a showing that all RACM will be implemented and that the implementation of all RACM has resulted in incremental emission reductions below pre-implementation levels. For the purposes of this proposed RFP demonstration, pre-implementation levels are 1998 emission levels, the promulgation year for this FIP. Because CAA section 171(1) defines RFP reductions as being ''for the purpose of ensuring attainment* * *by the applicable attainment date,'' post-implementation levels are 2001 emission levels, the statutory attainment year.[37]

RFP is demonstrated separately for the annual and 24-hour standards because the mix of sources contributing to the annual standard exceedances differs from that contributing to the 24-hour exceedances. In addition, since PM–10 exceedances are related almost entirely to primarily-emitted PM–10, only emissions of primarily-emitted PM–10 are evaluated for RFP.

1. Annual Standard

The proposed RFP demonstration for the annual standard is summarized here and in Table 7. A complete discussion of the RFP demonstration can be found in the TSD for this proposed action.

Emission levels for 1998 and 2001 were calculated by growing emissions from the emission inventory base year of 1994 and the modeling year of 1995 based on growth factors contained in the MAG Modeling TSD and by incorporating reductions from approved State RACM and BACM controls. Emissions levels for 2001 also reflect the estimated emission reductions from the proposed FIP rule for unpaved roads. The estimated effectiveness of controls on unpaved roads, 80 percent, was based on the research done for the microscale plan on the effectiveness of controls for unpaved parking (see Table 4–1 in the final Microscale Plan) and assumes a rule effectiveness of 80 percent per EPA's guidance and that 90 percent of the VMT on unpaved roads will be impacted by the FIP rule. 57 FR 13503.

The proposed annual RFP demonstration does not include emission reductions from the implementation of the proposed FIP rule for unpaved parking lots and vacant lots. Although emission reductions are expected from these sources, there currently is insufficient information on the number of unpaved parking lots and vacant lots that will be subject to the FIP to calculate an annual emission reduction. Information from the surveys EPA will perform after promulgation of the rule will help in quantifying emission reductions from these sources. In addition, while reductions from agricultural sources are also expected by 2001, no emission reductions were assumed in the proposed RFP demonstration for agricultural sources because the ultimate RACM have not been defined sufficiently to determine the expected level of control.

As described in section V.A.7.b., the FIP rule as proposed requires phased implementation with final implementation no later than June, 2000: existing vacant lots and unpaved parking lots are required to comply within 8 months of the effective date of the final rule (approximately April 1999) and unpaved roads are required to comply by June, 2000. Therefore, full implementation of the measure by 2001 can be assumed. A more detailed discussion of the proposed annual standard RFP demonstration can be found in the TSD for this action.

As can be seen from Table 7, the emission reductions from the proposed FIP measure for unpaved roads is sufficient to assure an incremental emission reduction between 1998 and 2001 and additional reductions expected from unpaved parking lots, vacant lots, and agricultural sources will also contribute to this incremental emission reduction; therefore, EPA proposes to determine that the FIP assures RFP for the annual standard.

TABLE 7.—RFP DEMONSTRATION FOR THE ANNUAL STANDARD

Year	Total PM–10 emissions metric tons/year
1998	61,024
2001	54,256

2. 24-hour Standard

For the 24-hour standard, EPA evaluated RFP only for the Gilbert and West Chandler sites, having already approved the RFP demonstrations at the Maryvale and Salt River sites as part of its action on the microscale plan. 62 FR 41856. For these proposed RFP demonstrations, source activity at each monitor was assumed to be unchanged

[37] The 1998 emission levels also include the implementation of improved controls on construction sources that were approved as BACM in the microscale plan and were to be implemented by mid-1997. No increase in control effectiveness after 1998 is expected from these State BACM measures or from other approved State RACM measures; therefore, the RFP demonstration proposed here only addresses the incremental reductions resulting from the proposed FIP measures.

from the 1995 levels determined in the microscale plan.[38]

As with the annual standard demonstration, 1998 emission levels were adjusted to reflect implementation of the improved controls on construction sources and 2001 emissions levels to reflect the estimated emission reductions from the proposed FIP rule for unpaved roads, unpaved parking lots, and vacant lots. Emission reductions estimates are again based on the research done for the microscale plan and assume a rule effectiveness of 80 percent per EPA's guidance. For unpaved roads, a control effectiveness of 80 percent is assumed. For vacant lots and unpaved parking lots, a control effectiveness of 70 percent is assumed. As with the annual standard, no emission reductions were assumed for agricultural sources. A more detailed analysis of the proposed RFP demonstrations for the Gilbert and West Chandler monitors can be found in the TSD for this proposal.

a. Gilbert Monitoring Site. The 24-hour exceedances at the Gilbert monitor are impacted by emissions from agricultural aprons, disturbed cleared lands (i.e., vacant lots), unpaved parking lots, and paved roads. 62 FR 31031. As can be seen from Table 8, the emission reductions from the proposed FIP rule for unpaved parking lots and vacant lots are sufficient to assure incremental emission reductions between 1998 and 2001 at the Gilbert monitoring sites; therefore, EPA proposes to determine that the proposed FIP assures RFP for the 24-hour standard at the Gilbert monitor.

