6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R05-OAR-2011-0868; EPA-R05-OAR-2012-0463; FRL-9837-8]

Approval and Promulgation of Air Quality Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Ohio; Redesignation of Cleveland-Akron-Lorain Area to Attainment of the 1997 Annual Standard and 2006 24-Hour Standard for Fine Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve the State of Ohio's requests to redesignate the Cleveland-Akron-Lorain area (Cleveland Area) to attainment for the 1997 annual and 2006 24-hour National Ambient Air Quality Standards (NAAQS or standards) for fine particulate matter ($PM_{2.5}$). EPA's proposed approval involves several additional related actions. EPA is proposing to determine that the Cleveland area has attained the 1997 annual and 2006 24-hour $PM_{2.5}$ standards. EPA is proposing to approve, as revisions to the Ohio state implementation plan (SIP), the state's plans for maintaining the 1997 annual and 2006 24-hour $PM_{2.5}$ standards in the area. EPA is proposing to approve the ammonia, Volatile Organic Compound (VOC), nitrogen oxide (NO_X), direct $PM_{2.5,}$ and sulfur dioxide (SO_2) emission inventories submitted by the State as meeting the comprehensive

emissions inventory requirement of the Clean Air Act (CAA). Finally, EPA finds adequate and is proposing to approve Ohio's NO_X and direct $PM_{2.5}$ Motor Vehicle Emission Budgets (MVEBs) for 2015 and 2022 for the Cleveland area. In the course of proposing to approve Ohio's request to redesignate the Cleveland area, EPA addresses a number of additional issues, including the effects of two decisions of the United States Court of Appeals for the District of Columbia (D.C. Circuit or Court): the Court's August 21, 2012, decision to vacate and remand to EPA the Cross-State Air Pollution Rule (CSAPR) and the Court's January 4, 2013, decision to remand to EPA two final rules implementing the 1997 $PM_{2.5}$ standard.

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 Nos. EPA-R05-OAR-2011-0868 and EPA-R05-OAR-2012-0463, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.
2. E-mail: Aburano.Douglas@epa.gov.
3. Fax: (312) 408-2279.
4. Mail: Doug Aburano, Chief, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), U.S.

Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

5. Hand delivery: Doug Aburano, Chief, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, 18th floor, 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 Nos. EPA-R05-OAR-2011-0868 and EPA-R05-OAR-2012-0463. 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, 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 or e-mail. The 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, 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 this document, "What Should I Consider as I Prepare My Comments for EPA?"

Docket: All documents in the docket are listed in the 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 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 Kathleen D'Agostino, Environmental Engineer, at (312) 886-1767 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Kathleen D'Agostino, Environmental Engineer, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-1767, dagostino.kathleen@epa.gov.

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

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 - 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 Is the Background for the Proposal?

Fine particulate pollution can be emitted directly from a source (primary $PM_{2.5}$) 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_2 emissions from power plants and industrial facilities. Nitrates, another common type of secondary particulate, are formed from combustion emissions of NO_X from power plants, mobile sources and other combustion sources.

The first air quality standards for $PM_{2.5}$ were promulgated on July 18, 1997, at 62 FR 38652. EPA promulgated an annual standard at a level of 15 micrograms per cubic meter ($\mu g/m^3$) of ambient air, based on a three year average of annual mean $PM_{2.5}$ concentrations at each monitoring site. In the same rulemaking,

EPA promulgated a 24-hour $PM_{2.5}$ standard at 65 $\mu g/m^3$, based on a three year average of the 98^{th} percentile of 24-hour $PM_{2.5}$ concentrations at each monitoring site.

On January 5, 2005, at 70 FR 944, EPA published air quality area designations for the 1997 annual $PM_{2.5}$ standard based on air quality data for calendar years 2001-2003. In that rulemaking, EPA designated the Cleveland area as nonattainment for the 1997 $PM_{2.5}$ air quality standards (70 FR 995). EPA defined the Cleveland nonattainment area to include Cuyahoga, Lake, Lorain, Medina, Portage, and Summit Counties and Ashtabula Township in Ashtabula County.

On October 17, 2006, at 71 FR 61144, EPA retained the annual $PM_{2.5}$ standard at 15 $\mu g/m^3$ (2006 annual $PM_{2.5}$ standard), but revised the 24-hour standard to 35 $\mu g/m^3$, based again on the three year average of the 98^{th} percentile of 24-hour $PM_{2.5}$ concentrations at each monitor.

On November 13, 2009, at 74 FR 58688, EPA published air quality area designations for the 2006 24-hour $PM_{2.5}$ standard. In that rulemaking, EPA designated the Cleveland area as nonattainment for the 2006 24-hour $PM_{2.5}$ standard and defined the area to include Cuyahoga, Lake, Lorain, Medina, Portage, and Summit Counties. The Ashtabula Township in Ashtabula County was not included as part of the 2006 24-hour $PM_{2.5}$ Cleveland

nonattainment area. Ashtabula County was designated as unclassifiable/attainment.

In response to legal challenges of the 2006 annual $PM_{2.5}$ standard, the D.C. Circuit 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). On December 14, 2012, EPA finalized a rule revising the $PM_{2.5}$ annual standard to 12 $\mu g/m^3$ based on current scientific evidence regarding the protection of public health. EPA is not addressing the 2012 annual $PM_{2.5}$ standard in this proposal.

On September 14, 2011, at 76 FR 56641, EPA issued a final determination that the Cleveland area attained the 1997 annual $PM_{2.5}$ standard by the applicable attainment date of April 5, 2010, based on certified ambient monitoring data for the 2007-2009 monitoring period.

On October 5, 2011, the Ohio Environmental Protection Agency (Ohio EPA) submitted a request to EPA to redesignate the Cleveland area to attainment for the 1997 annual $PM_{2.5}$ NAAQS, and to approve the SIP revision containing an emissions inventory, maintenance plan and MVEBs for the area. On May 30, 2012, Ohio EPA submitted a similar request for the 2006 24-hour $PM_{2.5}$ standard. In a supplemental submission to EPA on April 30, 2013, Ohio provided ammonia and VOC emissions inventories *to*

supplement the comprehensive emissions inventories submitted as part of the redesignation requests.

In this proposed redesignation, EPA takes into account two recent decisions of the D.C. Circuit. In the first of the two Court decisions, the D.C. Circuit, on August 21, 2012, issued *EME Homer City Generation, L.P.* v. *EPA,* 696 F.3d 7 (D.C. Cir. 2012), which vacated and remanded 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, 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 ($PM_{2.5}$)" final rule (73 FR 28321, May 16, 2008). 706 F.3d 428 (D.C. Cir. 2013).

