



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R05-OAR-2011-0673; FRL-9830-2]**

**Approval, and Promulgation of Air Quality Implementation Plans;  
Michigan; Redesignation of the Detroit-Ann Arbor Area to  
Attainment of the 1997 Annual Standard and the 2006 24-Hour  
Standard for Fine Particulate Matter**

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

**ACTION:** Proposed rule.

**SUMMARY:** On July 5, 2011, the Michigan Department of Environmental Quality (MDEQ) submitted a request for EPA to redesignate the Detroit-Ann Arbor Michigan nonattainment area (Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties), referred to as the Detroit-Ann Arbor area, to attainment of the Clean Air Act (CAA or Act) 1997 annual and the 2006 24-hour national ambient air quality standards (NAAQS or standard) for fine particulate matter (PM<sub>2.5</sub>). EPA is proposing to redesignate the area. EPA is also proposing several additional related actions. EPA is proposing to determine that the entire Detroit-Ann Arbor area continues to attain both the annual and 24-hour PM<sub>2.5</sub> standards. EPA is proposing to approve, as revisions to the Michigan state implementation plan (SIP), the state's plan for maintaining the 1997 annual and the 2006

24-hour PM<sub>2.5</sub> NAAQS through 2022 in the area. EPA previously approved the base year emissions inventory for the Detroit-Ann Arbor area, which met the comprehensive emissions inventory requirement of the Act. Michigan's maintenance plan submission includes a budget for the mobile source contribution of PM<sub>2.5</sub> and nitrogen oxides (NO<sub>x</sub>) to the Detroit-Ann Arbor Michigan PM<sub>2.5</sub> area for transportation conformity purposes, which EPA is proposing to approve. EPA is proposing to take this action in accordance with the CAA and EPA's implementation regulations regarding the 1997 and the 2006 PM<sub>2.5</sub> NAAQS.

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

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R05-OAR-2011-0673, by one of the following methods:

1. [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.
2. E-mail: [blakley.pamela@epa.gov](mailto:blakley.pamela@epa.gov).
3. Fax: (312) 886-4447.
4. Mail: Pamela Blakley, Chief, Control Strategies Section (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.
5. Hand Delivery: Pamela Blakley, Chief, Control Strategies Section (AR-18J), U.S. Environmental Protection Agency, 77

West Jackson Boulevard, Chicago, Illinois 60604. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 AM to 4:30 PM excluding Federal holidays.

*Instructions:* Direct your comments to Docket ID No.

EPA-R05-OAR-2011-0673. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov) or e-mail. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov) your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment,

EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional instructions on submitting comments, go to Section I of the SUPPLEMENTARY INFORMATION section of this document.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 AM to 4:30 PM, Monday through Friday, excluding Federal holidays. We recommend that you telephone Carolyn Persoon, Environmental Engineer, at (312) 353-8290 before visiting the Region 5 office.

**FOR FURTHER INFORMATION CONTACT:** Carolyn Persoon, Environmental Engineer, Control Strategies Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-8290, [persoon.carolyn@epa.gov](mailto:persoon.carolyn@epa.gov).

**SUPPLEMENTARY INFORMATION:** This supplementary information section is arranged as follows:

- I. What Should I Consider as I Prepare My Comments for EPA?
- II. What Actions is EPA Proposing to Take?
- III. What is the Background for These Actions?
- IV. What are the Criteria for Redesignation to Attainment?
- V. What is EPA's Analysis of the State's Request?
  1. Attainment
  2. The Area Has Met All Applicable Requirements under Section 110 and Part D and Has a Fully Approved SIP Under Section 110(k) (Section 107(d)(3)(E)(ii) and (v))
  3. The Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions Resulting from Implementation of the SIPs and Applicable Federal Air Pollution Control Regulations and Other Permanent and Enforceable Reductions (Section 107(d)(3)(E)(iii))
  4. Michigan Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d)(3)(E)(iv))

5. Motor Vehicle Emissions Budget (MVEBs) for the Mobile Source Contribution to PM<sub>2.5</sub> and NO<sub>x</sub>

6. 2005 Comprehensive Emissions Inventory

7. Summary of Proposed Actions

VI. What Are the Effects of EPA's Proposed Actions?

VII. Statutory and Executive Order Reviews.

**I. What Should I Consider as I Prepare My Comments for EPA?**

When submitting comments, remember to:

1. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
2. Follow directions - The EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
3. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
4. Describe any assumptions and provide any technical information and/or data that you used.
5. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
6. Provide specific examples to illustrate your concerns, and suggest alternatives.

7. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

8. Make sure to submit your comments by the comment period deadline identified.

## **II. What Actions is EPA Proposing to Take?**

EPA is proposing to take several actions related to redesignation of the Detroit-Ann Arbor area to attainment for the 1997 annual and 2006 24-hour  $PM_{2.5}$  NAAQS.

EPA is proposing to approve Michigan's  $PM_{2.5}$  maintenance plan for the Detroit-Ann Arbor area as a revision to the Michigan SIP, including the motor vehicles emissions budget for  $PM_{2.5}$  and  $NO_x$  for the mobile source contribution of the Michigan portion of the Detroit-Ann Arbor  $PM_{2.5}$  area. EPA's analysis for this proposed action is discussed in Section V. of today's proposed rulemaking.

EPA has previously approved (77 FR 66547) the 2005 primary  $PM_{2.5}$ ,  $NO_x$ , volatile organic compounds (VOCs), ammonia, and sulfur dioxide ( $SO_2$ ) base year emissions inventory which satisfied the requirement in section 172(c)(3) for a current, accurate and comprehensive emission inventory.

EPA also is proposing to find that Michigan meets the requirements for redesignation of the Detroit-Ann Arbor area to attainment of the 1997 annual and the 2006 24-hour  $PM_{2.5}$  NAAQS

under section 107(d)(3)(E) of the CAA. EPA is thus proposing to grant Michigan's request to change the designation of its portion of the Detroit-Ann Arbor area from nonattainment to attainment for the 1997 annual and the 2006 24-hour PM<sub>2.5</sub> NAAQS.

### **III. What is the Background for These Actions?**

Fine particulate pollution can be emitted directly from a source (primary PM<sub>2.5</sub>) or formed secondarily through chemical reactions in the atmosphere involving precursor pollutants emitted from a variety of sources. Sulfates are a type of secondary particulate formed from SO<sub>2</sub> emissions from power plants and industrial facilities. Nitrates, another common type of secondary particulate, are formed from combustion emissions of NO<sub>x</sub> from power plants, mobile sources, and other combustion sources.

The first air quality standards for PM<sub>2.5</sub> were promulgated on July 18, 1997, at 62 FR 38652. EPA promulgated an annual standard at a level of 15 micrograms per cubic meter (µg/m<sup>3</sup>) of ambient air, based on a three-year average of the annual mean PM<sub>2.5</sub> concentrations at each monitoring site. In the same rulemaking, EPA promulgated a 24-hour PM<sub>2.5</sub> standard of 65 µg/m<sup>3</sup>, based on a three-year average of the annual 98th percentile of 24-hour PM<sub>2.5</sub> concentrations at each monitoring site.

On January 5, 2005, at 70 FR 944, EPA published air quality

area designations for the 1997 annual PM<sub>2.5</sub> standard based on air quality data for calendar years 2001-2003. In that rulemaking, EPA designated the Detroit-Ann Arbor area (Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties) as nonattainment for the 1997 annual PM<sub>2.5</sub> standard.

On October 17, 2006, (71 FR 61144), EPA promulgated a 24-hour standard of 35 µg/m<sup>3</sup> based on a 3-year average of the 98<sup>th</sup> percentile of 24-hour concentration, as set forth at 40 CFR 50.13. On December 13, 2009, (74 FR 58688), EPA made designation determinations, as required by CAA section 107(d)(1), for the 2006 24-hour PM<sub>2.5</sub> NAAQS. In that action, EPA designated the Detroit-Ann Arbor area as nonattainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS.

EPA's rulemaking promulgating the revised 24-hour standard retained as the 2006 annual PM<sub>2.5</sub> standard the 1997 annual standard of 15 µg/m<sup>3</sup> (2006 annual PM<sub>2.5</sub> standard). In response to legal challenges of the 2006 annual PM<sub>2.5</sub> standard, the U.S. Court of Appeals for District of Columbia Circuit (D.C. Circuit or Court) remanded this standard to EPA for further consideration. See *American Farm Bureau Federation and National Pork Producers Council, et al. v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). However, given that the 1997 and 2006 annual PM<sub>2.5</sub> standards are essentially identical, attainment of the 1997

annual  $PM_{2.5}$  standard would also indicate attainment of the remanded 2006 annual standard. Since the Detroit-Ann Arbor area is designated only for 1997 annual standard and not the 2006 annual standard, today's proposed actions address the 1997 annual and the 2006 24-hour  $PM_{2.5}$  standards.

In this proposed redesignation, EPA takes into account two decisions of the D.C. Circuit. On August 21, 2012, in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012), the D.C. Circuit vacated and remanded the Cross State Air Pollution Rule (CSAPR) and ordered EPA to continue administering the Clean Air Interstate Rule (CAIR) "pending . . . development of a valid replacement." *EME Homer City* at 38. The D.C. Circuit denied all petitions for rehearing on January 24, 2013. In the second decision, on January 4, 2013, the D.C. Circuit remanded to EPA the "Final Clean Air Fine Particle Implementation Rule" (72 FR 20586, April 25, 2007) and the "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers ( $PM_{2.5}$ )" final rule (73 FR 28321, May 16, 2008). *Natural Resources Defense Council v. EPA*, 706 F.3d 428 (D.C. Cir. 2013).

#### **IV. What are the Criteria for Redesignation to Attainment?**

The CAA sets forth the requirements for redesignating a nonattainment area to attainment. Specifically, section

107(d)(3)(E) of the CAA allows for redesignation provided that: (1) the Administrator determines that the area has attained the applicable NAAQS based on current air quality data; (2) the Administrator has fully approved an applicable SIP for the area under section 110(k) of the CAA; (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable emission reductions resulting from implementation of the applicable SIP, Federal air pollution control regulations, or other permanent and enforceable emission reductions; (4) the Administrator has fully approved a maintenance plan for the area meeting the requirements of section 175A of the CAA; and (5) the state containing the area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

**V. What is EPA's Analysis of the State's Request?**

EPA is proposing to approve the redesignation of the Detroit-Ann Arbor area to attainment of the 1997 annual PM<sub>2.5</sub> NAAQS and is proposing to approve Michigan's maintenance plan for the area and other related SIP revisions. The bases for these actions follow.

**1. Attainment**

In accordance with section 179(c) of the CAA, 42 U.S.C. 7509(c) and 40 CFR 51.1004(c), EPA is proposing to determine

that Detroit-Ann Arbor Michigan has attained the 1997 annual and the 2006 24-hour PM<sub>2.5</sub> NAAQS. This proposed determination is based upon complete, quality-assured, and certified ambient air monitoring data for the 2009-2011 and 2010-2012 monitoring period that shows this area has monitored attainment of both PM<sub>2.5</sub> NAAQS.

Under EPA's regulations at 40 CFR 50.7, the annual primary and secondary PM<sub>2.5</sub> standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, is less than or equal to 15.0 µg/m<sup>3</sup> at all relevant monitoring sites in the area. Under EPA regulations in 40 CFR 50.13 and in accordance with 40 CFR part 50, appendix N, the 24-hour primary and secondary PM<sub>2.5</sub> standards are met when the 98<sup>th</sup> percentile 24-hour concentration is less than or equal to 35 µg/m<sup>3</sup>.