TABLE 8.—RFP DEMONSTRATION FOR THE 24-HOUR STANDARD—GILBERT MONITORING SITE

Source categories	1998 Emissions (kg/day)	FIP Control (percent)	2001 Emissions (kg/day)
Agriculture aprons	165	0	165
Vacant lots	76	0.56	33
Unpaved parking lots	190	0.56	84
Paved roads	5	0	5
Total	436	.....	287

b. West Chandler Monitoring Site. The 24-hour exceedances at the West Chandler monitor are impacted by emissions from agricultural fields, agricultural aprons, road construction, disturbed cleared lands (i.e., vacant lots), unpaved roads, and paved roads. 62 FR 31031. As can be seen from Table 9, the emission reductions from the proposed FIP rule for unpaved roads and vacant lots are sufficient to assure incremental emission reductions between 1998 and 2001 at the West Chandler monitoring sites; therefore, EPA proposes to determine that the FIP assures RFP for the 24-hour standard at the West Chandler monitor.

TABLE 9.—RFP DEMONSTRATION FOR THE 24-HOUR STANDARD—WEST CHANDLER MONITORING SITE

Source category	1998 Emissions (kg/day)	FIP control (percent)	2001 Emissions (kg/day)
Agriculture	19378	0	19378
Vacant lots	6188	0.56	2723
Road Construction	440	0	440
Agricultural apron	1954	0	1954
Unpaved road	49	0.64	18
Paved roads	37	0	37
Total	28046	.....	24550

VI. Impact on Indian Reservations

The Phoenix PM–10 nonattainment area includes two Indian reservations (the Salt River Pima-Maricopa Indian Community and the Fort McDowell Mojave-Apache Indian Community) and a portion of a third (the Gila River Indian Community). As discussed in section II.A.4. above, EPA's obligation is to apply the measures in the proposed FIP to those sources that would have been regulated under the moderate area PM–10 SIP. That does not include those sources located within Indian country that are not subject to State jurisdiction, and the State of Arizona has not demonstrated to EPA it has any such jurisdiction with respect to these lands.

In addition, EPA believes it would be inappropriate to apply federal control measures to Indian country sources without data showing that these sources are contributing to the area's nonattainment problem. No such data has been submitted to EPA. Therefore, EPA proposes to exclude sources located in Indian country from the proposed FIP requirements.

However, EPA believes that the solution to the Phoenix PM–10 problem must be developed in an equitable manner, and recognizes that such a solution may require that emission controls be applied to certain on-reservation PM–10 sources. In order to assess whether controls should be applied in Indian country, it will be necessary to obtain enough data to identify on-reservation sources and assess their contribution to the air quality problem. EPA is committed to working closely with the Indian tribes to identify impacts of activities on the reservations on the nonattainment area, and to ensure, if necessary, that on-reservation emissions are controlled in

[38] The microscale analysis at each monitor evaluated sources in a very limited geographic area. Because of this limited area, there is little opportunity for sources to expand. In some cases, a source that was present at the microscale site in 1995 no longer exists (e.g., the freeway construction at the West Chandler site); however, for this demonstration, EPA has assumed that the source is still present since the sites were chosen to be representative of other sites in the nonattainment area.

a manner consistent with attainment of the NAAQS.

The three Phoenix-area tribal governments have indicated their willingness to take appropriate steps to protect and improve air quality in the Phoenix area. All three tribes have been building environmental regulatory programs for several years, and all three have expressed their intention to add an air quality component to these programs. The Gila River Indian Community and the Salt River Pima-Maricopa Indian Community are actively developing CAA programs with grant support from EPA Region IX. The Fort McDowell Indian Community is working with EPA Region IX to develop an air grant project that will result in the development of an air quality needs assessment for the Tribe. For all three tribes, an early step in the program development process will be to generate detailed emissions inventory data and assess the need for regulations to control emissions from on-reservation sources.

It took many years for states to develop the comprehensive air quality programs that exist now; likewise, air quality program development can be expected to take many years for tribes. EPA is committed to working closely with the three Phoenix-area tribes over the next several years to enhance and support their air program development. EPA will provide the necessary technical and financial support to ensure not only that an adequate level of data is generated in order to assess appropriate air pollution controls for the reservations, but also to ensure that the tribes develop the capacity, if they so desire, to implement such controls through tribal CAA programs. As a backstop, and consistent with 40 CFR section 49.11(a), EPA is prepared to develop federal measures to implement PM–10 controls necessary to attain the NAAQS in the absence of an approved tribal CAA program.

Furthermore, EPA recognizes that there is a potential equity issue regarding nonattainment area agricultural activities as addressed by this proposal, specifically that many of the farms on the Indian reservations are leased to commercial farmers who are also actively farming off-reservation. In order to address this issue, EPA will actively support tribal participation in the process of developing the agricultural BMPs described in section V.A.7.a. above, and will promote the equitable implementation of BMPs throughout the Phoenix nonattainment area.

VII. Administrative Requirements

A. Executive Order (E.O.) 12866

Under Executive Order 12866, 58 FR 51735 (October 4, 1993), the Agency must determine whether the regulatory action is ''significant'' and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Due to potential novel policy issues this action is considered a significant regulatory action and therefore must be reviewed by OMB. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

B. Regulatory Flexibility Analysis

1. Regulatory Flexibility Act Requirements

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. section 601 et. seq., EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities unless EPA certifies that the rule will not have a significant economic impact on a substantial number of small entities. 5 U.S.C. sections 603, 604 and 605(b). Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

For the purposes of this inquiry, as it applies to the two proposed federal measures, the fugitive dust rule and the commitment for the development and implementation of RACM for the agricultural sector, EPA is assuming that the affected or potentially affected sources constitute ''small entities'' as defined by the RFA.