III. 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 redesignation provided that: (1) the Administrator determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the 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 reductions in emissions resulting from the implementation of the applicable SIP, Federal emission control regulations, and 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.

IV. What Is EPA's Analysis of the State's Request?

A. Attainment Determination and Redesignation

As noted above, on September 14, 2011, EPA determined that the Cleveland area had attained the 1997 annual $PM_{2.5}$ standard by the applicable attainment date. EPA is proposing to determine that the Cleveland area continues to attain the 1997 annual standard and is attaining 2006 24-hour $PM_{2.5}$ standard with certified 2010-2012 monitoring data. EPA is also proposing to approve Ohio's maintenance plans for the area and to determine that the area has met all other applicable redesignation criteria under CAA section 107(d)(3)(E). The basis for EPA's proposed approval of the redesignation requests is as follows:

1. The Area Has Attained the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. (Section 107(d)(3)(E)(i))

In this action EPA is proposing to determine that the Cleveland area continues to attain the 1997 annual $PM_{2.5}$ NAAQS. An area may be considered to be attaining the 1997 annual $PM_{2.5}$ NAAQS if there are no violations, as determined in accordance with 40 CFR 50.7 and part 50, appendix N, based on three complete consecutive calendar years of quality-assured air quality monitoring data. To attain this standard, the three year average of annual means must not exceed 15.0 $\mu g/m^3$ at all relevant monitoring sites in the subject area. Under 40 CFR part 50, appendix N 4.1, a year of $PM_{2.5}$ data meets completeness requirements when at least 75 percent of the scheduled sampling days for each quarter have valid data.

The redesignation request includes monitoring data for the 2008-2010 time period. Certified monitoring data are also now available for the 2009-2011 and 2010-2012 time periods. Table 1, below, provides a summary of the $PM_{2.5}$ annual air quality monitoring data for the years 2008-2012. Table 2, below, provides the three year average of annual means for the 2008-2010, 2009-2011 and 2010-2012 time periods.

Table 1. Annual Mean $PM_{2.5}$ Concentrations for the Cleveland Area ($\mu g/m^3$)

County	Monitor	Yearly Annual Mean				
		2008	2009	2010	2011	2012
Cuyahoga	39-035-0034	10.9	10.2	10.9	10.0	9.3
	39-035-0038	14.1	12.8	14.0	12.6	12.3
	39-035-0045	13.7	11.8	13.3	11.9	11.4
	39-035-0060	14.1	12.3	13.7	12.5	12.8
	39-035-0065	14.6	12.4	13.2	12.6	12.3
	39-035-1002	12.0	10.9	11.3	10.4	9.7
Lake	39-085-0007		10.4	10.4	9.4	9.0
	39-085-3002	11.5				
Lorain	39-093-3002	11.4	9.9	10.4	9.4	9.5
Medina	39-103-0003	11.8	10.8	10.8		
	39-103-0004				11.0	9.3
Portage	39-133-0002	12.1	11.1	11.2	10.5	9.3
Summit	39-153-0017	13.8	12.6	13.4	11.8	10.8
	39-153-0023	12.9	11.4	12.5	11.1	10.0

Table 2. Three year Average of the Annual Mean $PM_{2.5}$ Concentrations for the Cleveland Area ($\mu g/m^3$)

County	Monitor	2008-2010	2009-2011	2010-2012
Cuyahoga	39-035-0034	10.7	10.4	10.1
	39-035-0038	13.6	13.1	13.0
	39-035-0045	12.9	12.3	12.2
	39-035-0060	13.4	12.8	13.0
	39-035-0065	13.4	12.7	12.7
	39-035-1002	11.4	10.9	10.5
Lake	39-085-0007	10.8	10.1	9.6
	39-085-3002			
Lorain	39-093-3002	10.6	9.9	9.7
Medina	39-103-0003	11.1		
	39-103-0004			
Portage	39-133-0002	11.5	10.9	10.3
Summit	39-153-0017	13.3	12.6	12.0
	39-153-0023	12.3	11.7	11.2

Two monitors were operated in Lake County during the 2008-2012 time period. Site 39-085-3002 shut down on December 31,

2008 and site 39-085-0007 began operating on January 1, 2009. EPA approved the combination of these monitors for purposes of calculating the design value.

The data in Tables 1 and 2 show that all relevant $PM_{2.5}$ monitors in the Cleveland $PM_{2.5}$ nonattainment area have recorded $PM_{2.5}$ concentrations attaining the 1997 annual $PM_{2.5}$ standard during the 2008-2010, 2009-2011, and 2010-2012 time periods. On September 14, 2011, EPA determined that the Cleveland area had attained the 1997 annual $PM_{2.5}$ standard by the applicable attainment date.

Site 39-103-0003 in Medina County ceased operation on December 31, 2010, collecting complete data for all quarters in 2008-2010. Site 39-103-0004 began operation on September 1 2009. However, because the site only began submitting data to EPA's Air Quality System in 2011, three years of data are not available for evaluation. Because the monitor in Medina County has historically recorded one of the lowest $PM_{2.5}$ concentrations in the area, we are confident that EPA can rely on the other monitors in the area to determine that the area continues to attain the standard for the 2010-2012 time period. Therefore, based on complete, quality assured and certified $PM_{2.5}$ monitoring data for the most recent, 2010-2012, time period, EPA concludes that the Cleveland area continues to attain the 1997 annual $PM_{2.5}$ standard.

In this action EPA is proposing to determine that the Cleveland area has attained the 2006 24-hour $PM_{2.5}$ NAAQS based on complete quality assured, certified data for the 2010-2012 monitoring period. An area may be considered to be attaining the 2006 24-hour $PM_{2.5}$ NAAQS if there are no violations, as determined in accordance with 40 CFR 50.13 and part 50, appendix N, based on three complete consecutive calendar years of quality-assured air quality monitoring data. To attain this standard, the three year average of the 98^{th} percentile 24-hour concentration must not exceed 35 $\mu g/m^3$ at all relevant monitoring sites in the subject area. Under 40 CFR part 50, appendix N 4.1, a year of $PM_{2.5}$ data meets completeness requirements when at least 75 percent of the scheduled sampling days for each quarter have valid data.

The redesignation request includes monitoring data for the 2008-2010 time period. Certified monitoring data are also now available for the 2009-2011 and 2010-2012 time periods. Table 3, below, provides a summary of the $PM_{2.5}$ 24-hour air quality monitoring data for the years 2008-2012. Table 4, below, provides the three year average of 98^{th} percentile 24-hour concentrations for the 2008-2010, 2009-2011 and 2010-2012 time periods.