EPA has reviewed the ambient air quality monitoring data in the Detroit-Ann Arbor area, consistent with the requirements contained at 40 CFR part 50. EPA's review focused on data recorded in the EPA Air Quality System (AQS) database for the Detroit-Ann Arbor area for PM<sub>2.5</sub> nonattainment area from 2009-2011 and 2010-2012.

The Detroit-Ann Arbor area had fourteen monitors located in Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne

Counties that reported design values from 2010-2012 for PM<sub>2.5</sub> that ranged from 8.4 to 11.5 µg/m<sup>3</sup> for the 1997 annual standard and 22 to 28 µg/m<sup>3</sup> for the 2006 24-hour standard, as shown in Table 1.

All monitors in the Detroit-Ann Arbor area recorded complete data in accordance with criteria set forth by EPA in 40 CFR part 50 appendix N, where a complete year of air quality data comprises four calendar quarters, with each quarter containing data from at least 75% capture of the scheduled sampling days. Data available are considered to be sufficient for comparison to the NAAQS if three consecutive complete years of data exist. Recently state certified data for 2010-2012 show the area continues to attain.

**Table 1. Annual and 24-hour PM<sub>2.5</sub> Design Values for Detroit-Ann Arbor Area Monitors with Complete Data for the 2009-2011 and 2010-2012 Design Values in µg/m<sup>3</sup>**

County	Monitor	Annual Standard 2009-2011 (µg/m <sup>3</sup> )	24-Hour Standard 2009-2011 (µg/m <sup>3</sup> )	Annual Standard 2010-2012 (µg/m <sup>3</sup> )	24-Hour Standard 2010-2012 (µg/m <sup>3</sup> )
Macomb	New Haven 260990009	9.0	25	8.4	22
Monroe	Luna Pier 261150005	9.9	24	9.2	24
Oakland	Oak Park 261250001	9.4	27	8.8	24
St. Clair	Port Huron 261470005	9.3	26	9.6	25
Washtenaw	Ypsilanti 261610008	9.6	25	9.3	25
Wayne	Allen Park	10.5	27	9.2	24

261630001				
Dearborn 261630033	11.6	32	9.3	23
E 7 Mile 261630019	9.9	27	10.2	25
FIA 261630039	10.4	28	10.9	25
Linwood 261630016	10.1	28	10.0	26
Livonia 261630025	9.5	26	9.7	28
Newberry 261630038	10.3	27	9.4	24
SW HS 261630015	10.9	28	11.5	28
Wyandotte 261630036	9.6	24	9.2	22

EPA has found that the Detroit-Ann Arbor area has attained both the 1997 annual and the 2006 24-hour PM<sub>2.5</sub> NAAQs, and has attained the standards by the attainment date.

**2. The Area Has Met All Applicable Requirements under Section 110 and Part D and Has a Fully Approved SIP Under Section 110(k) (Section 107(d)(3)(E)(ii) and (v))**

We have determined that Michigan has met all currently applicable SIP requirements for purposes of redesignation for the Detroit-Ann Arbor area under section 110 of the CAA (general SIP requirements). We are also proposing to find that the Michigan submittal meets all SIP requirements currently applicable for purposes of redesignation under part D of title I of the CAA, in accordance with section 107(d)(3)(E)(v). In

addition, we are proposing to find that all applicable requirements of the Michigan SIP for purposes of redesignation have been approved, in accordance with section 107(d)(3)(E)(ii). As discussed above, EPA previously approved Michigan's 2005 emissions inventory as meeting the section 172(c)(3) comprehensive emissions inventory requirement.

In making these proposed determinations, we have ascertained which SIP requirements are applicable for purposes of redesignation, and concluded that the Michigan SIP includes measures meeting those requirements and that they are fully approved under section 110(k) of the CAA.

**a. Michigan Has Met All Applicable Requirements for Purposes of Redesignation of The Detroit-Ann Arbor Area under Section 110 and Part D of the CAA**

**i. Section 110 General SIP Requirements**

Section 110(a) of title I of the CAA contains the general requirements for a SIP. Section 110(a)(2) provides that the implementation plan submitted by a state must have been adopted by the state after reasonable public notice and hearing, and, among other things, must: include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; provide for establishment and operation of appropriate devices, methods,

systems, and procedures necessary to monitor ambient air quality; provide for implementation of a source permit program to regulate the modification and construction of any stationary source within the areas covered by the plan; include provisions for the implementation of part C, Prevention of Significant Deterioration (PSD) and part D, NSR permit programs; include criteria for stationary source emission control measures, monitoring, and reporting; include provisions for air quality modeling; and provide for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires that SIPs contain measures to prevent sources in a state from significantly contributing to air quality problems in another state. EPA believes that the requirements linked with a particular nonattainment area's designation are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, we believe that these requirements should not be construed to be applicable requirements for purposes of redesignation.

Further, we believe that the other section 110 elements described above that are not connected with nonattainment plan

submissions and not linked with an area's attainment status are also not applicable requirements for purposes of redesignation. A state remains subject to these requirements after an area is redesignated to attainment. We conclude that only the section 110 and part D requirements that are linked with a particular area's designation are the relevant measures which we may consider in evaluating a redesignation request. See Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176 (October 10, 1996)) and (62 FR 24826 (May 7, 1997)); Cleveland-Akron-Lorain, Ohio, final rulemaking (61 FR 20458 (May 7, 1996)); and Tampa, Florida, final rulemaking (60 FR 62748 (December 7, 1995)). See also the discussion on this issue in the Cincinnati, Ohio 1-hour ozone redesignation (65 FR 37890 (June 19, 2000)), and in the Pittsburgh, Pennsylvania 1-hour ozone redesignation (66 FR 50399 (October 19, 2001)).

We have reviewed the Michigan SIP and have concluded that it meets the general SIP requirements under section 110 of the CAA to the extent they are applicable for purposes of redesignation. EPA has previously approved provisions of Michigan's SIP addressing section 110 requirements (including provisions addressing particulate matter), at 40 CFR 52.1173.

On December 6, 2007, September 19, 2008, and April 6, 2011, Michigan made submittals addressing "infrastructure SIP"

elements required under CAA section 110(a)(2). EPA finalized approval of the December 6, 2007, submittal on July 13, 2011, at 76 FR 41075. An August 15, 2011, submittal for the 2006 standard was approved on October 29, 2012 (77 FR 65478). The requirements of section 110(a)(2), however, are statewide requirements that are not linked to the PM<sub>2.5</sub> nonattainment status of the Detroit-Ann Arbor area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of the state's PM<sub>2.5</sub> redesignation request.

**ii. Part D Requirements**

EPA has determined that, upon approval of the base year emissions inventories discussed in section IV.C. of this rulemaking, the Michigan SIP will meet the applicable SIP requirements for the Detroit-Ann Arbor area applicable for purposes of redesignation under part D of the CAA. Subpart 1 of part D, found in sections 172-176 of the CAA, sets forth the basic nonattainment requirements applicable to all nonattainment areas.

**1. Subpart 1**

**a) Section 172 Requirements.**

For purposes of evaluating this redesignation request, the applicable section 172 SIP requirements for the Detroit-Ann Arbor area are contained in sections 172(c)(1)-(9). A thorough

discussion of the requirements contained in section 172 can be found in the General Preamble for Implementation of Title I (57 FR 13498, April 16, 1992).

Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all reasonably available control measure (RACM) as expeditiously as practicable and to provide for attainment of the primary NAAQS. EPA interprets this requirement to impose a duty on all states to consider all available control measures for all nonattainment areas and to adopt and implement such measures as are reasonably available for implementation in each area as components of the area's attainment demonstration. Because the Detroit-Ann Arbor area has reached attainment, Michigan does not need to address additional measures to provide for attainment, and section 172(c)(1) requirements are no longer considered to be applicable as long as the area continues to attain the standard until redesignation. (40 CFR 51.918).

The reasonable further progress (RFP) requirement under section 172(c)(2) is defined as progress that must be made toward attainment. This requirement is not relevant for purposes of the Detroit-Ann Arbor redesignation because the area has monitored attainment of the 1997 annual PM<sub>2.5</sub> NAAQS. (General Preamble, 57 FR 13564). *See also* 40 CFR 51.918. The

requirement to submit the section 172(c)(9) contingency measures is similarly not applicable for purposes of redesignation. *Id.*

Section 172(c)(3) requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. Michigan submitted a 2005 base year emissions inventory in the required attainment plan. As discussed previously, and below in section IV.C., EPA approved the 2005 base year inventory as meeting the section 172(c)(3) emissions inventory requirement for the Detroit-Ann Arbor area on November 6, 2012 (77 FR 66547).

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA approved Michigan's current NSR program on January 27, 1982 (47 FR 3764), but has not approved updates since that time. Nonetheless, since PSD requirements will apply after redesignation, the area need not have a fully-approved NSR program for purposes of redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and

Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." Michigan has demonstrated that the Detroit-Ann Arbor area will be able to maintain the standard without part D NSR in effect; therefore, the state need not have a fully approved part D NSR program prior to approval of the redesignation request. The state's PSD program will become effective in the Detroit-Ann Arbor area upon redesignation to attainment. See rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the standard. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, we believe the Michigan's SIP meets the applicable requirements of section 110(a)(2) for purposes of redesignation.

**b) Section 176 Conformity Requirements.**

Section 176(c) of the CAA requires states to establish

criteria and procedures to ensure that Federally-supported or funded activities, including highway projects, conform to the air quality planning goals in the applicable SIPs. The requirement to determine conformity applies to transportation plans, programs and projects developed, funded or approved under Title 23 of the U.S. Code and the Federal Transit Act (transportation conformity) as well as to all other Federally-supported or funded projects (general conformity). State transportation conformity regulations must be consistent with Federal conformity regulations relating to consultation, enforcement, and enforceability, which EPA promulgated pursuant to CAA requirements.

EPA approved Michigan's general and transportation conformity SIPs on December 18, 1996 (61 FR 666079 and 61 FR 66609, respectively). Michigan has submitted an on-road motor vehicle emissions budget (MVEB) for the Detroit-Ann Arbor area calculated by the local metropolitan planning organization (MPO), SEMCOG. The area must use the MVEB from the maintenance plan in any conformity determination that is effective on or after the effective date of the maintenance plan approval.

## **2. Effect of the January 4, 2013, D.C. Circuit Decision**

### **Regarding PM<sub>2.5</sub> Implementation under Subpart 4**

#### **a. Background**

As discussed above, on January 4, 2013, in *Natural Resources Defense Council v. EPA*, the D.C. Circuit remanded to EPA the "Final Clean Air Fine Particle Implementation Rule" (72 FR 20586, April 25, 2007) and the "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM<sub>2.5</sub>)" final rule (73 FR 28321, May 16, 2008) (collectively, "1997 PM<sub>2.5</sub> Implementation Rule"). 706 F.3d 428 (D.C. Cir. 2013). The Court found that EPA erred in implementing the 1997 PM<sub>2.5</sub> NAAQS pursuant to the general implementation provisions of subpart 1 of part D of title I of the CAA, rather than the particulate-matter-specific provisions of subpart 4 of part D of title I. Although the Court's ruling did not directly address the 2006 PM<sub>2.5</sub> standard, EPA is taking into account the Court's position on subpart 4 and the 1997 PM<sub>2.5</sub> standard in evaluating redesignations for the 2006 standard.