The proposed federal measures are intended to fill gaps in the Arizona PM–10 SIP for the Phoenix nonattainment area. For non-agricultural fugitive dust sources, while the County has adopted and EPA has approved Rule 310 into the SIP, the County has not made a commitment to provide adequate resources to ensure enforcement of the rule as it applies to the unpaved road, unpaved parking lot and vacant lot source categories.[39] Further, application of Rule 310 to agricultural sources including fields and aprons is affected by the provision in section 102 (incorporating A.R.S. 49–504.4) that states that the rule ''shall not be construed so as to prevent normal farm cultural practices.'' Therefore, applicability of the rule to such sources depends on what dust-generating operation is occurring at the source. In other words, Rule 310 applies to some operations on agricultural fields and aprons and not to others.

2. RFA Analysis

a. Proposed Federal Rule for Unpaved Roads, Unpaved Parking Lots, and Vacant Lots. The starting point for EPA's analysis is Maricopa County's Rule 310. Regardless of the County's resources for enforcing the rule with respect to nonagricultural fugitive dust sources, those sources are legally responsible for complying with it. Failure to do so subjects such sources to potential enforcement action by EPA, the State, County and/or citizens. Thus, for the purpose of analyzing whether the proposed FIP rule will have ''a significant economic impact,'' EPA assumes that sources subject to the rule are complying with it. The appropriate inquiry then is whether the terms of EPA's proposed rule would impose a significant economic impact beyond that imposed by the terms of Rule 310.

Section 101 of Rule 310 states that the purpose of the rule is ''[t]o limit the emission of particulate matter into the ambient air from any property, operation or activity that may serve as an open fugitive dust source.'' Further, the provisions of the rule ''apply to any activity, equipment, operation and/or man-made or man-caused condition or practice * * * capable of generating fugitive dust. * * *'' Sections 305, 306, 309 and 312 of the rule contain the regulatory requirements applicable to the following source categories: vehicle use in open areas and vacant parcels, unpaved parking areas, vacant areas, and roadways. These requirements differ to some extent depending on the source category, but generally they mandate the implementation of RACM before certain dust-producing activities

[39] The County typically only ensures compliance with Rule 310 for these sources on a complaint basis.

can be undertaken. RACM is defined in section 221 as ''[a] technique, practice, or procedure used to prevent or minimize the generation, emission, entrainment, suspension and/or airbourne transport of fugitive dust.'' As further defined in subsection 221.1, and as pertinent to this analysis, RACM include, but are not limited to: curbing, paving, applying dust suppressants, and/or physically stabilizing with vegetation and gravel.

While subsection 211.1 does not specify which of the listed measures are appropriate for what types of source categories, the general definition of RACM in section 221 together with the list of RACM measures in subsection 211.1 provide a basis for selecting measures which are appropriate for a particular source to prevent or minimize dust emissions, to the extent other provisions of Rule 310 do not specify a particular RACM measure.

EPA's proposed fugitive dust rule is intended to establish a RACM requirement for unpaved parking lots, unpaved roads and vacant lots that is substantively equivalent to that established for the same sources by the Maricopa County rule. As noted above, the requirements of the County rule differ to some extent depending on the source category; EPA's proposed rule mirrors those differences. The primary difference between the County rule and EPA's proposed rule is that the EPA rule provides greater specificity and detail regarding which RACM are appropriate for a particular source category for the purpose of preventing or minimizing fugitive dust emissions.[40]

In providing further specificity and detail, EPA's proposed rule does not change the nature of the RACM requirement already applicable to sources covered by County Rule 310. The RACM required to be applied in the proposed FIP rule are the very measures listed in subsection 211.1 of Rule 310. Beyond that, the RACM specified in the proposed rule for any particular source category are the appropriate RACM for that source category. What constitutes RACM for the source categories covered by the proposed FIP rule is relatively straightforward in light of the differences among the source categories, the low technology nature of the potential RACM and other available information. EPA therefore believes that its further specification of the RACM requirements does not change the nature of the RACM requirements already applicable under County Rule 310.

The only other notable difference between the County rule and the proposed FIP rule that is relevant to this analysis is section 600 of the proposed FIP rule. Rule 310 contains a recordkeeping requirement for permitted dust-generating activities, but does not contain such a requirement for unpermitted activities, including unpaved parking lots, unpaved roads and vacant lots. Therefore, section 600 of the proposed FIP rule includes a requirement that owners/operators subject to the rule maintain records demonstrating appropriate application of RACM. EPA has determined that the recordkeeping requirements for the source categories covered in the FIP rule will not have a significant economic impact. In many cases, the owner/operator need only retain a purchase receipt or contractor work order for the control(s) implemented. When chemical stabilization is applied as a control measure, more specific information regarding the product being used is required. However, this information (e.g., type of product, label instructions) is readily available from vendors or easily determined at the time of application. EPA expects that the information the proposed rule would require sources to keep would be retained by source owners or operators in any event in the normal course of business (e.g., for tax and accounting purposes).