Table 3. 98th Percentile 24-hour $PM_{2.5}$ Concentrations for the Cleveland Area (µg/m^3)

County	Monitor	98th Percentile 24-hour Concentrations				
		2008	2009	2010	2011	2012
Cuyahoga	39-035-0034	31.5	24.7	26.8	22.6	19.5
	39-035-0038	39.4	29.9	30.5	29.7	28.8
	39-035-0045	35.3	23.5	32.7	25.2	24.5
	39-035-0060	36.9	28.9	30.9	26.5	33.5
	39-035-0065	33.8	28.9	27.3	27.0	23.3
	39-035-1002	30.1	20.5	26.5	23.9	19.9
Lake	39-085-0007		19.8	26.9	23.3	19.4
	39-085-3002	28.0				
Lorain	39-093-3002	32.1	21.5	24.4	23.1	22.0
Medina	39-103-0003	30.3	25.7	28.8		
	39-103-0004				25.0	19.1
Portage	39-133-0002	29.4	23.8	31.9	23.2	18.2
Summit	39-153-0017	37.6	29.2	32.7	26.4	20.3
	39-153-0023	32.7	24.8	30.2	24.8	19.8

Table 4. Three year Average of the 98th Percentile 24-hour $PM_{2.5}$ Concentrations for the Cleveland Area (µg/m^3)

County	Monitor	2008-2010	2009-2011	2010-2012
Cuyahoga	39-035-0034	28	25	23
	39-035-0038	33	30	29
	39-035-0045	31	27	27
	39-035-0060	32	29	30
	39-035-0065	30	28	26
	39-035-1002	26	24	23
Lake	39-085-0007	25	23	23
	39-085-3002			
Lorain	39-093-3002	26	23	23
Medina	39-103-0003	28		
	39-103-0004			
Portage	39-133-0002	28	26	24
Summit	39-153-0017	33	29	26
	39-153-0023	29	27	25

The data in Tables 3 and 4 show all relevant $PM_{2.5}$ monitors in the Cleveland $PM_{2.5}$ nonattainment area have recorded $PM_{2.5}$

concentrations attaining the 2006 24-hour $PM_{2.5}$ NAAQS during the 2008-2010, 2009-2011, and 2010-2012 time periods. As with the annual standard, EPA combined data from two monitors in Lake County as Ohio requested. Both of these sites collected complete monitoring data during the quarters the monitors were operated.

As noted previously, two monitors were also operated in Medina County during the 2008-2012 time period. Site 39-103-0003 ceased operation on December 31, 2010, collecting complete data for all quarters in 2008-2010. Site 39-103-0004 began operation on September 1 2009, began submitting data to EPA's Air Quality System in 2011, and does not have three years of data available for evaluation. Because the monitor in Medina County has historically recorded one of the lowest $PM_{2.5}$ concentrations in the area, we are confident that EPA can rely on the other monitors in the area to determine that the area is attaining the standard for the 2010-2012 time period.

Data for monitoring site 39-035-0060 are incomplete in 2009. However, data for the other sites in Cuyahoga County are complete and well below the 24-hour standard, with the highest 98^{th} percentile 24-hour concentration being 29.9 $\mu g/m^3$ at site 39-035-0038, the historical design value site. In addition, complete, quality-assured and certified $PM_{2.5}$ monitoring data at site 39-035-0060 for the most recent, 2010-2012, time period,

show attainment of the 2006 24-hour $PM_{2.5}$ standard. Therefore, based on complete, quality-assured and certified $PM_{2.5}$ monitoring data for the most recent, 2010-2012, time period, EPA concludes that the Cleveland area is attaining the 2006 24-hour $PM_{2.5}$ standard.

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

We have determined that Ohio's SIP meets all applicable SIP requirements for purposes of redesignation for the Cleveland area under section 110 of the CAA (general SIP requirements) and 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, with the exception of the emissions inventory under section 172(c)(3), we have approved all applicable requirements of the Ohio SIP for purposes of redesignation, in accordance with section 107(d)(3)(E)(ii). As discussed below, in this action EPA is proposing to approve Ohio's 2005 and 2008 emissions inventories as meeting the section 172(c)(3) comprehensive emissions inventory requirement.

In making these determinations, we have ascertained which SIP requirements are applicable to the area for purposes of

redesignation, and have determined that there are SIP measures meeting those requirements and that they are fully approved under section 110(k) of the CAA.

a. The Cleveland Area Has Met All Applicable Requirements for Purposes of Redesignation 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: (1) include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; (2) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor ambient air quality; (3) 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; (4) include provisions for the implementation of part C, Prevention of Significant Deterioration (PSD) and part D, New Source Review (NSR) permit programs; (5) include criteria for stationary source emission control measures, monitoring, and reporting; (6) include provisions for air quality modeling; and, (7) 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 holds 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 conclude that these requirements should not be construed to be applicable requirements for purposes of redesignation.

Further, we conclude 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. This approach is consistent with EPA's existing policy on applicability of conformity and oxygenated fuels requirements for redesignation

purposes, as well as with section 184 ozone transport requirements. 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 Ohio 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 Ohio's SIP addressing section 110 requirements, including provisions addressing particulate matter, at 40 CFR 52.1870. On December 5, 2007, and September 4, 2009, Ohio made submittals addressing "infrastructure SIP" elements required by section 110(a)(2) of the CAA. EPA approved elements of Ohio's submittals on July 13, 2011, at 76 FR 41075. The requirements of section 110(a)(2), however, are statewide requirements that are not linked to the $PM_{2.5}$ nonattainment status of the Cleveland area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of the state's $PM_{2.5}$ redesignation

requests.

ii. Part D Requirements

EPA is proposing to determine that, upon approval of the base year emissions inventories discussed in section IV.B. of this rulemaking, the Ohio SIP will meet the applicable SIP requirements for the Cleveland 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. Subpart 4 of part D, found in sections 185-190 of the CAA, provides more specific requirements for particulate matter nonattainment areas.

(1) Subpart 1

(a) Section 172 Requirements

For purposes of evaluating these redesignation requests, the applicable section 172 SIP requirements for the Cleveland 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 Measures (RACM) as expeditiously as practicable and to provide for attainment of the primary NAAQS.

EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures 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 attainment has been reached, no additional measures are needed 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. See 40 CFR 51.1004(c).