**b. Proposal on This Issue**

EPA is proposing to determine that the Court's January 4, 2013, decision does not prevent EPA from redesignating the Detroit-Ann Arbor area to attainment. Even in light of the Court's decision, redesignation for this area is appropriate under the CAA and EPA's longstanding interpretations of the CAA's provisions regarding redesignation. EPA's longstanding

interpretation is that requirements that are imposed, or that become due, after a complete redesignation request is submitted for an area that is attaining the standard are not applicable for purposes of evaluating a redesignation request. Second, even if EPA applies the subpart 4 requirements to the Detroit-Ann Arbor redesignation request and disregards the provisions of its 1997 PM<sub>2.5</sub> implementation rule recently remanded by the Court, the state's request for redesignation of this area still qualifies for approval. EPA's discussion takes into account the effect of the Court's ruling on the area's maintenance plan, which EPA views as approvable when subpart 4 requirements are considered.

**i. Applicable Requirements for Purposes of Evaluating the Redesignation Request**

With respect to the 1997 PM<sub>2.5</sub> Implementation Rule, the Court's January 4, 2013, ruling rejected EPA's reasons for implementing the PM<sub>2.5</sub> NAAQS solely in accordance with the provisions of subpart 1, and remanded that matter to EPA, so that it could address implementation of the 1997 PM<sub>2.5</sub> NAAQS under subpart 4 of part D of the CAA, in addition to subpart 1. For the purposes of evaluating Michigan's redesignation request for the area, to the extent that implementation under subpart 4 would impose additional requirements for areas designated

nonattainment, EPA believes that those requirements are not "applicable" for the purposes of CAA section 107(d)(3)(E), and thus EPA is not required to consider subpart 4 requirements with respect to the Detroit-Ann Arbor redesignation. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean that the part D provisions which are "applicable" and which must be approved in order for EPA to redesignate an area include only those which came due prior to a state's submittal of a complete redesignation request. See "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (Calcagni memorandum). See also "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) NAAQS on or after November 15, 1992," Memorandum from Michael Shapiro, Acting Assistant Administrator, Air and Radiation, September 17, 1993 (Shapiro memorandum); Final Redesignation of Detroit-Ann Arbor, (60 FR 12459, 12465-66, March 7, 1995); Final Redesignation of St. Louis, Missouri, (68 FR 25418, 25424-27, May 12, 2003); *Sierra Club v. EPA*, 375 F.3d 537, 541 (7th Cir. 2004) (upholding EPA's redesignation rulemaking applying this interpretation and expressly rejecting Sierra Club's view that

the meaning of "applicable" under the statute is "whatever should have been in the plan at the time of attainment rather than whatever actually was in the plan and already implemented or due at the time of attainment").<sup>1</sup> In this case, at the time that Michigan submitted its redesignation request, requirements under subpart 4 were not due, (and indeed, were not yet known to apply.)

EPA's view that, for purposes of evaluating the Detroit-Ann Arbor redesignation, the subpart 4 requirements were not due at the time the state submitted the redesignation request is in keeping with the EPA's interpretation of subpart 2 requirements for subpart 1 ozone areas redesignated subsequent to the D.C. Circuit's decision in *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006). In *South Coast*, the Court found that EPA was not permitted to implement the 1997 8-hour ozone standard solely under subpart 1, and held that EPA was required under the statute to implement the standard under the ozone-specific requirements of subpart 2 as well. Subsequent to the *South Coast* decision, in evaluating and acting upon redesignation requests for the 1997 8-hour ozone standard that

---

<sup>1</sup> Applicable requirements of the CAA that come due subsequent to the area's submittal of a complete redesignation request remain applicable until a redesignation is approved, but are not required as a prerequisite to redesignation. Section 175A(c) of the CAA.

were submitted to EPA for areas under subpart 1, EPA applied its longstanding interpretation of the CAA that "applicable requirements", for purposes of evaluating a redesignation, are those that had been due at the time the redesignation request was submitted. *See, e.g., Proposed Redesignation of Manitowoc County and Door County Nonattainment Areas* (75 FR 22047, 22050, April 27, 2010). In those actions, EPA therefore did not consider subpart 2 requirements to be "applicable" for the purposes of evaluating whether the area should be redesignated under section 107(d)(3)(E).

EPA's interpretation derives from the provisions of CAA Section 107(d)(3). Section 107(d)(3)(E)(v) states that, for an area to be redesignated, a state must meet "all requirements 'applicable' to the area under section 110 and part D." Section 107(d)(3)(E)(ii) provides that the EPA must have fully approved the "applicable" SIP for the area seeking redesignation. These two sections read together support EPA's interpretation of "applicable" as only those requirements that came due prior to submission of a complete redesignation request. First, holding states seeking redesignation to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request would make it problematic or impossible for EPA to act on redesignation requests in accordance with the

18-month deadline Congress set for EPA action in section 107(d)(3)(D). If "applicable requirements" were interpreted to be a continuing flow of requirements with no reasonable limitation, states, after submitting a redesignation request, would be forced continuously to make additional SIP submissions that in turn would require EPA to undertake further notice-and-comment rulemaking actions to act on those submissions. This would create a regime of unceasing rulemaking that would delay action on the redesignation request beyond the 18-month timeframe provided by the CAA for this purpose.

Second, a fundamental premise for redesignating a nonattainment area to attainment is that the area has attained the relevant NAAQS due to emission reductions from existing controls. Thus, an area for which a redesignation request has been submitted would have already attained the NAAQS as a result of satisfying statutory requirements that came due prior to the submission of the request. Absent a showing that unadopted and unimplemented requirements are necessary for future maintenance, it is reasonable to view the requirements applicable for purposes of evaluating the redesignation request as including only those SIP requirements that have already come due. These are the requirements that led to attainment of the NAAQS. To require, for redesignation approval, that a state also satisfy

additional SIP requirements coming due after the state submits its complete redesignation request, and while EPA is reviewing it, would compel the state to do more than is necessary to attain the NAAQS, without a showing that the additional requirements are necessary for maintenance.

In the context of this redesignation, the timing and nature of the Court's January 4, 2013, decision in *NRDC v. EPA* compound the consequences of imposing requirements that come due after the redesignation request is submitted. The state submitted its redesignation request on July 5, 2011, but the Court did not issue its decision remanding EPA's 1997 PM<sub>2.5</sub> implementation rule concerning the applicability of the provisions of subpart 4 until January 2013.

To require the state's fully-completed and pending redesignation request to comply now with requirements of subpart 4 that the Court announced only in January 2013, would be to give retroactive effect to such requirements when the state had no notice that it was required to meet them. The D.C. Circuit recognized the inequity of this type of retroactive impact in *Sierra Club v. Whitman*, 285 F.3d 63 (D.C. Cir. 2002),<sup>2</sup> where it

---

<sup>2</sup>*Sierra Club v. Whitman* was discussed and distinguished in a recent D.C. Circuit decision that addressed retroactivity in a quite different context, where, unlike the situation here, EPA sought to give its regulations retroactive effect. *National Petrochemical and Refiners Ass'n v. EPA*. 630

upheld the District Court's ruling refusing to make retroactive EPA's determination that the St. Louis area did not meet its attainment deadline. In that case, petitioners urged the Court to make EPA's nonattainment determination effective as of the date that the statute required, rather than the later date on which EPA actually made the determination. The Court rejected this view, stating that applying it "would likely impose large costs on states, which would face fines and suits for not implementing air pollution prevention plans . . . even though they were not on notice at the time." *Id.* at 68. Similarly, it would be unreasonable to penalize the state of Michigan by rejecting its redesignation request for an area that is already attaining the 1997 PM<sub>2.5</sub> standard and that met all applicable requirements known to be in effect at the time of the request. For EPA now to reject the redesignation request solely because the state did not expressly address subpart 4 requirements of which it had no notice, would inflict the same unfairness condemned by the Court in *Sierra Club v. Whitman*.

**ii. Subpart 4 Requirements and Michigan Redesignation Request**

Even if EPA were to take the view that the Court's January 4, 2013, decision requires that, in the context of

---

F.3d 145, 163 (D.C. Cir. 2010), rehearing denied 643 F.3d 958 (D.C. Cir. 2011), cert denied 132 S. Ct. 571 (2011).

pending redesignations, subpart 4 requirements were due and in effect at the time the state submitted its redesignation request, EPA proposes to determine that the Detroit-Ann Arbor area still qualifies for redesignation to attainment. As explained below, EPA believes that the redesignation request for the Detroit-Ann Arbor area, though not expressed in terms of subpart 4 requirements, substantively meets the requirements of that subpart for purposes of redesignating the area to attainment.

With respect to evaluating the relevant substantive requirements of subpart 4 for purposes of redesignating the Detroit-Ann Arbor area, EPA notes that subpart 4 incorporates components of subpart 1 of part D, which contains general air quality planning requirements for areas designated as nonattainment. See Section 172(c). Subpart 4, itself, contains specific planning and scheduling requirements for PM<sub>10</sub><sup>3</sup> nonattainment areas, and under the Court's January 4, 2013, decision in *NRDC v. EPA*, these same statutory requirements also apply for PM<sub>2.5</sub> nonattainment areas. EPA has longstanding general guidance that interprets the 1990 amendments to the CAA, making recommendations to states for meeting the statutory requirements for SIPs for nonattainment areas. See, "State

---

<sup>3</sup> PM<sub>10</sub> refers to particulates nominally 10 micrometers in diameter or smaller.

Implementation Plans; General Preamble for the Implementation of Title I of the Clear Air Act Amendments of 1990," 57 FR 13498 (April 16, 1992) (the "General Preamble"). In the General Preamble, EPA discussed the relationship of subpart 1 and subpart 4 SIP requirements, and pointed out that subpart 1 requirements were, to an extent, "subsumed by, or integrally related to, the more specific PM-10 requirements." 57 FR 13538 (April 16, 1992). The subpart 1 requirements include, among other things, provisions for attainment demonstrations, RACM, RFP, emissions inventories, and contingency measures.

For the purposes of this redesignation, in order to identify any additional requirements which would apply under subpart 4, we are considering the Detroit-Ann Arbor area to be a "moderate" PM<sub>2.5</sub> nonattainment area. Under section 188 of the CAA, all areas designated nonattainment areas under subpart 4 would initially be classified by operation of law as "moderate" nonattainment areas, and would remain moderate nonattainment areas unless and until EPA reclassifies the area as a "serious" nonattainment area. Accordingly, EPA believes that it is appropriate to limit the evaluation of the potential impact of subpart 4 requirements to those that would be applicable to moderate nonattainment areas. Section 189(a) and (c) of subpart 4 applies to moderate nonattainment areas and includes the

following: (1) an approved permit program for construction of new and modified major stationary sources (section 189(a)(1)(A)); (2) an attainment demonstration (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); and (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date (section 189(c)).

The permit requirements of subpart 4, as contained in section 189(a)(1)(A), refer to and apply the subpart 1 permit provisions requirements of sections 172 and 173 to PM<sub>10</sub>, without adding to them. Consequently, EPA believes that section 189(a)(1)(A) does not itself impose for redesignation purposes any additional requirements for moderate areas beyond those contained in subpart 1.<sup>4</sup> In any event, in the context of redesignation, EPA has long relied on the interpretation that a fully approved nonattainment new source review program is not considered an applicable requirement for redesignation, provided the area can maintain the standard with a PSD program after redesignation. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, "Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment." See also rulemakings for Detroit, Michigan

---

<sup>4</sup> The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.