As the above discussion of the RACM requirements of the two rules makes clear, even though the proposed FIP rule differs from Rule 310 in that it is more specific and detailed, there should be no additional burden on regulated sources because they are already legally required to apply RACM under the County rule, and the RACM required by the proposed FIP rule is substantively identical to that required under Rule 310. Moreover, EPA believes that the additional recordkeeping requirement in the proposed FIP rule will not have a significant economic impact on the affected sources. As stated above and in section V.A.7.b., the information proposed to be retained is minimal and is therefore not expected to entail any appreciable economic impact.

b. Proposed Federal Commitment for Agriculture. EPA's proposed measure to control fugitive dust from agricultural fields and aprons consists of an enforceable commitment to propose and finalize adoption of RACM for those sources in September 1999 and April 2000, respectively. Prior to this formal rulemaking, EPA intends to convene a stakeholder process to develop the specific RACM that will ultimately be proposed for adoption. As discussed in detail in section V.A.7.a. above, EPA's intends the RACM to take the form of BMPs. During the BMP development process, EPA will investigate a myriad of factors, including the appropriate coverage of potential BMPs, regional climate, soil and crop types, and growing seasons.

Because this aspect of today's action neither proposes specific regulatory requirements, nor obligates EPA to propose requirements necessarily applicable to small entities, it will not, by itself, have a significant economic impact on a substantial number of small entities. When EPA proposes specific RACM in the September 1999 rulemaking, it will either undertake a RFA analysis or certify the proposed rule, as appropriate.

c. Certification. For the reasons set forth above, pursuant to 5 U.S.C. 605(b), EPA certifies that today's proposed federal rules do not have a significant impact on a substantial number of small entities within the meaning of those terms for RFA purposes.

C. Unfunded Mandates Reform Act (UMRA)

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), P.L. 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector.

Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, when EPA promulgates ''any general notice of proposed rulemaking that is likely to result in promulgation of any rule that includes any Federal mandate that may result in the expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more'' in any one year. A ''Federal mandate'' is defined, under section 101 of UMRA, as a provision that ''would impose an enforceable duty'' upon the private

[40] EPA believes that it is reasonable and appropriate for its proposed rule to be more specific and detailed than the County rule. As a result of the State's failure to commit sufficient enforcement resources for its rule, EPA is having to fulfill the role of primary enforcer of the RACM requirement for the sources described above. EPA Region 9 will be responsible for fulfilling that role, and it is located in San Francisco. Given the greater difficulties that Region 9 will inevitably face in enforcing the RACM requirement in Arizona, it is reasonable for EPA to design a RACM rule that ensures EPA enforcement of the rule will be practicable. As described above, the County rule provides a general basis for determining which RACM should be applied to which source categories. But its lack of specificity makes it more likely that the agency enforcing the rule will routinely be called upon to address which RACM should be applied to which source categories. By addressing this issue in the FIP rule itself, EPA hopes to reduce the extent to which sources and others may have to consult with the Agency to determine which RACM are appropriate for a particular source or source category.

sector or State, local, or tribal governments'', with certain exceptions not here relevant.

Under section 203 of UMRA, EPA must develop a small government agency plan before EPA ''establish[es] any regulatory requirements that might significantly or uniquely affect small governments''.

Under section 204 of UMRA, EPA is required to develop a process to facilitate input by elected officers of State, local, and tribal governments for EPA's ''regulatory proposals'' that contain significant Federal intergovernmental mandates.

Under section 205 of UMRA, before EPA promulgates ''any rule for which a written statement is required under [UMRA section] 202'', EPA must identify and consider a reasonable number of regulatory alternatives and either adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule, or explain why a different alternative was selected.

As explained above, while the proposed federal fugitive dust rule may impose an enforceable duty on State or local governments, the resulting expenditures by those entities are expected to be minimal. Tribal governments are excluded from the coverage of this proposed rule. In addition, there will be no current enforceable duties imposed on, or expenditures by, State, local or tribal governments or the private sector as a result of the proposed federal commitment regarding the agricultural sector. Therefore, expenditures by State, local and tribal governments, in the aggregate, or by the private sector, will be well under $100 million per year as a result of today's proposed federal measures. Consequently, sections 202, 204 and 205 of UMRA do not apply to today's proposed action. Therefore, EPA is not required and has not taken any actions to meet the requirements of these sections of UMRA.

With respect to section 203 of UMRA, EPA has concluded that its proposed actions include no regulatory requirements that will significantly or uniquely affect small governments. As discussed in detail in section VII.B. above, EPA believes that the RACM requirements of the proposed FIP rule for vacant lots, unpaved parking lots and unpaved roads are already legally required under Maricopa County Rule 310. Moreover, the requirements of EPA's proposed FIP rule, while more specific and detailed, are substantively identical to those required under Rule 310. Therefore, there should be no additional burden on regulated sources, including small governments. With respect to EPA's proposed enforceable commitment for the agricultural sector, such a commitment neither proposes specific regulatory requirements, nor obligates EPA to propose requirements necessarily applicable to small entities. Thus, neither EPA's proposed fugitive dust rule nor its proposed commitment for the agricultural sector will significantly or uniquely affect small governments. Consequently, EPA has not developed a small government plan. Nevertheless, during the development of today's proposed action, EPA held numerous meetings with potentially affected representatives of the State and local governments to discuss the requirements of, and receive input regarding, the proposed federal fugitive dust rule and commitment for the agricultural sector.

D. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1855.01) and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., S.W.; Washington, DC 20460 or by calling (202) 260–2740.

EPA's proposed FIP rule for unpaved parking lots, unpaved roads and vacant lots includes recordkeeping and reporting requirements which will help ensure source compliance with the rule's control requirements. In general, EPA believes the recordkeeping and reporting requirements are the minimal requirements necessary to demonstrate compliance. The requirents include:

—Owners/operators of unpaved roads must keep a record which indicates the date and type of control (i.e., paving, stabilizing, or applying gravel) applied to the road.