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 this redesignation because the Cleveland area is monitoring attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. *Id.* The requirement to submit the section 172(c)(9) contingency measures is similarly not applicable for purposes of this redesignation. *Id.*

Section 172(c)(3) requires submission and approval of a comprehensive, accurate, and current inventory of actual emissions. Ohio submitted 2005 and 2008 emissions inventories along with their redesignation request and supplemented the inventories on April 30, 2013. As discussed below in section IV.B., EPA is proposing to approve the 2005 and 2008 emission inventories as meeting the section 172(c)(3) emissions inventory

requirement for the Cleveland area.

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 Ohio's current NSR program on January 10, 2003 (68 FR 1366). 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." Ohio has demonstrated that the Cleveland 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 Cleveland 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 find that the Ohio SIP meets the section 110(a)(2) requirements applicable 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).

Section 176(c) of the CAA was amended by provisions contained in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005 (Public Law 109-59). Among the changes Congress made to this section of the CAA

were streamlined requirements for state transportation conformity SIPs. State transportation conformity regulations must be consistent with Federal conformity regulations and address three specific requirements related to consultation, enforcement and enforceability. EPA believes that it is reasonable to interpret the transportation conformity SIP requirements as not applying for purposes of evaluating the redesignation request under section 107(d) for two reasons.

First, the requirement to submit SIP revisions to comply with the transportation conformity provisions of the CAA continues to apply to areas after redesignation to attainment since such areas would be subject to a section 175A maintenance plan. Second, EPA's Federal conformity rules require the performance of conformity analyses in the absence of Federally-approved state rules. Therefore, because areas are subject to the transportation conformity requirements regardless of whether they are redesignated to attainment and, because they must implement conformity under Federal rules if state rules are not yet approved, EPA believes it is reasonable to view these requirements as not applying for purposes of evaluating a redesignation request. *See Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), upholding this interpretation. *See* also 60 FR 62748, 62749-62750 (Dec. 7, 1995) (Tampa, Florida).

EPA approved Ohio's general conformity SIP on March 11,

1996 (61 FR 9646) and Ohio's transportation conformity SIP on and May 30, 2000 (65 FR 34395), and April 27, 2007 (72 FR 20945). Ohio is in the process of updating its approved transportation conformity SIP, and EPA will review its provisions when they are submitted.

Ohio has submitted onroad MVEBs for the Cleveland area of 1,371.35 tons per year (tpy) and 880.89 tpy primary $PM_{2.5}$ and 35,094.70 tpy and 17,263.65 tpy NO_X for the years 2015 and 2022, respectively. The area must use the MVEBs from the maintenance plan in any conformity determination that is made on or after the effective date of the adequacy finding and maintenance plan approval.

(2) Effect of the January 4, 2013, D.C. Circuit Decision Regarding $PM_{2.5}$ 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 ($PM_{2.5}$)" final rule (73 FR 28321, May 16, 2008) (collectively, "1997 $PM_{2.5}$ Implementation Rule"). 706 F.3d 428 (D.C. Cir. 2013). The Court found that EPA erred in implementing the 1997 $PM_{2.5}$ 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 $PM_{2.5}$ standard, EPA is taking into account the Court's position on subpart 4 and the 1997 $PM_{2.5}$ 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 Cleveland 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 first explains its longstanding interpretation 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, EPA then shows that, even if EPA applies the subpart 4 requirements to the Cleveland redesignation requests and disregards the provisions of its 1997 $PM_{2.5}$ implementation rule recently remanded by the Court, the state's requests for redesignation of this area still qualify for approval. EPA's discussion takes into account the effect of the Court's ruling

on the area's maintenance plans, which EPA views as approvable when subpart 4 requirements are considered.

(i) Applicable Requirements for Purposes of Evaluating the Redesignation Requests

With respect to the 1997 $PM_{2.5}$ Implementation Rule, the Court's January 4, 2013, ruling rejected EPA's reasons for implementing the $PM_{2.5}$ 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 $PM_{2.5}$ NAAQS under subpart 4 of part D of the CAA, in addition to subpart 1. For the purposes of evaluating Ohio's redesignation requests 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 Cleveland redesignation. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean, as a threshold matter, 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) National Ambient Air Quality Standards (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").[1] In this case, at the time that Ohio submitted its redesignation requests, requirements under subpart 4 were not due, and indeed, were not yet known to apply.

[1] 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.

EPA's view that, for purposes of evaluating the Cleveland redesignation, the subpart 4 requirements were not due at the time the state submitted the redesignation requests 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 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 to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request, in order to be redesignated, 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 requests are submitted. The state submitted its redesignation requests on October 5, 2011, and May 30, 2012, but the Court did not issue its decision remanding EPA's 1997

$PM_{2.5}$ implementation rule concerning the applicability of the provisions of subpart 4 until January 2013.

To require the state's fully-completed and pending redesignation requests to comply now with requirements of subpart 4 that the Court announced only in its January, 2013, decision on the 1997 PM2.5 implementation rule, 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),[2] where it 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

[2]*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 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).

would be unreasonable to penalize the state of Ohio by rejecting its redesignation requests for an area that is already attaining the 1997 and 2006 $PM_{2.5}$ standards and that met all applicable requirements known to be in effect at the time of the requests. For EPA now to reject the redesignation requests 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 Ohio's Redesignation Requests

Even if EPA were to take the view that the Court's January 4, 2013, decision requires that, in the context of pending redesignations for the 1997 and 2006 $PM_{2.5}$ standards, subpart 4 requirements were due and in effect at the time the state submitted its redesignation requests, EPA proposes to determine that the Cleveland area still qualifies for redesignation to attainment. As explained below, EPA believes that the redesignation request for the Cleveland 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 Cleveland 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_{10}[3] nonattainment areas, and under the Court's January 4, 2013, decision in *NRDC v. EPA*, these same statutory requirements also apply for $PM_{2.5}$ 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 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, reasonably available control measures (RACM), RFP, emissions inventories, and contingency measures.

For the purposes of this redesignation, in order to

[3] PM_{10} refers to particulates nominally 10 micrometers in diameter or smaller.

identify any additional requirements which would apply under subpart 4, we are considering the Cleveland area to be a "moderate" $PM_{2.5}$ 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. Sections 189(a) and (c) of subpart 4 apply to moderate nonattainment areas and include 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_{10}, 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.[4] 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 (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,[5] when EPA evaluates a redesignation request under either subpart 1 and/or 4, any area that is attaining the $PM_{2.5}$ standard is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-

[4] The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.

[5] I.e., attainment demonstration, RFP, RACM, milestone requirements, contingency measures.

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 Clean Air Act Amendments of 1990"; (57 FR 13498, 13564, April 16, 1992).

The General Preamble also explained that

> [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, "The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations

because they only have meaning for areas not attaining the standard."