(60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

With respect to the specific attainment planning requirements under subpart 4,<sup>5</sup> when EPA evaluates a redesignation request under subpart 1 and/or 4, any area that is attaining the PM<sub>2.5</sub> standard is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-linked requirements as not applicable for areas attaining the standard. In the General Preamble, EPA stated that:

The requirements for RFP will not apply in evaluating a request for redesignation to attainment since, at a minimum, the air quality data for the area must show that the area has already attained. Showing that the State will make RFP towards attainment will, therefore, have no meaning at that point.

"General Preamble for the Interpretation of Title I of the CAA Amendments of 1990"; (57 FR 13498, 13564, April 16, 1992).

The General Preamble also explained that

---

<sup>5</sup>I.e., attainment demonstration, RFP, RACM, milestone requirements, contingency measures.

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

*Id.*

EPA similarly stated in its 1992 Calcagni memorandum that, "[t]he requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard."

It is evident that, even if we were to consider the Court's January 4, 2013, decision in *NRDC v. EPA* to mean that attainment-related requirements specific to subpart 4 should be imposed retroactively<sup>6</sup> and thus are now past due, those requirements do not apply to an area that is attaining the 1997 and 2006 PM<sub>2.5</sub> standard, for the purpose of evaluating a pending request to redesignate the area to attainment. EPA has

---

<sup>6</sup> As EPA has explained above, we do not believe that the Court's January 4, 2013 decision should be interpreted so as to impose these requirements on the states retroactively. *Sierra Club v. Whitman, supra.*

consistently enunciated this interpretation of applicable requirements under section 107(d)(3)(E) since the General Preamble was published more than twenty years ago. Courts have recognized the scope of EPA's authority to interpret "applicable requirements" in the redesignation context. *See Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004).

Moreover, even outside the context of redesignations, EPA has viewed the obligation to submit attainment-related SIP planning requirements of subpart 4 as inapplicable for areas that EPA determines are attaining the standard. EPA's prior "Clean Data Policy" rulemakings for the PM<sub>10</sub> NAAQS, also governed by the requirements of subpart 4, explain EPA's reasoning. They describe the effects of a determination of attainment on the attainment-related SIP planning requirements of subpart 4. *See "Determination of Attainment for Coso Junction Nonattainment Area,"* (75 FR 27944, May 19, 2010). *See also Coso Junction proposed PM<sub>10</sub> redesignation,* (75 FR 36023, 36027, June 24, 2010); *Proposed and Final Determinations of Attainment for San Joaquin Nonattainment Area* (71 FR 40952, 40954-55, July 19, 2006; and 71 FR 63641, 63643-47 October 30, 2006). In short, EPA in this context has also long concluded that to require states to meet superfluous SIP planning requirements is not necessary and not

required by the CAA, so long as those areas continue to attain the relevant NAAQS.

Elsewhere in this notice, EPA proposes to determine that the area has attained the 1997 and 2006 PM<sub>2.5</sub> standards. Under its longstanding interpretation, EPA is proposing to determine here that the area meets the attainment-related plan requirements of subparts 1 and 4.

Thus, EPA is proposing to conclude that the requirements to submit an attainment demonstration under 189(a)(1)(B), a RACM determination under sections 172(c)1 and 189(a)(1)(c), a RFP demonstration under section 189(c)(1), and contingency measure requirements under section 172(c)(9) are satisfied for purposes of evaluating the redesignation request.

### **iii. Subpart 4 and Control of PM<sub>2.5</sub> Precursors**

The D.C. Circuit in *NRDC v. EPA* remanded to EPA the two rules at issue in the case with instructions to EPA to re-promulgate them consistent with the requirements of subpart 4. In this section, EPA addresses the Court's opinion with respect to PM<sub>2.5</sub> precursors. While past implementation of subpart 4 for PM<sub>10</sub> has allowed for control of PM<sub>10</sub> precursors, such as NO<sub>x</sub>, from major stationary, mobile, and area sources in order to attain the standard as expeditiously as practicable, CAA section 189(e) specifically provides that control requirements for major

stationary sources of direct PM<sub>10</sub> shall also apply to PM<sub>10</sub> precursors from those sources, except where EPA determines that major stationary sources of such precursors "do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in the area."

EPA's 1997 PM<sub>2.5</sub> implementation rule, remanded by the D.C. Circuit, contained rebuttable presumptions concerning certain PM<sub>2.5</sub> precursors applicable to attainment plans and control measures related to those plans. Specifically, in 40 CFR 51.1002, EPA provided, among other things, that a state was "not required to address VOC [and ammonia] as . . . PM<sub>2.5</sub> attainment plan precursor[s] and to evaluate sources of VOC [and ammonia] emissions in the State for control measures." EPA intended these to be rebuttable presumptions. EPA established these presumptions at the time because of uncertainties regarding the emission inventories for these pollutants and the effectiveness of specific control measures in various regions of the country in reducing PM<sub>2.5</sub> concentrations. EPA also left open the possibility for such regulation of VOC and ammonia in specific areas where that was necessary.

The Court in its January 4, 2013 decision made reference to both section 189(e) and 40 CFR 51. 1002, and stated that, "[i]n light of our disposition, we need not address the petitioners'

challenge to the presumptions in [40 CFR 51.1002] that volatile organic compounds and ammonia are not PM<sub>2.5</sub> precursors, as subpart 4 expressly governs precursor presumptions." *NRDC v. EPA*, at 27, n.10.

Elsewhere in the Court's opinion, however, the Court observed:

[a]mmonia is a precursor to fine particulate matter, making it a precursor to both PM<sub>2.5</sub> and PM<sub>10</sub>. For a PM<sub>10</sub> nonattainment area governed by subpart 4, a precursor is presumptively regulated. See 42 U.S.C. § 7513a(e) [section 189(e)].

*Id.* at 21, n.7. For a number of reasons, EPA believes that its proposed redesignation of the Detroit-Ann Arbor area is consistent with the Court's decision on this aspect of subpart 4. First, while the Court, citing section 189(e), stated that "for a PM<sub>10</sub> area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's 1997 PM<sub>2.5</sub> implementation rule provisions regarding ammonia and VOC as precursors. The Court had no occasion to reach whether and how it was substantively necessary to regulate any specific precursor in a particular PM<sub>2.5</sub> nonattainment area, and did not address what might be

necessary for purposes of acting upon a redesignation request.

However, even if EPA takes the view that the requirements of subpart 4 were deemed applicable at the time the state submitted the redesignation request, and disregards the implementation rule's rebuttable presumptions regarding ammonia and VOC as PM<sub>2.5</sub> precursors (and any similar provisions reflected in the guidance for the 2006 PM<sub>2.5</sub> standard), the regulatory consequence would be to consider the need for regulation of all precursors from any sources in the area to demonstrate attainment and to apply the section 189(e) provisions to major stationary sources of precursors. In the case of Detroit-Ann Arbor, EPA believes that doing so is consistent with proposing redesignation of the area for the 1997 PM<sub>2.5</sub> standard. The Detroit-Ann Arbor area has attained both standards without any specific additional controls of VOC and ammonia emissions from any sources in the area.

Precursors in subpart 4 are specifically regulated under the provisions of section 189(e), which requires, with important exceptions, control requirements for major stationary sources of PM<sub>10</sub> precursors.<sup>7</sup> Under subpart 1 and EPA's prior implementation

---

<sup>7</sup> Under either subpart 1 or subpart 4, for purposes of demonstrating attainment as expeditiously as practicable, a state is required to evaluate all economically and technologically feasible control measures for direct PM

rule, all major stationary sources of PM<sub>2.5</sub> precursors were subject to regulation, with the exception of ammonia and VOC. Thus, we must address here whether additional controls of ammonia and VOC from major stationary sources are required under section 189(e) of subpart 4 in order to redesignate the area for the 1997 PM<sub>2.5</sub> standard. As explained below, we do not believe that any additional controls of ammonia and VOC are required in the context of this redesignation.

In the General Preamble, EPA discusses its approach to implementing section 189(e). See 57 FR 13538-13542. With regard to precursor regulation under section 189(e), the General Preamble explicitly stated that control of VOCs under other Act requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e) (57 FR 13542). EPA in this proposal proposes to determine that Michigan has met the provisions of section 189(e) with respect to ammonia and VOCs as precursors. This proposed supplemental determination is based on our findings that (1) the Detroit-Ann Arbor area contains no major stationary sources of ammonia, and (2) existing major stationary sources of VOC are adequately controlled under other provisions of the CAA regulating the

---

emissions and precursor emissions, and adopt those measures that are deemed reasonably available.

ozone NAAQS.<sup>8</sup> In the alternative, EPA proposes to determine that, under the express exception provisions of section 189(e), and in the context of the redesignation of the area, which is attaining the 1997 annual PM<sub>2.5</sub> standard, at present ammonia and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 1997 PM<sub>2.5</sub> standard in the Detroit-Ann Arbor area. See 57 FR 13539-42.

EPA notes that its 1997 PM<sub>2.5</sub> implementation rule provisions in 40 CFR 51.1002 were not directed at evaluation of PM<sub>2.5</sub> precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 annual PM<sub>2.5</sub> NAAQS. By contrast, redesignation to attainment primarily requires the area to have already attained due to permanent and enforceable emission reductions, and to demonstrate that controls in place can continue to maintain the standard. Thus, even if we regard the Court's January 4, 2013, decision as calling for "presumptive regulation" of ammonia and VOC for PM<sub>2.5</sub> under the attainment planning provisions of subpart 4, those provisions in and of themselves do not require additional controls of these precursors for an area that already qualifies for redesignation.

---

<sup>8</sup>The Detroit-Ann Arbor area has reduced VOC emissions through the implementation of various SIP approved VOC control programs and various on-road and nonroad motor vehicle control programs.

Nor does EPA believe that requiring Michigan to address precursors differently than it has already would result in a substantively different outcome.

Although, as EPA has emphasized, its consideration here of precursor requirements under subpart 4 is in the context of a redesignation to attainment, EPA's existing interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM<sub>10</sub> contemplates that states may develop attainment plans that regulate only those precursors that are necessary for purposes of attainment in the area in question, i.e., states may determine that only certain precursors need be regulated for attainment and control purposes.<sup>9</sup> Courts have upheld this approach to the requirements of subpart 4 for PM<sub>10</sub>.<sup>10</sup> EPA believes that application of this approach to PM<sub>2.5</sub> precursors under subpart 4 is reasonable. Because the Detroit-Ann Arbor area has already attained the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS with its current approach to regulation of PM<sub>2.5</sub> precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that there is no need to revisit the

---

<sup>9</sup>See, e.g., "Approval and Promulgation of Implementation Plans for California - San Joaquin Valley PM-10 Nonattainment Area; Serious Area Plan for Nonattainment of the 24-Hour and Annual PM-10 Standards," 69 FR 30006 (May 26, 2004) (approving a PM10 attainment plan that impose controls on direct PM10 and NO<sub>x</sub> emissions and did not impose controls on SO<sub>2</sub>, VOC, or ammonia emissions).