—Owners/operators of unpaved parking lots must keep a record which indicates the date and type of control (i.e., paving, stabilizing, applying gravel, or temporary stabilization for lots used less than 35 days per year) applied to the unpaved parking lot.

—Responsible party(ies) for unpermitted weed abatement activities on vacant lots must develop a dust control plan and submit the plan to EPA for approval prior to the weed abatement.

—Owners/operators of vacant lots with disturbed surfaces must keep a record which indicates the date and type of control (i.e., applying ground cover vegetation, stabilizing, restoring to natural undisturbed state, or applying gravel) applied to the vacant lot.

—Owners/operators of vacant lots with motor vehicle disturbances must keep a record which indicates the date and type of control (i.e., installing signs, fences, dust suppressants, or cement barriers) applied to the vacant lot.

—Agency surveys will be conducted by the EPA or other appropriate agency to determine the effectiveness of the rule in the Phoenix area.

The estimated recordkeeping and reporting burden for the proposed FIP rule is about 9716 hours. The estimated labor cost is about $173,632. No capital/start-up costs or operational and maintenance costs are anticipated. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control number for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., S.W.; Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., N.W. Washington, DC 20503, marked ''Attention: Desk Officer for EPA.'' Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after April 1, 1998, a comment to OMB is best assured of having its full effect if OMB receives it by May 1, 1998. The final rule will respond to any OMB or public

comments on the information collection requirements contained in this proposal.

List of Subjects in 40 CFR Part 52

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

Dated: March 20, 1998.

Carol M. Browner,

Administrator.

For the reasons set forth in the preamble, part 52, chapter I, title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

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

Subpart D—Arizona

2. Subpart D is proposed to be amended by adding §§ 52.127 and 52.128 to read as follows:

§ 52.127 Commitment to promulgate and implement reasonably available control measures for the agricultural fields and aprons.

The Administrator shall promulgate and implement reasonably available control measures (RACM) pursuant to section 189(a)(1)(C) of the Clean Air Act for agricultural fields and aprons in the Maricopa County (Phoenix) PM–10 nonattainment area according to the following schedule: by no later than September, 1999, the Administrator shall sign a Notice of Proposed Rulemaking; by no later than April, 2000, the Administrator shall sign a Notice of Final Rulemaking; and by no later than June, 2000, EPA shall begin implementing the final RACM.

§ 52.128 Rule for unpaved parking lots, unpaved roads and vacant lots.

(a) *General.*—(1) *Purpose.* The purpose of this section is to limit the emissions of particulate matter into the ambient air from human activity on unpaved parking lots, unpaved roads and vacant lots.

(2) *Applicability.* The provisions of this section shall apply to owners/operators of unpaved roads, unpaved parking lots and vacant lots and responsible parties for weed abatement on vacant lots in the Phoenix PM–10 nonattainment area. This section does not apply to unpaved roads, unpaved parking lots, or vacant lots located on an industrial facility, construction, or earth-moving site that has an approved permit issued by Maricopa County Environmental Services Division under Rule 200, Section 305 containing a Dust Control Plan (DCP) approved under Rule 310 covering all unpaved parking lots, unpaved roads and vacant lots. Nothing in this definition shall preclude applicability of this section to vacant lots with disturbed surface areas due to construction, earth-moving, weed abatement or other dust generating operations which have been terminated for over eight months.

(b) *Definitions.*—(1) *Average Daily Trips (ADT).* The average number of vehicles that cross a given surface during a specified 24-hour time period as determined by the Institute of Transportation Engineers Trip Generation Report (6th edition, 1997) or tube counts.

(2) *Chemical Stabilizer.* Any non-toxic chemical dust suppressant which meets any specifications, criteria, or tests required by any federal, state, or local water agency and is not prohibited for use by the U.S. Environmental Protection Agency or any applicable law, rule or regulation.

(3) *Disturbed Surface Area.* Any portion of the earth's surface, or materials placed thereon, which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of fugitive dust.

(4) *Dust Suppressants.* Water, hygroscopic materials, solution of water and chemical surfactant, foam, or non-toxic chemical stabilizers not prohibited for use by the U.S. Environmental Protection Agency or any applicable law, rule or regulation, as a treatment material to reduce fugitive dust emissions.

(5) *EPA.* United States Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, California 94105.

(6) *Fugitive Dust.* The particulate matter entrained in the ambient air which is caused from man-made and natural activities such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind. This excludes particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers.

(7) *Lot.* A parcel of land identified on a final or parcel map recorded in the office of the Maricopa County recorder with a separate and distinct number or letter.

(8) *Motor Vehicle.* A self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act, including any non-motorized attachments, such as, but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.

(9) *Off-Road Motor Vehicle.* Any wheeled vehicle which is used off paved roadways and includes but is not limited to the following: any motor cycle or motor-driven cycle; any motor vehicle commonly referred to as a sand buggy, dune buggy, or all terrain vehicle.

(10) *Owner/Operator.* Any person who owns, leases, operates, controls or supervises a fugitive dust source subject to the requirements of this section.

(11) *Paving.* Applying asphalt, recycled asphalt, concrete, or asphaltic concrete to a roadway surface.

(12) *Phoenix PM–10 Nonattainment Area.* Such area as defined in 40 CFR 81.303.

(13) *PM–10.* Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by reference or equivalent methods that meet the requirements specified for PM–10 in 40 CFR part 50, appendix J.