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[6] and thus are now past due, those requirements do not apply to an area that is attaining the 1997 and 2006 $PM_{2.5}$ standards, for the purpose of evaluating a pending request to redesignate the area to attainment. EPA has 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 obligations 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_{10} NAAQS, also governed by the requirements of subpart 4, explain EPA's reasoning. They

[6] 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.*

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_{10} 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 2006 $PM_{2.5}$ standard and continues to attain the 1997 $PM_{2.5}$ standard. 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 section 172(c)(1) and section 189(a)(1)(c), a RFP demonstration under 189(c)(1), and contingency measure requirements under section 172(c)(9) are satisfied for purposes of evaluating the redesignation requests.

(iii) Subpart 4 and Control of $PM_{2.5}$ 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. EPA in this section addresses the Court's opinion with respect to $PM_{2.5}$ precursors. While past implementation of subpart 4 for PM_{10} has allowed for control of PM_{10} precursors such as NO_X 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_{10} shall also apply to PM_{10} precursors from those sources, except where EPA determines that major stationary sources of such precursors "do not contribute significantly to PM_{10} levels which exceed the standard in the area."

EPA's 1997 $PM_{2.5}$ implementation rule, remanded by the D.C. Circuit, contained rebuttable presumptions concerning certain $PM_{2.5}$ 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 . . . $PM_{2.5}$ 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 $PM_{2.5}$ 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, "In 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 $PM_{2.5}$ 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:

> Ammonia is a precursor to fine particulate matter, making it a precursor to both $PM_{2.5}$ and PM_{10}. For a PM_{10} 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 Cleveland 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_{10} area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's 1997 $PM_{2.5}$ 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 $PM_{2.5}$ 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 requests, and disregards the implementation rule's rebuttable presumptions regarding ammonia and VOC as $PM_{2.5}$ precursors (and any similar provisions reflected in the guidance for the 2006 PM2.5 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 the Cleveland area EPA believes that doing so is consistent with proposing redesignation of the area for the 1997 and 2006 $PM_{2.5}$ standards. The Cleveland area has attained the 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_{10} precursors.[7] Under subpart 1 and EPA's prior implementation rule, all major stationary sources of $PM_{2.5}$ 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 $PM_{2.5}$ 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 CAA requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e). 57 FR 13542.

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

EPA in this proposal proposes to determine that the SIP has met the provisions of section 189(e) with respect to ammonia and VOCs as precursors. This proposed determination is based on our findings that (1) the Cleveland 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 ozone NAAQS.[8] 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 $PM_{2.5}$ standard and the 2006 24-hour standard, at present ammonia and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 1997 $PM_{2.5}$ standard in the Cleveland area. *See* 57 FR 13539-42.

EPA notes that its 1997 $PM_{2.5}$ implementation rule provisions in 40 CFR 51.1002 were not directed at evaluation of $PM_{2.5}$ precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 $PM_{2.5}$ NAAQS. By contrast, redesignation to attainment primarily requires the area to have already attained due to permanent and enforceable emission reductions, and to

[8]The Cleveland area has reduced VOC emissions through the implementation of various control programs including VOC Reasonably Available Control Technology regulations and various onroad and nonroad motor vehicle control programs.

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 $PM_{2.5}$ 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. Nor does EPA believe that requiring Ohio to address precursors differently than they have 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_{10} 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.[9] Courts have upheld this

[9] *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_X emissions and did not impose controls on SO_2, VOC, or ammonia emissions).

approach to the requirements of subpart 4 for PM_{10}.[10] EPA believes that application of this approach to $PM_{2.5}$ precursors under subpart 4 is reasonable. Because the Cleveland area has already attained the 1997 $PM_{2.5}$ NAAQS with its current approach to regulation of $PM_{2.5}$ precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that there is no need to revisit the attainment control strategy with respect to the treatment of precursors. Even if the Court's decision is construed to impose an obligation, in evaluating these redesignation requests, to consider additional precursors under subpart 4, it would not affect EPA's approval here of Ohio's requests for redesignation of the Cleveland area. In the context of a redesignation, the area has shown that it has attained the standard. 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 Cleveland area to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS at this time.

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[10] *See, e.g., Assoc. of Irritated Residents v. EPA et al.*, 423 F.3d 989 (9th Cir. 2005).

In sum, even if Ohio were required to address precursors for the Cleveland area under subpart 4 rather than under subpart 1, as interpreted in EPA's remanded $PM_{2.5}$ 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).

(iv) Maintenance Plan and Evaluation of Precursors

A discussion of the impact of the Court's decision on the maintenance plan required under sections 175A and 107(d)(3)(E)(iv) can be found in section IV.A.4.d. below.

b. The Cleveland Area Has a Fully Approved Applicable SIP under Section 110(k) of the CAA

Upon final approval of Ohio's comprehensive 2005 and 2008 emissions inventories, EPA will have fully approved the Ohio SIP for the Cleveland area under section 110(k) of the CAA for all requirements applicable for purposes of redesignation. EPA may rely on prior SIP approvals in approving a redesignation request (See page 3 of the 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, Ohio has adopted and submitted, and EPA has fully approved, provisions addressing

various required SIP elements under particulate matter standards. In this action, EPA is proposing to approve Ohio's 2005 and 2008 emissions inventories for the Cleveland area as meeting the requirement of section 172(c)(3) of the CAA. No Cleveland area SIP provisions are currently disapproved, conditionally approved, or partially approved.

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

EPA finds that Ohio has demonstrated that the observed air quality improvement in the Cleveland area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, Federal measures, and other state-adopted measures.

In making this showing, Ohio EPA has calculated the change in emissions between 2005, one of the years in the period during which the Cleveland area monitored nonattainment, and 2008, one of the years in the period during which the Cleveland 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 Cleveland area and upwind 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. Consent Decrees

Some of the emissions reductions resulting from the consent decrees occurred during the attainment period, while other reductions will aid in maintenance of the standards.

A March 18, 2005, consent decree with Ohio Edison Company required the Eastlake Power Plant, located in Eastlake, Ohio, to reduce NO_X emissions by 11,000 tpy beginning in 2007. Beginning in September 2011, the Eastlake plant was only be used for emergency power purposes. The facility is now scheduled to completely shut down in 2015.

A December 9, 2005, consent decree required Saint Gobain Performance Plastics Corporation to pay, in addition to a civil penalty, $12,000 to Ohio EPA's Clean Diesel School Bus Program Fund.

A September 30, 2011, consent agreement and final order requires Potters Industries, Inc. to retrofit a fleet, fleets, or portion thereof, of diesel buses or diesel vehicles contracted for public use, located within 50 miles of Cleveland. Potters Industries is required to spend a minimum of $50,000 and complete the project by May 18, 2012.