<sup>10</sup>See, e.g., *Assoc. of Irrigated Residents v. EPA et al.*, 423 F.3d 989 (9<sup>th</sup> Cir. 2005).

attainment control strategy with respect to the treatment of precursors. Even if the Court's decision is construed to impose an obligation to consider additional precursors under subpart 4 in evaluating this redesignation request, it would not affect EPA's approval here of Michigan's request for redesignation of the Detroit-Ann Arbor area. In the context of a redesignation, the area has shown that it has attained both standards. Moreover, the state has shown, and EPA has proposed to determine, that attainment in this area is due to permanent and enforceable emissions reductions on all precursors necessary to provide for continued attainment. It follows logically that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013, decision of the Court as precluding redesignation of the Detroit-Ann Arbor area to attainment for the 1997 PM<sub>2.5</sub> NAAQS at this time.

In sum, even if Michigan were required to address precursors for the Detroit-Ann Arbor area under subpart 4 rather than under subpart 1, as interpreted in EPA's remanded PM<sub>2.5</sub> implementation rule, EPA would still conclude that the area had met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v).

**b. Michigan Has a Fully Approved Applicable SIP under  
Section 110(k) of the CAA**

EPA has found that Michigan has a fully approved SIP under section 110(k) of the CAA for all requirements applicable for purposes of redesignation to attainment for the 1997 annual and 2006 24-hour PM<sub>2.5</sub> standards. EPA may rely on prior SIP approvals in approving a redesignation request (See page 3 of the September 4, 1992, John Calcagni memorandum; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-990 (6th Cir. 1998); *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001)) plus any additional measures it may approve in conjunction with a redesignation action. See 68 FR 25413, 25426 (May 12, 2003). Since the passage of the CAA of 1970, Michigan has adopted and submitted, and EPA has fully approved, provisions addressing various required SIP elements under particulate matter standards. EPA previously approved Michigan's 2005 base year emissions inventory for the Detroit-Ann Arbor area as meeting the requirement of section 172(c)(3) of the CAA for the 1997 annual and 2006 24-hour PM<sub>2.5</sub> standards.

### **c. Nonattainment Requirements**

Under section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements. On April 5, 2008, Michigan submitted a state-wide attainment demonstration for the 1997 annual standard for PM<sub>2.5</sub>, including the Detroit-Ann Arbor area.

However, pursuant to 40 CFR 51.1004(c), EPA's determination that the area has attained the 1997 annual and the 2006 24-hour PM<sub>2.5</sub> standards suspends the requirement to submit certain planning SIPs related to attainment, including attainment demonstration requirements, the Reasonably Available Control Technology (RACT)-RACM requirement of section 172(c)(1) of the CAA, the RFP and attainment demonstration requirements of sections 172(c)(2) and (6) and 182(b)(1) of the CAA, and the requirement for contingency measures of section 172(c)(9) of the CAA. The attainment demonstration requirement for the 2006 24-hour PM<sub>2.5</sub> standard has a deadline of December 14, 2012, and, therefore, this action relieves Michigan of the requirement to submit an attainment demonstration for the 2006 24-hour standard.

As a result, the only remaining requirement under section 172 to be considered is the emissions inventory required under section 172(c)(3). As discussed previously, EPA approved the inventory that Michigan submitted as part of its attainment plan as satisfying this requirement on November 6, 2012 (77 FR 66547). This approval included inventories for all four precursors (SO<sub>2</sub>, NO<sub>x</sub>, VOCs, and ammonia).

No SIP provisions applicable for redesignation of the Detroit-Ann Arbor area are currently disapproved, conditionally approved, or partially approved. Michigan has, to date, a fully

approved SIP for all requirements applicable for purposes of redesignation.

**3. The Improvement in Air Quality Is Due to Permanent and Enforceable Reductions in Emissions Resulting from Implementation of the SIPs and Applicable Federal Air Pollution Control Regulations and Other Permanent and Enforceable Reductions (Section 107(d)(3)(E)(iii))**

EPA believes that Michigan has demonstrated that the observed air quality improvement in the Detroit-Ann Arbor area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIPs, Federal measures, and other state-adopted measures.

In making this demonstration, Michigan has calculated the change in emissions between 2005, one of the years used to designate the area as nonattainment, and 2008, one of the years the Detroit-Ann Arbor area monitored attainment. The reduction in emissions and the corresponding improvement in air quality over this time period can be attributed to a number of regulatory control measures that the Detroit-Ann Arbor area and contributing areas have implemented in recent years.

**a. Permanent and Enforceable Controls Implemented**

The following is a discussion of permanent and enforceable measures that have been implemented in the area:

**i. Federal Emission Control Measures**

Reductions in direct emissions of fine particles and in emissions of fine particle precursors have occurred statewide and in upwind areas as a result of Federal emission control measures, with additional emission reductions expected to occur in the future. Federal emission control measures include the following.

*Tier 2 Emission Standards for Vehicles and Gasoline Sulfur Standards.* These emission control requirements result in lower NO<sub>x</sub> and SO<sub>2</sub> emissions from new cars and light duty trucks, including sport utility vehicles. Emission standards established under EPA's rules became effective between 2004 and 2009. The EPA has estimated that, emissions of NO<sub>x</sub> from new vehicles have decreased by the following percentages: passenger cars (light duty vehicles)-77%; light duty trucks, minivans, and sports utility vehicles-86%; and, larger sports utility vehicles, vans, and heavier trucks-69 to 95%. EPA expects fleet-wide average emissions to decline by similar percentages as new vehicles replace older vehicles. The Tier 2 standards also reduced the sulfur content of gasoline to 30 parts per million (ppm) beginning in January 2006. Most gasoline sold in Michigan prior to January 2006 had a sulfur content of about 500 ppm.

*Heavy-Duty Diesel Engine Rule.* EPA issued this rule in July 2000. This rule, which went into effect in 2004, includes standards limiting the sulfur content of diesel fuel. A second phase, which took effect in 2007, reduced fine particle emissions from heavy-duty highway engines and further reduced the highway diesel fuel sulfur content to 15 ppm. The total program is estimated to have achieved a 90% reduction in direct PM<sub>2.5</sub> emissions and a 95% reduction in NO<sub>x</sub> emissions for new engines using low sulfur diesel, compared to previously existing engines using higher sulfur content diesel. The reduction in fuel sulfur content also yielded an immediate reduction in sulfate particle emissions from all diesel vehicles.

*Nonroad Diesel Rule.* In May 2004, EPA promulgated a new rule for large nonroad diesel engines, such as those used in construction, agriculture, and mining equipment, to be phased in between 2008 and 2014. The rule reduces the sulfur content in nonroad diesel fuel by over 99%. Prior to 2006, nonroad diesel fuel averaged approximately 3,400 ppm sulfur. This rule limited nonroad diesel sulfur content to 500 ppm by 2006, with a further reduction to 15 ppm by 2010. The combined engine and fuel rules will reduce NO<sub>x</sub> and PM emissions from large nonroad diesel engines by over 90%, compared to nonroad engines using higher sulfur content diesel. It is estimated that compliance with

this rule will cut NO<sub>x</sub> emissions from nonroad diesel engines by up to 90%. This rule achieved some emission reductions by 2008 and was fully implemented by 2010. The reduction in fuel sulfur content also yielded an immediate reduction in sulfate particle emissions from all diesel vehicles.

*Nonroad Large Spark-Ignition Engine and Recreational Engine Standards.* In November 2002, EPA promulgated emission standards for groups of previously unregulated nonroad engines. These engines include large spark-ignition engines such as those used in forklifts and airport ground-service equipment; recreational vehicles using spark-ignition engines such as off-highway motorcycles, all-terrain vehicles, and snowmobiles; and recreational marine diesel engines. Emission standards from large spark-ignition engines were implemented in two tiers, with Tier 1 starting in 2004 and Tier 2 in 2007. Recreational vehicle emission standards were phased in between 2006 and 2012. Marine Diesel engine standards were phased in from 2006 through 2009. With full implementation of the entire nonroad spark-ignition engine and recreational engine standards, EPA expects an 80% reduction in NO<sub>x</sub> emissions by 2020. Some of these emission reductions occurred by the 2008-2010 period used to demonstrate attainment, and additional emission reductions will occur during the maintenance period.

**ii. Control Measures in Contributing Areas**

Given the significance of sulfates and nitrates in the Detroit-Ann Arbor area, the area's air quality is strongly affected by regulated emissions from power plants.

*NO<sub>x</sub> SIP Call.* On October 27, 1998 (63 FR 57356), EPA issued a NO<sub>x</sub> SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub>. Affected states were required to comply with Phase I of the SIP Call beginning in 2004, and Phase II beginning in 2007. Emission reductions resulting from regulations developed in response to the NO<sub>x</sub> SIP Call are permanent and enforceable.

*CAIR.* On May 12, 2005, EPA promulgated CAIR, which requires significant reductions in emissions of SO<sub>2</sub> and NO<sub>x</sub> from electric generating units to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. See 76 FR 70093. The Court initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). In response to the court's decision, EPA promulgated CSAPR to address interstate transport of NO<sub>x</sub> and SO<sub>2</sub> in the eastern United States. See 76 FR 48208 (August 8, 2011).

On December 30, 2011, the D.C. Circuit issued an order addressing the status of CSAPR and CAIR in response to motions filed by numerous parties seeking a stay of CSAPR pending judicial review. In that order, the Court stayed CSAPR pending resolution of the petitions for review of that rule. The Court also indicated that EPA was expected to continue to administer CAIR in the interim until judicial review of CSAPR was completed.

On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR. In that decision, it also ordered EPA to continue administering CAIR "pending the promulgation of a valid replacement." *EME Homer City*, 696 F.3d at 38. The D.C. Circuit denied all petitions for rehearing on January 24, 2013. EPA and other parties have filed petitions for certiorari to the U.S. Supreme Court, but those petitions have not been acted on to date.

In light of these unique circumstances and for the reasons explained below, to the extent that attainment is due to emission reductions associated with CAIR, EPA is here proposing to determine that those reductions are sufficiently permanent and enforceable for purposes of CAA sections 107(d)(3)(E)(iii) and 175A. EPA therefore proposes to approve the redesignation request and the related SIP revision for Livingston, Macomb,

Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties in Michigan, including Michigan's plan for maintaining attainment of the PM<sub>2.5</sub> standard in the Detroit-Ann Arbor area.

As directed by the D.C. Circuit, CAIR remains in place and enforceable until substituted by a valid replacement rule. Michigan's SIP revision, which lists CAIR as a control measure, was approved by EPA on December 20, 2007 (72 FR 72256), for the purpose of reducing SO<sub>2</sub> and NO<sub>x</sub> emissions. CAIR was thus in place and getting emission reductions when the Detroit-Ann Arbor began monitoring attainment of the 1997 annual and 2006 24-hour NAAQS. The quality-assured, certified monitoring data used to demonstrate the area's attainment of the 1997 annual PM<sub>2.5</sub> NAAQS by the April 2010 attainment deadline was also impacted by CAIR.

To the extent that the Detroit-Ann Arbor area relies on CAIR to maintain the standards, the recent directive from the D.C. Circuit in *EME Homer City* ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period. EPA has been ordered by the Court to develop a new rule to address interstate transport to replace CSAPR and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. Thus, CAIR will remain in place until EPA has promulgated a

final rule through a notice-and-comment rulemaking process, states have had an opportunity to draft and submit SIPs, EPA has reviewed the SIPs to determine if they can be approved, and EPA has taken action on the SIPs, including promulgating a FIP if appropriate. The Court's clear instruction to EPA that it must continue to administer CAIR until a valid replacement exists provides an additional backstop: by definition, any rule that replaces CAIR and meets the Court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in vacating CSAPR and requiring EPA to continue administering CAIR, the D.C. Circuit emphasized that the consequences of vacating CAIR "might be more severe now in light of the reliance interests accumulated over the intervening four years." *EME Homer City*, 696 F.3d at 38. The accumulated reliance interests include the interests of states that reasonably assumed they could rely on reductions associated with CAIR which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on top of those achieved by CAIR. EPA believes this is precisely

the type of irrational result the Court sought to avoid by ordering EPA to continue administering CAIR. For these reasons, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be addressed.