(14) *Reasonably Available Control Measures (RACM).* Techniques used to prevent the emission and/or airborne transport of fugitive dust and dirt.

(15) *Stabilized Surface.* (i) Any unpaved road or unpaved parking lot surface in which any fugitive dust plume emanating from vehicular movement does not exceed 20 percent opacity as determined by test methods in paragraph (g)(1) of this section.

(ii) Any vacant lot surface that has a visible crust as determined by the test method in paragraph (g)(2)(i) of this section;

(iii) Any vacant lot surface that is sufficiently vegetated as determined by test methods in paragraph (g)(2)(ii) or (g)(2)(iv) of this section.

(iv) Any vacant lot surface which is stabilized as determined by the test method in paragraph (g)(2)(iii) of this section;

(16) *Unpaved Parking Lot.* A privately or publicly owned or operated area utilized for parking vehicles that is not covered by concrete, asphaltic concrete, asphalt, or recycled asphalt.

(17) *Unpaved Road.* Any road, equipment path, or driveway that is not covered by asphalt, asphaltic concrete, recycled asphalt, or concrete. Public unpaved roads are those open to public access that are owned by any federal, state, county, municipal or other

governmental or quasi-governmental agencies.

(18) *Urban or Suburban Open Area.* An unsubdivided or undeveloped tract of land adjoining a residential, industrial, or commercial area, located on public or private property.

(19) *Vacant Lot.* A subdivided residential, industrial, institutional, governmental, or commercial lot which contains no approved or permitted buildings or structures of a temporary or permanent nature.

(c) *Exemptions.* The requirements in paragraph (d) of this section do not apply to the following:

(1) Any unpaved parking lot 5,000 square feet or less.

(2) Any vacant lot with less than 0.10 acres (4,356 square feet) of disturbed surface area(s).

(3) Non-routine or emergency maintenance of flood control channels and water retention basins.

(4) Vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality and/or commercial acceptance. Such facilities and operations shall be exempted from the provisions of this section only if such testing is not feasible within enclosed facilities.

(5) Weed abatement operations performed on any vacant lot or property under the order of a governing agency for the control of a potential fire hazard or otherwise unhealthy condition provided that mowing, cutting, or other similar process is used to maintain weed stubble at least three (3) inches above the soil surface. This includes the application of herbicides provided that the clean-up of any debris does not disturb the soil surface.

(6) Weed abatement operations that receive an approved Earth Moving permit under Maricopa County Rule 200, Section 305 (adopted 11/15/93).

(d) *Requirements.*—(1) *Unpaved parking lots.* Any owners/operators of an unpaved parking lot shall implement one of the following RACM on the entire surface area of the lot within eight (8) months following [the effective date of the final rule].

(i) An owner or operator of an unpaved parking lot shall:

(A) Pave the lot; or

(B) Apply chemical stabilizers in sufficient concentration and frequency to maintain a stabilized surface; or

(C) Apply and maintain surface gravel uniformly to a depth of at least 2 inches such that the surface is stabilized.

(ii) Any owners/operators of an unpaved parking lot that is used no more than 35 days per year may substitute the following control measure for those listed in paragraph (d)(1)(i) of this section:

(A) Apply chemical stabilizers within 20 days prior to any day in which over 100 vehicles are parked. Chemical stabilizers must be applied in sufficient concentration and frequency to maintain a stabilized surface throughout any day(s) when over 100 vehicles ingress into the lot.

(2) *Unpaved roads.* Any owners/operators of existing public unpaved roads with ADT volumes of 150 vehicles or greater, where at least 70% of the road is located within the Phoenix PM–10 nonattainment area, shall implement one of the following RACM along the entire surface of the road by June 10, 2000:

(i) Pave the road; or

(ii) Apply chemical stabilizers in sufficient concentration and frequency to maintain a stabilized surface; or

(iii) Apply and maintain surface gravel uniformly to a depth of at least 2 inches such that the surface is stabilized.

(3) *Vacant lots.* The following provisions shall be implemented as applicable:

(i) *Weed abatement.* No person shall remove vegetation from any vacant lot by blading, disking, plowing under or any other means that disturbs 0.10 acres or more of soil surface without first obtaining EPA approval of a DCP pursuant to paragraph (d)(3)(i)(A) of this section to effectively prevent or minimize fugitive dust.

(A) A DCP, containing the information described in paragraph (e)(3) of this section, shall be submitted to EPA at least 60 calendar days before the weed abatement occurs. Within 30 calendar days of its receipt, EPA shall provide written notice to the responsible party(ies) approving or disapproving the DCP. Should a DCP be disapproved, within 14 calendar days following receipt of any revisions provided by the responsible party(ies) to EPA, EPA shall provide notice to the responsible party(ies) approving or disapproving the DCP. Should EPA not provide written notice of approval or disapproval within the above deadlines, the responsible party(ies) may assume that the DCP is approved.

(B) Any person responsible for more than one weed abatement operation at non-contiguous sites may submit one DCP covering multiple sites provided that the contents of the DCP apply similarly to all such sites and any information specific to the site that is required by paragraph (e)(3) of this section is included.