A May 11, 2012, consent order and final judgement between Ohio and Procex, Ltd. requires several actions by Procex, including implementing the following no later than November 30, 2012: (1) an air pollution capture system for the collection of particulate emissions from emissions units P003, P005, and P007, and associated operations; (2) ductwork and an exhaust fan to transfer the collected emissions from the air pollution capture system for all four emissions units to air pollution control equipment; and, (3) air pollution control equipment that meets a total hourly particulate emissions limit of 1.65 pounds/hour. Procex is also required to contribute $2,000 to Ohio EPA's Clean Diesel School Bus Program Fund by April 30, 2014.

A September 28, 2012, consent agreement and final order order with Charter Manufacturing Company, Inc. requires the following which had already been completed by Charter Manufacturing: (1) by August 2010, modification of the existing canopy area to better contain and evacuate emissions; (2) by June 1, 2012, submission to EPA of a protocol to performance test the melt shop baghouse; (3) by July 1, 2012, performance testing of the melt shop baghouse; and, (4) by August 15, 2012, submission to EPA of a report of the performance testing results. In addition, Charter Manufacturing is required to: (1) submit an application to Ohio EPA requesting the conditions and emission rates associated with stainless steel production be

removed from title V and other air permits; (2) comply with the melt shop baghouse pressure drop operational and monitoring requirements specified in the administrative consent order; and, (3) keep the door at the west end of the melt shop closed, except for times when a scrap car needs to enter or exit the melt shop.

ii. Federal Emission Control Measures

Reductions in fine particle precursor emissions 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 VOC, NO_X, and SO_2 emissions from new cars and light duty trucks. The Federal rules were phased in between 2004 and 2009. The EPA has estimated that, by the time post-2009 vehicles have entirely replaced pre-2009 vehicles, the following vehicle NO_X emission reductions will have occurred nationwide: passenger cars (light duty vehicles) (77 percent); light duty trucks, minivans, and sports utility vehicles (86 percent); and, larger sports utility vehicles, vans, and heavier trucks (69 to 95 percent). Some of the emissions reductions resulting from new vehicle standards occurred during the 2008-2010 attainment period; however

additional reductions will continue to occur throughout the maintenance period 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. Gasoline sold in the region including Ohio prior to implementation of the Tier 2 sulfur content limits had an average sulfur content of 276 ppm[11].

Heavy-Duty Diesel Engine Rule. This rule, which EPA issued in July 2000, limited the sulfur content of diesel fuel beginning in 2004. A second phase took effect in 2007 which 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 achieve a 90 percent reduction in primary $PM_{2.5}$ emissions and a 95 percent reduction in NO_X emissions for these new engines using low sulfur diesel, compared to existing engines using higher sulfur content diesel. The reductions in fuel sulfur content occurred by the 2008-2010 attainment period. Some of the emissions reductions resulting from new vehicle standards occurred during the 2008-2010 attainment period, however additional reductions will continue to occur throughout the maintenance period as the fleet of older

[11] See Regulatory Impact Analysis - Control of Air Pollution from New Motor Vehicles: Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements, December 1999, EPA420-R-99-023, p. IV-42.

heavy duty diesel engines turns over. 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, which established engine emission standards to be phased in between 2008 and 2014. The rule also required reductions to the sulfur content in nonroad diesel fuel by over 99 percent. 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_X and PM emissions from large nonroad diesel engines by over 90 percent, compared to current nonroad engines using higher sulfur content diesel. The reduction in fuel sulfur content yielded an immediate reduction in sulfate particle emissions from all diesel vehicles. In addition, some emissions reductions from the new engine emission standards were realized over the 2008-2010 time period, although most of the reductions will occur over the maintenance period as the fleet of older nonroad diesel engines turns over.

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 are being phased in from 2006 through 2012. Marine Diesel engine standards were phased in from 2006 through 2009. With full implementation of all of the nonroad spark-ignition engine and recreational engine standards, an overall 72 percent reduction in VOC, 80 percent reduction in NO_X and 56 percent reduction in carbon monoxide (CO) emissions are expected by 2020. Some of these emission reductions occurred by the 2008-2010 attainment period and additional emission reductions will occur during the maintenance period as the fleet turns over.

iii. Control Measures implemented in Ohio and in Upwind Areas

Given the significance of sulfates and nitrates in the Cleveland area, the area's air quality is strongly affected by regulation of SO_2 and NO_X emissions from power plants.

NO_X SIP Call. On October 27, 1998 (63 FR 57356), EPA issued

a NO_X SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO_X. 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_X SIP Call are permanent and enforceable.

CAIR and CSAPR. EPA promulgated CSAPR (76 FR 48208, August 8, 2011), to replace CAIR, which has been in place since 2005. *See* 76 FR 59517. CAIR requires significant reductions in emissions of SO_2 and NO_X 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 D.C. Circuit 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).

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 in *EME Homer City Generation, L.P.* v. *EPA* (No. 11-1302 and consolidated cases). 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 filed petitions for certiorari to the U.S. Supreme Court. On June 24, 2013, the Supreme Court granted certiorari and agreed to review the D.C. Circuit's decision in EME Homer City. The Supreme Court's grant of certiorari, by itself, does not alter the status of CAIR or CSAPR. At this time, CAIR remains in place.

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 requests and the related SIP revisions for the Cleveland area, including Ohio's plan for maintaining attainment of the $PM_{2.5}$ standard.

As directed by the D.C. Circuit, CAIR remains in place and enforceable until substituted by a valid replacement rule. Ohio

submitted a CAIR SIP which was approved by EPA on February 1, 2008 (73 FR 6034). On July 15, 2009 Ohio submitted revisions to its CAIR SIP, which EPA approved on September 25, 2009 (74 FR 48857). In its redesignation requests, Ohio notes that in 2008 and 2009 facilities began preparing for and implementing control programs to address CAIR and consent decrees. Thus, it is likely that some of the emissions reductions that lead to monitored attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards in the Cleveland area were due to sources beginning to comply with CAIR requirements. The quality-assured, certified monitoring data used to demonstrate the area's attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS by the attainment deadline was also impacted by CAIR.

To the extent that Ohio is relying on CAIR in its maintenance plan, the 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 who 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 also, 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.

b. Emission Reductions

Ohio developed annual emissions inventories for NO_X, primary $PM_{2.5}$, and SO_2 for 2005, one of the years the Cleveland area monitored nonattainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards, and 2008, one of the years the area monitored attainment of the standards.