**iii. Consent decrees and Permanent Shutdowns**

Michigan has also submitted multiple permanent and enforceable measures to address PM<sub>2.5</sub> and precursors at single sources, by retiring credits from permits once an emissions source has shut down. A discussion of single source shutdowns and their emissions are found in the Appendix to Michigan's submission. These single site emission reductions include multiple facility shutdowns, which have resulted in the retirement of permitted emission credits, including the following facilities: Ajax Materials Corporation, Edison Energy Services, Great Lakes Petroleum Terminal, LLC, and M-Lok Incorporated. These facility shutdowns resulted in an estimated reduction of over 100 tpy of NO<sub>x</sub> and over 4 tpy of direct PM<sub>2.5</sub>. Michigan has also attributed emission reductions to various permanent and enforceable controls required at multiple point

source facilities in the Detroit-Ann Arbor area. Controls required on facilities through permanent and Federally enforceable construction permits and consent orders through enforcement actions include: baghouse controls on several blast furnace operations the basic oxygen furnace at Severstal steel mill (permit #182-05B) and baghouse upgrades on blast furnaces at US Steel (Consent Order 1-2005).

**b. Emission Reductions**

Michigan developed an emissions inventory for NO<sub>x</sub>, direct PM<sub>2.5</sub>, and SO<sub>2</sub> for 2005, one of the years used to designate the area as nonattainment, and 2008, one of the years the Detroit-Ann Arbor area monitored attainment of the standard. EPA previously approved the emissions inventory for the 2005 base year on November 6, 2012 (77 FR 66547).

Emissions of SO<sub>2</sub> and NO<sub>x</sub> from electric generating units (EGUs) were derived from EPA's Clean Air Market's acid rain database. These emissions reflect Michigan NO<sub>x</sub> emission budgets resulting from EPA's NO<sub>x</sub> SIP call. All other point source emissions were obtained from Michigan's source facility emissions reporting.

Area source emissions the Detroit-Ann Arbor area for 2005

were taken from periodic emissions inventories.<sup>11</sup> These 2005 area source emission estimates were extrapolated to 2008. Source growth factors were supplied by the Lake Michigan Air Directors Consortium (LADCO).

Nonroad mobile source emissions were extrapolated from nonroad mobile source emissions reported in EPA's 2005 National Emissions Inventory (NEI). Contractors were employed by LADCO to estimate emissions for commercial marine vessels and railroads.

On-road mobile source emissions were calculated using EPA's mobile source emission factor model, MOVES2010a, in conjunction with transportation model results developed by local Metropolitan Planning Organization SEMCOG.

All emissions estimates discussed below were documented in the submittals and appendices to Michigan's redesignation request submittal of July 5, 2011. For these data and additional emissions inventory data, the reader is referred to EPA's digital docket for this rule, <http://www.regulations.gov>, for docket number EPA-R05-OAR-2011-0673, which includes a digital copy of Michigan's submittal.

---

<sup>11</sup> Periodic emission inventories are derived by states every three years and reported to the EPA. These periodic emission inventories are required by the Federal Consolidated Emissions Reporting Rule, codified at 40 CFR Subpart A. EPA revised these and other emission reporting requirements in a final rule published on December 17, 2008, at 73 FR 76539.

Emissions data in tons per year (tpy) for the Detroit-Ann Arbor area are shown in Tables 2, 3, and 4 below.

Table 2. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for NO<sub>x</sub> in the Detroit-Ann Arbor area (tpy).

	2005	2008	Net Change (2005-2008)
Point (EGU)	69,756.71	70,008.00	251.29
Non-EGU	18,684.20	18,817.18	132.98
Area	15,949.67	17,157.57	1,207.90
Nonroad	28,829.50	24,065.61	-4,763.89
Marine, Air, and Rail	7,380.89	6,380.17	-1,000.72
On-road	154,294.00	119,194.00	-35,100.00
Total	294,894.98	255,622.53	-39,272.45

Table 3. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for SO<sub>2</sub> in the Detroit-Ann Arbor area (tpy).

	2005	2008	Net Change (2005-2008)
Point (EGU)	227,751.98	233,870.64	6,118.66
Non-EGU	16,240.13	19,793.49	3,553.36
Area	4,629.99	5,702.94	1,072.95
Nonroad	2,739.34	426.61	-2,312.73
Marine, Air, and Rail	681.42	588.82	-92.60
On-road	3,809.00	1,066.00	-2,743.00
Total	255,851.86	261,448.50	5,596.64

Table 4. Comparison of 2005 emissions from the nonattainment year and 2008 emissions for an attainment year for direct PM<sub>2.5</sub> in the Detroit-Ann Arbor area (tpy).

	2005	2008	Net Change (2005-2008)
Point (EGU)	1,105.51	1,375.31	269.80
Non-EGU	2,454.95	1,605.72	-849.23
Area	5,456.25	5,406.06	-50.19
Nonroad	2,203.67	1,773.31	-430.36
MAR	193.09	165.62	-27.47

On-road	5,323.00	4,360.00	-963.00
Total	16,736.47	14,686.02	-2,050.45

Table 2 and 4 show reductions in both NO<sub>x</sub> and direct PM<sub>2.5</sub> emissions for the Detroit-Ann Arbor area by 39,272.45 tpy for NO<sub>x</sub>, and 2,050.45 tpy for direct PM<sub>2.5</sub> between 2005, a nonattainment year and 2008, an attainment year.

Although Table 3 shows an increase in SO<sub>2</sub> emissions of 5,596.64 tpy, the state submission includes sufficient evidence to show that, even with the increase in SO<sub>2</sub>, the area has reached attainment of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS and will continue to maintain that designation into the future due to multiple actions by the state. The evidence submitted by the state contains modeling, monitoring, and trend analysis. Based on monitoring data, the trend analysis for the area shows a steady decline in PM<sub>2.5</sub> emissions, with a significant drop in concentrations beginning in 2006. Since meteorology can play a large part in dispersion of PM<sub>2.5</sub>, which can greatly affect monitored concentrations, LADCO and the state have normalized the data to remove meteorological effects using a statistical analysis, and the state has shown in its submission that the concentrations observed are due to real reductions in PM<sub>2.5</sub> and its precursors, not just meteorological effects.

The state has also submitted monitored data showing PM<sub>2.5</sub> composition. PM<sub>2.5</sub> can be classified by its chemical composition, allowing the state and EPA to discern what percentage each major precursor contributes to PM<sub>2.5</sub> concentrations in the Detroit-Ann Arbor area. PM<sub>2.5</sub> composition attributed to SO<sub>2</sub> is, on average, 20-30% of total PM<sub>2.5</sub> monitored concentrations, so, although SO<sub>2</sub> emissions have increased, NO<sub>x</sub> and PM<sub>2.5</sub> emissions (which contribute 60-75% of the total PM<sub>2.5</sub> monitored concentrations, and are both significant contributors under EPA guidance) have each been reduced by more than 10%, and PM<sub>2.5</sub> emissions have declined.

Based on the information summarized above, Michigan has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions.

#### **4. Michigan Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA (Section 107(d)(3)(E)(iv))**

In conjunction with Michigan's request to redesignate the Detroit-Ann Arbor nonattainment area to attainment status, Michigan has submitted a SIP revision to provide for maintenance of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS in the area through 2022.

##### **a. What Is Required in a Maintenance Plan?**

Section 175A of the CAA sets forth the required elements of a maintenance plan for areas seeking redesignation from

nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after EPA approves a redesignation to attainment. Eight years after redesignation, the state must submit a revised maintenance plan which demonstrates that attainment will continue to be maintained for ten years following the initial ten year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures with a schedule for implementation as EPA deems necessary to assure prompt correction of any future PM<sub>2.5</sub> violations.

The September 4, 1992, Calcagni memorandum provides additional guidance on the content of a maintenance plan. The memorandum states that a maintenance plan should address the following items: the attainment emissions inventory, a maintenance demonstration showing maintenance for the ten years of the maintenance period, a commitment to maintain the existing monitoring network, factors and procedures to be used for verification of continued attainment of the NAAQS, and a contingency plan to prevent or correct future violations of the NAAQS.

Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the

maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing of maintenance "for a period of ten years following redesignation." Calcagni memorandum, p. 9. Where the emissions inventory method of showing maintenance is used, its purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. Calcagni Memorandum, pp. 9-10.

As discussed in detail in the section below, the state's maintenance plan submission expressly documents that the area's emissions inventories will remain below the attainment year inventories through 2022. In addition, for the reasons set forth below, EPA believes that the state's submission, in conjunction with additional supporting information, further demonstrates that the area will continue to maintain the 1997 annual and 2006 24-hour NAAQS at least through 2023. Thus, any EPA action to finalize its proposed approval of the redesignation request and maintenance plans in 2013, will be based on a showing, in accordance with section 175A, that the state's maintenance plan provides for maintenance for at least ten years after redesignation.

**b. Attainment Inventory**

Michigan developed an emissions inventory for NO<sub>x</sub>, direct

PM<sub>2.5</sub>, and SO<sub>2</sub> for 2008, one of the years in the period during which the Detroit-Ann Arbor area monitored attainment of the 1997 annual PM<sub>2.5</sub> standard, as described previously. The attainment level of emissions is summarized in Tables 2, 3, and 4, above.

**c. Demonstration of Maintenance**

Along with the redesignation request, Michigan submitted a revision to its PM<sub>2.5</sub> SIP to include a maintenance plan for the Detroit-Ann Arbor area, as required by section 175A of the CAA. Michigan's plan demonstrates maintenance of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> standard through 2022 by showing that current and future emissions of NO<sub>x</sub>, directly emitted PM<sub>2.5</sub> and SO<sub>2</sub> in the area remain at or below attainment year emission levels. Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing of maintenance "for a period of ten years following redesignation." Calcagni memorandum, p. 9. Where the emissions inventory method of showing maintenance is used, its purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. Calcagni Memorandum, pp. 9-10.

As discussed in detail in the section below, the state's

maintenance plan submission expressly documents that the area's emissions inventories will remain below the attainment year inventories through 2022. In addition, for the reasons set forth below, EPA believes that the state's submission, in conjunction with additional supporting information, further demonstrates that the area will continue to maintain the PM<sub>2.5</sub> standard at least through 2023. Thus, if EPA finalizes its proposed approval of the redesignation request and maintenance plans in 2013, it will be based on a showing, in accordance with section 175A, that the state's maintenance plan provides for maintenance for at least ten years after redesignation.

Michigan's plan demonstrates maintenance of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS through 2022 by showing that current and future emissions of NO<sub>x</sub>, directly emitted PM<sub>2.5</sub> and SO<sub>2</sub> for the area remain at or below attainment year emission levels.