(ii) *Disturbed surfaces.* Any owners/operators of an urban or suburban open area vacant lot which remains unoccupied, unused, vacant or undeveloped for more than fifteen (15) days of which any portion has a disturbed surface area(s) shall implement one of the following RACM within eight (8) months following [the effective date of the final rule] or within eight (8) months following the initial fifteen-day period of inactivity, whichever is later:

(A) Establish ground cover vegetation on all disturbed surface areas in sufficient quantity to maintain a stabilized surface; or

(B) Apply dust suppressants to all disturbed surface areas in sufficient quantity and frequency to maintain a stabilized surface; or

(C) Restore to a natural state, i.e. as existing in or produced by nature without cultivation or artificial influence, such that all disturbed surface areas are stabilized; or

(D) Apply and maintain surface gravel uniformly over all disturbed surface areas to a depth of at least 2 inches such that all disturbed surface areas are stabilized.

(iii) *Motor Vehicle Disturbances.* Any owners/operators of an urban or suburban open area vacant lot of which any portion has a disturbed surface area due to motor vehicle or off-road motor vehicle use or parking, notwithstanding use or parking by the owner(s), one of the following RACM shall be implemented within 60 calendar days following the initial determination of disturbance:

(A) Place signs at intervals of at least 300 feet, as measured along the access perimeter, that state ''Dust Control Area: No Trespassing'' with lettering at least two inches in height; or

(B) Place fencing along the access perimeter; or

(C) Plant shrubs or trees at least two (2) feet in height that prohibit motor vehicle and off-road motor vehicle entry along the access perimeter; or

(D) Place cement barriers that prohibit motor vehicle and off-road motor vehicle entry along the access perimeter.

(4) *Alternative control measures.* For sources subject to requirements in paragraphs (d)(1), (d)(2), (d)(3)(ii) and (d)(3)(iii) of this section: As an alternative to compliance, owners/operators may use any other alternative control measures approved by EPA pursuant to paragraphs (e)(1) and (e)(2) of this section as equivalent to the methods specified in paragraph (d) of this section.

(e) *Administrative requirements.* (1) Proposed alternative control measures for sources subject to paragraph (d)(1) of this section must be submitted to EPA

for approval within one year of the effective date of the final rule. Proposed alternative control measures for sources subject to paragraphs (d)(2) and (d)(3)(ii) of this section must be submitted to EPA for approval within 90 days prior to the required RACM implementation date as specified in this section. Proposed alternative control measures for sources subject to paragraph (d)(3)(iii) of this section must be submitted to EPA for approval within 60 calendar days following the initial determination of disturbance.

(2) Upon receipt of an alternative control measure, EPA shall provide written notice within 30 calendar days to the owner/operator approving or disapproving the alternative control measure. Should EPA not provide written notice of approval or disapproval within the above deadline, the owner/operator shall assume that the alternative control measure is approved. Upon receiving notice of EPA approval, the owner/operator shall implement the alternative control measure according to the timeframe established in this section unless otherwise specified by EPA. Upon receiving notice of EPA disapproval of the alternative control measure, the owner/operator shall implement RACM according to the specifications and timeframe established in this section. For sources submitting an alternative control measure under paragraph (d)(3)(iii) of this section, owners/operators shall implement the alternative control measure if approved by EPA within 60 days upon receiving written notice, or, upon disapproval of the alternative control measure, implement RACM as specified in this section within 60 days upon receiving written notice.

(3) Information to be included in a DCP:

(i) Name(s), address(es) and phone number(s) of person(s) responsible for the preparation, submittal and implementation of the DCP and responsible for the weed abatement operation(s).

(ii) A plot plan of the site which describes:

(A) The location of the site;

(B) The total area of land surface subject to disturbance and the total area of the entire project site, in acres;

(C) The type of weed abatement operation(s) and equipment to be used on the site.

(iii) A description of:

(A) Dust control measures or combinations thereof to be applied during all periods of weed abatement operations, including post-weed abatement and any operations conducted afterwork hours and on weekends and holidays, to all surface areas subject to disturbance as described in the plot plan.

(B) Dust control measures to be applied on all days when wind speeds exceed 25 miles per hour.

(C) Dust suppressant(s) to be applied, including product specifications or label instructions for approved usage; the method, frequency and concentration of application; the type, number and capacity of application equipment and; information on environmental impacts and approvals or certifications related to appropriate and safe use for ground applications.

(D) The specific surface treatment(s) and/or control measures utilized to control material track-out and sedimentation onto unpaved surfaces and access points adjoining paved surfaces.

(f) *Monitoring and records* (1) Any owners/operators that are subject to the provisions of this section shall compile and retain records that provide evidence of control measure application, indicating the type of treatment or measure, extent of coverage and date applied. For control measures involving chemical stabilization, records shall also indicate the type of product applied, vendor name, label instructions for approved usage, and the method, frequency and concentration of application.

(2) Copies of control measure records and dust control plans along with supporting documentation shall be retained for at least three years.

(3) *Agency surveys.* (i) EPA or other appropriate entity shall conduct a survey of the number and size (or length) of unpaved roads, unpaved parking lots, and vacant lots subject to the provisions of this section located within the Phoenix PM–10 nonattainment area beginning no later than 365 days following [the effective date of the final rule].

(ii) EPA or other appropriate entity shall conduct a survey at least every three years within the Phoenix PM–10 nonattainment area beginning no later than 365 days following [the effective date of the final rule] which includes:

(A) An estimate of the percentage of unpaved roads, unpaved parking lots, and vacant lots subject to this section to which RACM as required in this section have been applied; and

(B) A description of the most frequently applied RACM and estimates of their control effectiveness.