The emission inventories submitted by Ohio EPA were developed with the assistance of the Lake Michigan Air Directors Consortium (LADCO). The main purpose of LADCO is to provide technical assessments for and assistance to its member states on problems of air quality. LADCO's primary geographic focus is the area encompassed by its member states (Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin) and any areas which affect air quality in its member states.

The 2005 nonattainment inventory was developed as described below. Point source emissions for 2005 were compiled by Ohio EPA using source specific data reported by facilities through the state's STARShip database program. The data are reported by facilities annually and include emissions, process rates,

operating schedules, emissions control data and other relevant information. Ohio EPA quality assured the database files and submitted the data to LADCO for emissions processing through the Emissions Modeling System (EMS). LADCO used the Electric Generating Unit (EGU) inventory compiled by EPA's Acid Rain Program, based on facility reported emissions as measured by continuous emissions monitors.

Area source sector emissions were calculated using surrogate emissions factors based on energy usage, population, employment records, or other reliable data. Ohio EPA used Emission Inventory improvement Program methodologies or selected other methodologies which are shared by other states. The decision of which methodology to use was largely based on Ohio's data availability.

Nonroad source sector emissions estimates were generated using EPA's National Mobile Inventory Model (NMIM), with the following modifications: emission factors were added for diesel tampers/rammers; the $PM_{2.5}$ ratios in the SCC table were revised to correctly calculate $PM_{2.5}$ diesel emissions; and, gasoline parameters, including Reid Vapor Pressure (RVP), Oxygenate content and sulfur content, were revised using updates provided by the state and E.H. Pechan and Associates. Marine, aircraft and rail nonroad emissions were calculated separately. Contractors were employed by LADCO to estimate emissions for

commercial marine vessels and railroads. Ohio developed aircraft emissions estimates using AP-42 emission factors and landing and take-off data provided by the Federal Aviation Administration.

Onroad mobile source emissions estimates were developed using the EPA's MOVES2010 model.

The 2008 attainment year inventory was developed as follows. Point source emissions for 2008 were compiled from Ohio's STARShip database. Onroad emissions projections were based on EPA's MOVES2010 model. Area and nonroad emissions were grown from the 2005 inventory using LADCO's growth factors.

NO_X, primary $PM_{2.5}$, and SO_2 emissions data are shown in Table 5 below.

Table 5. Comparison of 2005 and 2008 NO_X, primary $PM_{2.5}$, and SO_2 Emission Totals by Source Sector in Tons per Year (tpy)

	2005			2008			Net Change 2005-2008		
Sector	$PM_{2.5}$	NO_X	SO_2	$PM_{2.5}$	NO_X	SO_2	$PM_{2.5}$	NO_X	SO_2
Point	1,916	29,699	147,256	2,003	29,280	111,991	87	-419	-35,265
Area	2,380	10,419	954	2,433	10,527	945	53	108	-9
Nonroad	1,888	29,286	3,154	1,656	26,148	1,828	-233	-3,138	-1,326
Onroad	3,022	86,522	1,854	2,556	69,731	556	-466	-16,791	-1,299
Total	9,206	155,927	153,218	8,648	135,687	115,319	-558	-20,240	-37,899

Table 5 shows that the Cleveland area reduced primary $PM_{2.5}$, NO_X, and SO_2 emissions by 558 tpy, 20,240 tpy, and 37,899 tpy, respectively, between 2005 and 2008. Based on the information summarized above, Ohio has adequately demonstrated that the improvement in air quality is due to permanent and enforceable

emissions reductions.

On April 30, 2013, Ohio submitted supplemental information regarding emissions of VOC and ammonia. This information is reviewed below. However, EPA believes that the improvement in air quality is attributable to the $PM_{2.5}$, NO_x, and SO_2 emission reductions described above and is not significantly affected by any changes in VOC or ammonia emissions.

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

In conjunction with Ohio's requests to redesignate the Cleveland nonattainment area to attainment status, Ohio EPA submitted SIP revisions to provide for maintenance of the 1997 annual and 2006 24-hour $PM_{2.5}$ 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 $PM_{2.5}$ violations.

The September 4, 1992, John 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 inventories, 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.

b. Attainment Inventory

The Ohio EPA developed annual emissions inventories for NO_X, direct $PM_{2.5}$, and SO_2 for 2008, one of the years the area monitored attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standard, as described in section IV.A.3.b.. The use of an annual inventory is appropriate for both the annual and 24-hour standard because 24-hour exceedances occur in all four quarters. The attainment level of emissions is summarized in Table 5, above.

c. Demonstration of Maintenance

Along with the redesignation requests, Ohio EPA submitted

revisions to the Ohio $PM_{2.5}$ SIP to include maintenance plans for the Cleveland area, as required by section 175A of the CAA. 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, Ohio's maintenance plan submissions expressly document 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 submissions, in conjunction with additional supporting information, further demonstrate that the area will continue to maintain the $PM_{2.5}$ standard at least through 2023. Thus, if EPA finalizes its proposed approval of the redesignation requests and maintenance plans in 2013, it is based on a showing, in accordance with section 175A, that the state's maintenance plans provide for maintenance for at least ten years after redesignation.

Ohio's plans demonstrate maintenance of the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS through 2022 by showing that current and future emissions of NO_X, directly emitted $PM_{2.5}$ and SO_2 for the area remain at or below attainment year emission levels. 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). As discussed below, a comparison of current and future emissions inventories for VOC and ammonia show significant reductions in VOC emissions and relatively constant emissions of ammonia, which further support a finding that the area will continue to maintain the standard.

For NO_x, directly emitted $PM_{2.5}$, and SO_2, Ohio is using emissions inventory projections for the years 2015 and 2022 to demonstrate maintenance. The projected emissions were estimated by Ohio EPA, with assistance from LADCO, The Ohio Department of Transportation (ODOT) and the Northeast Ohio Areawide Coordinating Agency (NOACA).

LADCO has developed growth and control files for point, area and nonroad categories. These files were used along with LADCO's 2009 and 2018 emission inventories to develop the 2015 and 2022 emissions estimates. NOACA and ODOT developed onroad emissions projections using the MOVES model.

As discussed in section IV.3.a. above, many of the control programs that helped to bring the area into attainment of the standard will continue to achieve additional emission reductions over the maintenance period. These control programs include Tier 2 emission standards for vehicles and gasoline sulfur standards, the heavy-duty diesel engine rule, the nonroad diesel rule, and the nonroad large spark-ignition engine and recreation engine standards. In addition, implementation of CAIR was assumed in the projections. Emissions data for all sources by source sector are shown in Tables 6 through 8, below.