The rate of decline in emissions of PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub> from the attainment year 2008 through 2022 indicates that emissions inventory levels not only significantly decline between 2008 and 2022, but that the reductions will continue in 2023 and beyond. The average annual rate of decline is 1,367 tpy for SO<sub>2</sub>, 8,495 tpy of NO<sub>x</sub>, and 264 tpy of direct PM. These rates of decline are consistent with monitored and projected air quality trends, emissions reductions achieved through emissions controls and

regulations that will remain in place beyond 2023 and through fleet turnover that will continue beyond 2023, among other factors. We are proposing to find the mobile source contribution to these emissions is expected to remain insignificant in 2023 and beyond because of fleet turnover in upcoming years that will result in cleaner vehicles and cleaner fuels.

A maintenance demonstration need not be based on modeling. See *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), *Sierra Club v. EPA*, 375 F. 3d 537 (7th Cir. 2004). See also 66 FR 53094, 53099-53100 (October 19, 2001), 68 FR 25413, 25430-25432 (May 12, 2003). Michigan uses emissions inventory projections for the years 2018 and 2022 to demonstrate maintenance for the entire Detroit-Ann Arbor area. The projected emissions were estimated by Michigan, with assistance from LADCO and SEMCOG, who used the MOVES2010a model for mobile source projections. Projection modeling of inventory emissions was done for the 2018 interim year emissions using estimates based on the 2009 and 2018 LADCO modeling inventory, using LADCO's growth factors, for all sectors. The 2022 maintenance year emission estimates were based on emissions estimates from the 2018 LADCO modeling. Table 5 shows the 2008 attainment base year emission estimates and the 2018 and 2022 emission projections for the Detroit-Ann

Arbor area, taken from Michigan's July 5, 2011, submission.

Table 5. Comparison of 2008, 2018 and 2022 NO<sub>x</sub>, Direct PM<sub>2.5</sub>, and SO<sub>2</sub> Emission Totals (tpy) for the Detroit-Ann Arbor area.

	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>
2008 (baseline)	261,447.50	255,622.53	14,686.02
2018	231,218.01	146,017.66	11,363.91
2022	242,301.62	136,679.11	10,976.30
Net Change (2008-2022)	-19,145.88 8% decrease	-118,943.42 47% decrease	-3,709.72 26% decrease

Table 5 shows that, for the period between 2008 and the maintenance projection for 2022, the Detroit-Ann Arbor area will reduce NO<sub>x</sub> emissions by 118,943.42 tpy; direct PM<sub>2.5</sub> emissions by 3,709.72 tpy; and SO<sub>2</sub> emissions by 19,145.88 tpy. The 2022 projected emissions levels are significantly below attainment year inventory levels, and, based on the rate of decline, it is highly improbable that any increases in these levels will occur in 2023 and beyond. Thus, the emissions inventories set forth in Table 5 show that the area will continue to maintain the annual and 24-hour PM<sub>2.5</sub> standards during the maintenance period and at least through 2023.

As Table 1 demonstrates, monitored PM<sub>2.5</sub> design value concentrations in Detroit-Ann Arbor are well below the NAAQS in the years beyond 2008, an attainment year for the area. Further, those values are trending downward as time progresses. Based on the future projections of emissions in 2015 and 2022 showing

significant emissions reductions in direct PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub>, it is very unlikely that monitored PM<sub>2.5</sub> values in 2023 and beyond will show violations of the NAAQS. Additionally, the 2009-2011 design values of 11.6 and 32 µg/m<sup>3</sup> (annual and 24-hour, respectively) provide a sufficient margin in the unlikely event emissions rise slightly in the future.

***Maintenance Plan Evaluation of Ammonia and VOCs***

With regard to the redesignation of the Detroit-Ann Arbor area, in evaluating the effect of the Court's remand of EPA's implementation rule, which included presumptions against consideration of VOC and ammonia as PM<sub>2.5</sub> precursors, EPA in this proposal is also considering the impact of the decision on the maintenance plan required under sections 175A and 107(d)(3)(E)(iv). To begin with, EPA notes that the area has attained the 1997 and 2006 PM<sub>2.5</sub> standards and that the state has shown that attainment of those standards is due to permanent and enforceable emission reductions.

EPA proposes to determine that the state's maintenance plan shows continued maintenance of the standards by tracking the levels of the precursors whose control brought about attainment of the 1997 and 2006 PM<sub>2.5</sub> standard in the Detroit-Ann Arbor area. EPA therefore believes that the only additional consideration related to the maintenance plan requirements that results from

the Court's January 4, 2013, decision is that of assessing the potential role of VOC and ammonia in demonstrating continued maintenance in this area. As explained below, based upon documentation provided by the state and supporting information, EPA believes that the maintenance plan for the Detroit-Ann Arbor area need not include any additional emission reductions of VOC or ammonia in order to provide for continued maintenance of the standard.

First, as noted above in EPA's discussion of section 189(e), VOC emission levels in this area have historically been well-controlled under SIP requirements related to ozone and other pollutants. Second, total ammonia emissions throughout the Detroit-Ann Arbor area are very low, estimated to be less than 7,000 tpy. See Table 6 below. This amount of ammonia emissions appears especially small in comparison to the total amounts of SO<sub>2</sub>, NO<sub>x</sub>, and even direct PM<sub>2.5</sub> emissions from sources in the area. Third, as described below, available information shows that no precursor, including VOC and ammonia, is expected to increase over the maintenance period so as to interfere with or undermine the state's maintenance demonstration.

Michigan's maintenance plan shows that emissions of direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> are projected to decrease by 3,709.72 tpy, 19,145.88 tpy, and 118,943.42 tpy, respectively, over the

maintenance period. See Table 5 above. In addition, emissions inventories used in the regulatory impact analysis (RIA) for the 2012 PM<sub>2.5</sub> NAAQS show that VOC and ammonia emissions are projected to decrease by 61,993 tpy and 577 tpy, respectively between 2007 and 2020. See Table 6 below. While the RIA emissions inventories are only projected out to 2020, there is no reason to believe that this downward trend would not continue through 2022. Given that the Detroit-Ann Arbor area is already attaining the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS even with the current level of emissions from sources in the area, the downward trend of emissions inventories would be consistent with continued attainment. Indeed, projected emissions reductions for the precursors that the state is addressing for purposes of the 1997 PM<sub>2.5</sub> NAAQS indicate that the area should continue to attain the NAAQS following the precursor control strategy that the state has already elected to pursue. Even if VOC and ammonia emissions were to increase unexpectedly between 2020 and 2022, the overall emissions reductions projected in direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> would be sufficient to offset any increases. For these reasons, EPA believes that local emissions of all of the potential PM<sub>2.5</sub> precursors will not increase to the extent that they will cause monitored PM<sub>2.5</sub> levels to violate the 1997 or the 2006 PM<sub>2.5</sub> standard during the maintenance period.

**Table 6. Comparison of 2007 and 2020 VOC and Ammonia Emission Totals by Source Sector (tpy) for the Detroit-Ann Arbor Area<sup>12</sup>**

Sector	VOC			Ammonia		
	2007	2020	Net Change 2007-2020	2007	2020	Net Change 2007-2020
<b>Point</b>	15,250	15,324	73	210	566	356
<b>Area</b>	64,265	60,714	-3,552	4,531	4,627	96
<b>Nonroad</b>	25,717	13,823	-11,894	28	35	6
<b>On-road</b>	67,242	20,682	-46,561	2,119	1,104	-1,015
<b>Fires</b>	124	124	0	344	349	6
<b>Total</b>	172,599	110,666	-61,933	6,897	6,341	-557

In addition, available air quality modeling analyses show continued maintenance of the standard during the maintenance period. The current air quality annual and 24-hour design values for the area are 11.6 and 32  $\mu\text{g}/\text{m}^3$  (based on 2009-11 air quality data), which are well below the 1997 annual and 2006 24-hour  $\text{PM}_{2.5}$  NAAQS of 15 and 35  $\mu\text{g}/\text{m}^3$ . Moreover, the modeling analysis conducted for the RIA for the 2012  $\text{PM}_{2.5}$  NAAQS indicates that the design values for this area are expected to continue to decline through 2020. In the RIA analysis, the highest 2020 modeled design value for the Detroit-Ann Arbor area is 11.6  $\mu\text{g}/\text{m}^3$ . Given that precursor emissions are projected to decrease through 2022, it is reasonable to conclude that monitored  $\text{PM}_{2.5}$  levels in this area will also continue to decrease through 2022.

Thus, EPA believes that there is ample justification to conclude that the Detroit-Ann Arbor area should be redesignated,

<sup>12</sup> These emissions estimates were taken from the emissions inventories developed for the RIA for the 2012  $\text{PM}_{2.5}$  NAAQS which can be found in the docket.

even taking into consideration the emissions of other precursors potentially relevant to PM<sub>2.5</sub>. After consideration of the D.C. Circuit's January 4, 2013 decision, and for the reasons set forth in this notice, EPA proposes to approve the state's maintenance plan and its request to redesignate the Detroit-Ann Arbor area to attainment for the PM<sub>2.5</sub> 1997 annual and 2006 24-hour NAAQS.

Based on the information summarized above, Michigan has adequately demonstrated maintenance of both PM<sub>2.5</sub> standards in this area for a period extending in excess of ten years from expected final action on Michigan's redesignation request.

**d. Monitoring Network**

Michigan's maintenance plan includes additional elements. Michigan's plan includes a commitment to continue to operate its EPA-approved monitoring network, as necessary to demonstrate ongoing compliance with the NAAQS. Michigan currently operates 14 PM<sub>2.5</sub> monitors in the Detroit-Ann Arbor Michigan.

**e. Verification of Continued Attainment**

Michigan remains obligated to continue to quality-assure monitoring data and enter all data into the AQS in accordance with Federal guidelines. Michigan will use these data, supplemented with additional information as necessary, to assure that the area continues to attain the standard. Michigan will

also continue to develop and submit periodic emission inventories as required by the Federal Consolidated Emissions Reporting Rule (67 FR 39602, June 10, 2002) to track future levels of emissions. Both of these actions will help to verify continued attainment in accordance with 40 CFR part 58.

**f. Contingency Plan**

The contingency plan provisions are designed to promptly correct or prevent a violation of the NAAQS that might occur after redesignation of an area to attainment. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation of the contingency measures, and a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be adopted and implemented. The maintenance plan must include a requirement that the state will implement all pollution control measures that were contained in the SIP before redesignation of the area to attainment. See section 175A(d) of the CAA.

Michigan's contingency plan defines an Action Level

Response. The Action Level Response will be prompted by standard two-year annual average of  $15 \mu\text{g}/\text{m}^3$  or higher (annual standard) and a two-year 98<sup>th</sup> percentile average monitored value of  $35 \mu\text{g}/\text{m}^3$  or higher (24-hour standard) within the maintenance area. If an Action Level Response is triggered, Michigan will adopt and implement appropriate control measures within 18 months from the end of the year in which monitored air quality triggering a response occurs.

Michigan's candidate contingency measures include the following:

- i. Wood stove change-out program;
- ii. Steel mill controls;
- iii. Coke battery controls;
- iv. Diesel retrofit program;
- v. Reduced idling program;
- vi. ICI boiler controls;
- vii. Food preparation flame broiler control and;
- viii. EGU controls

Michigan further commits to conduct ongoing review of its data, and if monitored concentrations or emissions are trending

upward, Michigan commits to take appropriate steps to avoid a violation if possible. Michigan commits to continue implementing SIP requirements upon and after redesignation. EPA believes that Michigan's contingency measures, as well as the commitment to continue implementing any SIP requirements, satisfy the pertinent requirements of section 175A(d).