(g) *Test methods.* (1) For determining whether unpaved roads and unpaved parking lots are stabilized, visible opacity from vehicular movement shall not exceed twenty (20) percent. Opacity observations shall be conducted in accordance with Reference Method 9 (40 CFR part 60, appendix A), [Proposed Methods 203A, 203B, and 203C, with opacity readings conducted according to Method 203C] [1]. Visible opacity tests shall only be conducted on dry unpaved surfaces (i.e. when the surface is not damp to the touch) and on days when average wind speeds do not exceed 15 miles per hour (mph). For purposes of this section, visible opacity tests shall be conducted using the following vehicle speeds: 35 mph on unpaved roads and 20 mph on unpaved parking lots.

(2) The test methods in this paragraph (g)(2) shall be used for determining whether a vacant lot, or portion thereof, has a stabilized surface. Evidence of disturbance is loss of vegetation cover and disintegration of surface compaction and/or crusts. The surface shall be considered stabilized if any of the following test methods indicate that conditions defining a stabilized surface have been met:

(i)(A) Where a visible crust exists which is greater than 0.6 cm thick and not easily crumbled between the fingers, the surface shall be considered stabilized. This determination shall be based on the majority of at least three (3) crustal measurements representative of the disturbed surface area.

(B) If thin deposits of loose uncombined surface material cover more than 50 percent of a crusted surface, the test method described in paragraph (g)(2)(iii) of this section shall be applied to the loose material to determine whether the surface is stabilized.

(ii) Where flat vegetation covers at least 50 percent of the disturbed surface area as determined by the line transect method described in ''Estimating Percent Residue Cover Using the Line-Transect Method'', G93–1133 (February 1997, Electronic version), Cooperative Extension, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln, the surface shall be considered stabilized. Flat vegetation shall include attached vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation and a vertical height of one (1) inch or less that is not subject to movement by wind. Flat vegetation which is dead but firmly attached shall be considered equally protective as live vegetation. Stones or other aggregate larger than one

[1] These proposed methods in 40 CFR part 51, appendix M, were published at 58 FR 61640, November 22, 1993.

centimeter in diameter may be considered protective cover in the course of conducting the line transect method.

(iii) For all other surface conditions, at least three (3) soil samples shall be collected representative of the disturbed surface area. Each sample shall be measured for threshold friction velocity in accordance with the sieving field procedure found in ''Industrial Wind Erosion'' (Fifth Edition, Volume I, Chapter 13, Section 13.2.5, 1995), AP–42, Office of Air Quality Planning & Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. Corrections for non-erodible elements (not including flat or standing vegetation), shall be determined by following the procedures in ''Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites'', (February 1985, Appendix A) EPA/600/8–85/002, Office of Health and Environmental Assessment, United States Environmental Protection Agency, Washington DC. Non-erodible elements shall be defined as elements on the disturbed surface area which remain firmly in place during a wind episode and inhibit soil loss by consuming part of the shear stress of the wind, such as stones larger than one centimeter in diameter. Soil samples shall only be collected from dry surfaces (i.e. when the surface is not damp to the touch) to a depth of approximately one (1) centimeter. The threshold friction velocity of all soil samples shall be averaged. The surface shall be considered stabilized if the threshold friction velocity, corrected for non-erodible elements, is equal to or greater than 100 centimeters per second.

(iv) Where standing vegetation is firmly attached to the disturbed surface area and the corrected threshold friction velocity measured in paragraph (g)(2)(iii) of this section is equal to or greater than forty-three (43) centimeters per second, the surface shall be considered stabilized if the average frontal silhouette area of the standing vegetation per unit of ground area is ten (10) percent or greater. Where standing vegetation is firmly attached to the disturbed surface area and the corrected threshold friction velocity measured in paragraph (g)(2)(iii) of this section is less than forty-three (43) centimeters per second, the surface shall be considered stabilized if the average frontal silhouette area of the standing vegetation per unit of ground area is thirty (30) percent or greater. Standing vegetation shall include vegetation that is attached via root systems with predominant vertical orientation and a height exceeding one (1) inch. Standing vegetation which is dead but firmly attached shall be considered equally protective as live vegetation.

(A) For standing vegetation that consists of separate vegetative units (for example, shrubs and sagebrush), the standard unit area of ground surface to be surveyed shall be a square of side length equal to at least 10 times the average height of the vegetative structure. For other standing vegetation, the standard unit area to be surveyed shall be three (3) feet by 3 feet.

(B) The number of standing vegetative structures within the standard unit area shall be counted. Vegetation which grows in clumps shall be counted as a single unit. Where vegetation of diverse dimensions is present, vegetation shall be counted separately in groups with similar horizontal and vertical structural dimensions. The width and height of the vegetation that is representative of the average dimensions of the general vegetation within each structural group in the standard unit area shall be measured and multiplied together to obtain a frontal silhouette area. The frontal silhouette areas for each vegetative group shall be multiplied by the total number of vegetation counted within each group and added together to arrive at the total frontal silhouette area of all standing vegetative structures. The total frontal silhouette area shall be divided by the total standard unit area and multiplied by 100 to arrive at the percent frontal silhouette area coverage.

(C) This procedure shall be repeated for at least two additional representative areas within the disturbed portion(s) of the vacant lot. The three percent frontal silhouette areas shall be averaged. Total frontal silhouette areas of distinct standard unit areas may only be added together if the vegetation is relatively uniform and consistent in spacing over the entire disturbed surface area.

(3) Alternative test methods may be used upon obtaining the written approval of the EPA.

[FR Doc. 98–8061 Filed 3–31–98; 8:45 am]

BILLING CODE 6560–50–P