As required by section 175A(b) of the CAA, Michigan commits to submit to the EPA an updated PM<sub>2.5</sub> maintenance plan eight years after redesignation of the Detroit-Ann Arbor area to cover an additional ten year period beyond the initial ten year maintenance period. As required by section 175A of the CAA, Michigan has also committed to retain the PM<sub>2.5</sub> control measures contained in the SIP prior to redesignation.

For all of the reasons set forth above, EPA is proposing to approve Michigan's 1997 annual and 2006 24-hour PM<sub>2.5</sub> maintenance plan for the Detroit-Ann Arbor area as meeting the requirements of CAA section 175A.

#### **5. Motor Vehicle Emissions Budget (MVEBs) for the Mobile Source Contribution to PM<sub>2.5</sub> and NO<sub>x</sub>**

##### **a. How Are MVEBs Developed and What Are the MVEBs for the Detroit-Ann Arbor Area?**

Under the CAA, states are required to submit, at various times, control strategy SIP revisions and maintenance plans for

PM<sub>2.5</sub> nonattainment areas and for areas seeking redesignation to attainment of the PM<sub>2.5</sub> standards. These emission control strategy SIP revisions (e.g., RFP and attainment demonstration SIP revisions) and maintenance plans create MVEBs based on on-road mobile source emissions for criteria pollutants and/or their precursors to address pollution from on-road transportation sources. The MVEBs are the portions of the total allowable emissions that are allocated to highway and transit vehicle use that, together with emissions from other sources in the area, will provide for attainment, RFP, or maintenance, as applicable.

Under 40 CFR part 93, a MVEB for an area seeking a redesignation to attainment is established for the last year of the maintenance plan and could also be established for an interim year or years. The MVEB serves as a ceiling on emissions from an area's planned transportation system. The MVEB concept is further explained in the preamble to the November 24, 1993, transportation conformity rule (58 FR 62188).

Under section 176(c) of the CAA, new transportation plans and transportation improvement programs (TIPs) must be evaluated to determine if they conform to the purpose of the area's SIP. Conformity to the SIP means that transportation activities will not cause new air quality violations, worsen existing air

quality violations, or delay timely attainment of the NAAQS or any required interim milestone. If a transportation plan or TIP does not conform, most new transportation projects that would expand the capacity of roadways cannot go forward. Regulations at 40 CFR part 93 set forth EPA policy, criteria, and procedures for demonstrating and assuring conformity of such transportation activities to a SIP.

When reviewing SIP revisions containing MVEBs, including attainment strategies, rate-of-progress plans, and maintenance plans, EPA must affirmatively find adequate and/or approve the MVEBs for use in determining transportation conformity before the MVEBs can be used. Once EPA affirmatively approves and/or finds the submitted MVEBs to be adequate for transportation conformity purposes, the MVEBs must be used by state and Federal agencies in determining whether proposed transportation plans and TIPs conform to the SIP as required by section 176(c) of the CAA. EPA's substantive criteria for determining the adequacy of MVEBs are set out in 40 CFR 93.118(e)(4). Additionally, to approve a motor vehicle emissions budget EPA must complete a thorough review of the SIP, in this case the PM<sub>2.5</sub> maintenance plans, and conclude that the SIP will achieve its overall purpose, in this case providing for maintenance of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> standards in the Detroit-Ann Arbor

area.

The maintenance plans submitted by Michigan for the area contains new primary PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs for the area for the year 2022. Michigan calculated the MVEBs using MOVES2010(a). After approval of the MVEBs becomes effective, the budgets will have to be used in future conformity determinations and regional emissions analyses prepared by the SEMCOG, and will have to be based on the use of MOVES2010a or the most recent version of MOVES required to be used in transportation conformity determinations.<sup>13</sup> The state has determined the 2022 MVEBs for the Detroit-Ann Arbor area to be 4,360 tpy for primary PM<sub>2.5</sub> and 119,194 tpy for NO<sub>x</sub>. The budget for the Detroit-Ann Arbor area is equal to the mobile source emissions calculated for the attainment year of 2008. Michigan has decided to include "safety margins" as provided for in 40 CFR 93.124(a) (described below) of 3,049 tpy for primary PM<sub>2.5</sub> and 91,183 tpy for NO<sub>x</sub> in the 2022 MVEBs, respectively, to provide for on-road mobile source growth. Michigan did not provide emission budgets for SO<sub>2</sub>, VOCs, and ammonia because it concluded, consistent with EPA's presumptions regarding these precursors, that emissions of these precursors from on-road motor vehicles are not significant

---

<sup>13</sup> EPA described the circumstances under which an area would be required to use MOVES in transportation conformity determinations in its March 2, 2010, Federal Register notice officially releasing MOVES2010 for use in SIPs and transportation conformity determinations. (75 FR 9413)

contributors to the area's PM<sub>2.5</sub> air quality problem.

In the Detroit-Ann Arbor area, the motor vehicle budgets including the safety margins and motor vehicle emission projections for both NO<sub>x</sub> and PM<sub>2.5</sub> are equal to the levels in the attainment year.

EPA has reviewed the submitted budgets for 2022 including the added safety margins using the conformity rule's adequacy criteria found at 40 CFR 93.118(e)(4) and the conformity rule's requirements for safety margins found at 40 CFR 93.124(a). EPA has also completed a thorough review of the maintenance plan for the Detroit-Ann Arbor area. Based on the results of this review of the budgets and the maintenance plans, EPA is approving the 2022 direct PM<sub>2.5</sub> and NO<sub>x</sub> budgets, including the requested safety margins for the Detroit-Ann Arbor area. Additionally, EPA, through this rulemaking, has found the submitted budgets to be adequate for use to determine transportation conformity in the Detroit-Ann Arbor area, because EPA has determined that the area can maintain the 1997 annual PM<sub>2.5</sub> NAAQS for the relevant maintenance period with on-road mobile source emissions at the levels of the MVEBs including the requested safety margins. These budgets must be used in conformity determinations made on or after the effective date of the final rulemaking (40 CFR 93.118(f)(iii)). Additionally, transportation conformity

determinations made after the effective date of this notice must be based on regional emissions analyses using MOVES2010a or a more recent version of MOVES that has been approved for use in conformity determinations.<sup>14</sup>

**b. What Is a Safety Margin?**

A "safety margin" is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. As shown in Table 5, overall emissions in the Detroit-Ann Arbor area are projected to decline by 118,943.42 tpy and 3,709.72 tpy for NO<sub>x</sub> and PM<sub>2.5</sub> in 2022, respectively, which is greater than the MVEB safety margin of 91,183 tpy for NO<sub>x</sub> and 3,049 for primary PM<sub>2.5</sub>.

The transportation conformity rule allows areas to allocate all or a portion of a "safety margin" to the area's motor vehicle emissions budgets (40 CFR 92.124(a)). The MVEBs requested by Michigan contain NO<sub>x</sub> and PM<sub>2.5</sub> safety margins for mobile sources in 2022, which are much smaller than the allowable safety margins reflected in the total emissions for the Detroit-Ann Arbor area. The state is not requesting allocation to the MVEBs of the entire available safety margins reflected in the demonstration of maintenance. Therefore, even

---

<sup>14</sup> EPA described the circumstances under which an area would be required to use MOVES in transportation conformity determinations in its March 2, 2010 Federal Register notice officially releasing MOVES2010 for use in SIPs and transportation conformity determinations. (75 FR 9413)

though the state is requesting MVEBs that exceed the projected on-road mobile source emissions for 2022 contained in the demonstration of maintenance, the increase in on-road mobile source emissions that can be considered for transportation conformity purposes is within the safety margins of the overall PM<sub>2.5</sub> maintenance demonstration. As discussed above, EPA is proposing that if this approval is finalized in 2013, the area will continue to maintain the 1997 annual and 2006 24-hour NAAQS through at least 2023. Consistent with this proposal, EPA is proposing to approve the motor vehicle emissions budgets submitted by the state in its July 5, 2011, maintenance plan for the Detroit-Ann Arbor area. EPA is proposing that the submitted budgets are consistent with maintenance of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS through 2023, specifically because the area is using the attainment year emissions as the MVEB for the future, which would remain the same into 2023.

Therefore, EPA believes that the requested budgets, including the requested portion of the safety margins, provide for a quantity of mobile source emissions that would be expected to maintain the PM<sub>2.5</sub> standard. Once allocated to mobile sources, these portions of the safety margins will not be available for use by other sources.

**c. What Action is EPA Taking on the Submitted Motor Vehicle**

**Emissions Budgets?**

EPA, through this rulemaking, is proposing to find adequate and is approving the MVEBs for use to determine transportation conformity in the Detroit-Ann Arbor area, because EPA has determined that the area can maintain attainment of the 1997 annual and 2006 24-hour PM<sub>2.5</sub> NAAQS for the relevant maintenance period with mobile source emissions at the levels of the MVEBs including the requested safety margins. (40 CFR 93.118(f)(iii))

**6. 2005 Comprehensive Emissions Inventory**

As discussed above, section 172(c)(3) of the CAA requires areas to submit a comprehensive emissions inventory including direct PM and all four precursors (SO<sub>2</sub>, NO<sub>x</sub>, VOCs, and ammonia). EPA approved the Michigan 2005 base year emissions inventory on November 6, 2012 (77 FR 66547), fulfilling this requirement. Emissions contained in the submittals cover the general source categories of point sources, area sources, on-road mobile sources, and nonroad mobile sources.

Based upon EPA's previous action, the 2005 emissions inventory was complete and accurate, and met the requirement of CAA section 172(c)(3).

**7. Summary of Proposed Actions.**

EPA is proposing to determine that the Detroit-Ann Arbor area is attaining and will continue to attain the 1997 annual

and 2006 24-hour  $PM_{2.5}$  standards. EPA is proposing to approve Michigan's  $PM_{2.5}$  maintenance plan for the Detroit-Ann Arbor area as a revision to the Michigan SIP because the plan meets the requirements of section 175A of the CAA. EPA is further proposing that the Detroit-Ann Arbor area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. Therefore, EPA is proposing to grant the request from Michigan to change the legal designation of the Detroit-Ann Arbor area from nonattainment to attainment for the 1997 annual and 2006 24-hour  $PM_{2.5}$  NAAQS. Finally, for transportation conformity purposes EPA is also proposing to approve Michigan's MVEBs for the Detroit-Ann Arbor area.

#### **VI. What Are the Effects of EPA's Proposed Actions?**

If finalized, approval of the redesignation request would change the official designation of the Michigan portion of the Detroit-Ann Arbor area for the 1997 annual and 2006 24-hour  $PM_{2.5}$  NAAQS, found at 40 CFR part 81, from nonattainment to attainment. If finalized, EPA's proposal would approve as a revision to the Michigan SIP for the Detroit-Ann Arbor area, the maintenance plan for the 1997 annual and 2006 24-hour  $PM_{2.5}$  standard.

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

Under the CAA, redesignation of an area to attainment and

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

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

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

permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

**List of Subjects**

**40 CFR Part 52**

Environmental protection, Air pollution control,  
Incorporation by reference, Intergovernmental relations,  
Particulate matter.

**40 CFR Part 81**

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

Date: June 19, 2013

Susan Hedman,  
Regional Administrator, Region 5.

[FR Doc. 2013-15887 Filed 07/01/2013 at 8:45 am; Publication  
Date: 07/02/2013]