Table 6. Comparison of 2008, 2015, and 2022 NO_X Emission Totals by Source Sector (tpy) for the Cleveland Area

Sector	2008	2015	Net Change 2008-2015	2022	Net Change 2008-2022
Point	29,280	26,285	-2,995	24,921	-4,359
Area	10,527	10,612	84	10,705	178
Nonroad	26,148	17,479	-8,669	9,156	-16,992
Onroad	69,731	30,517	-39,214	15,012	-54,719
Total	135,687	84,892	-50,795	59,794	-75,893

Table 7. Comparison of 2008, 2015, and 2022 Direct $PM_{2.5}$ Emission Totals by Source Sector (tpy) for the Cleveland Area

	2008	2015	Net Change 2008-2015	2022	Net Change 2008-2022
Point	2,003	2,111	108	2,242	239
Area	2,433	2,421	-12	2,417	-16
Nonroad	1,656	1,187	-469	711	-944
Onroad	2,556	1,192	-1,364	766	-1,790
Total	8,648	6,911	-1,737	6,136	-2,512

Table 8. Comparison of 2008, 2015, and 2022 SO_2 Emission Totals by Source Sector (tpy) for the Cleveland Area

Sector	2008	2015	Net Change 2008-2015	2022	Net Change 2008-2022
Point	111,991	85,877	-26,114	57,024	-54,967
Area	945	916	-28	888	-56

Nonroad	1,828	887	-940	409	-1,419
Onroad	556	185	-371	164	-392
Total	115,319	87,866	-27,453	58,486	-56,834

Tables 6-8 show that emissions of NO_X, direct $PM_{2.5}$, and SO_2 are projected to decrease by 50,795 tpy, 1,737 tpy, and 27,453 tpy, respectively, between 2008 and 2015. In addition, Tables 6-8 show that emissions of NO_X, direct $PM_{2.5}$, and SO_2 are projected to decrease by 75,893 tpy, 2,512 tpy, and 56,834 tpy, respectively, between 2008 and 2022.

The rate of decline in emissions of $PM_{2.5}$, NO_x, and SO_2 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 7,256 tpy for NO_X, 179 tpy for direct $PM_{2.5}$, and 4,060 tpy for SO_2. 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. Furthermore, fleet turnover in onroad and nonroad vehicles that will continue to occur after 2022 will continue to provide additional significant emission reductions.

In addition, as Tables 2 and 4 demonstrate, monitored $PM_{2.5}$ design value concentrations in the Cleveland area 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 $PM_{2.5}$, NO_x, and SO_2, it is very unlikely that monitored $PM_{2.5}$ values in 2023 and beyond will show violations of the NAAQS. Additionally, the 2010-2012 design values of 13.0 and 30 $\mu g/m^3$ (for the annual and the 24-hour standards, respectively) provide a sufficient margin in the unlikely event emissions rise slightly in the future.

Based on the information summarized above, Ohio has adequately demonstrated maintenance of the $PM_{2.5}$ standard for a period extending ten years from the date that EPA may be expected to complete rulemaking on the state's redesignation request.

d. Maintenance Plan and Evaluation of Precursors

After evaluating the effect of the Court's remand of EPA's implementation rule, a rule that included presumptions against consideration of VOC and ammonia as $PM_{2.5}$ precursors, EPA in this proposal is also considering the impact of the decision on the maintenance plans required under sections 175A and 107(d)(3)(E)(iv). To begin with, EPA notes that the area has attained the 1997 annual and 2006 24-hour $PM_{2.5}$ standards and that the state has shown that attainment of that standard is due to permanent and enforceable emission reductions.

Based on its review of Ohio's maintenance plan and related information, EPA believes that the primary influences on future air quality in the Cleveland area will be emissions of NO_x, directly emitted $PM_{2.5}$, and SO_2. EPA therefore proposes to determine that the state's maintenance plans show continued maintenance of the standards by tracking the levels of the pollutants whose control brought about attainment of the $PM_{2.5}$ standards in the Cleveland area. Nevertheless, pursuant to the Court's January 4, 2013, decision, EPA is further assessing the potential role of VOC and ammonia in achieving continued maintenance in this area. As explained below, based upon documentation provided by the state and supporting information, EPA believes that the prospective trends in emissions of VOC and ammonia are consistent with a finding of continued maintenance of the standards in the Cleveland area.

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 Cleveland area are relatively low, estimated to be less than 13,200 tons per year. *See* Table 9 below. This amount of ammonia emissions is small in comparison to the total amounts of SO_2, NO_X, and even direct $PM_{2.5}$ emissions from sources in the area. Third, as described below, NO_X, SO_2, direct $PM_{2.5}$ and VOC

emissions are expected to decrease over the maintenance period, and ammonia emissions are projected to increase only slightly. Thus, future emissions levels are not expected to interfere with or undermine the state's maintenance demonstrations.

Ohio's maintenance plans show that emissions of NO_X, direct $PM_{2.5}$, and SO_2 are projected to decrease by 75,893 tpy, 2,512 tpy, and 56,834 tpy, respectively, over the maintenance period. *See* Tables 6-8 above. In addition, emissions inventories used in the regulatory impact analysis (RIA) for the 2012 $PM_{2.5}$ NAAQS show that VOC emissions are projected to decrease by 32,376 tpy, with ammonia emissions increasing by only 93 tpy. While the RIA emissions inventories are only projected out to 2020, there is no reason to believe that these trends would not continue through 2023.

Given that the Cleveland area is already attaining the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS, even with the current level of emissions from sources in the area, the overall downward trend in emissions would be consistent with continued attainment. Indeed, projected emissions reductions for the precursors that the state is addressing for purposes of the $PM_{2.5}$ 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 2025, the overall

emissions reductions projected in direct $PM_{2.5}$, SO_2, and NO_X would be sufficient to offset any increases. For these reasons, EPA believes that local emissions of all of the potential $PM_{2.5}$ precursors will not increase to the extent that they will cause monitored $PM_{2.5}$ levels to violate the 1997 annual or 2006 24-hour $PM_{2.5}$ standards during the maintenance period.

Table 9: Comparison of 2007 and 2020 VOC and Ammonia Emission Totals by Source Sector (tpy) for the Cleveland Area[12]

	VOC			Ammonia		
Sector	2007	2020	Net Change 2007-2020	2007	2020	Net Change 2007-2020
Point	7,205	7,122	-83	31	165	134
Area	35,944	36,222	278	11,803	12,336	533
Nonroad	28,017	13,362	-14,655	23	25	3
Onroad	29,558	11,642	-17,917	1,234	657	-576
Total	100,724	68,348	-32,376	13,090	13,184	93

In addition, available air quality modeling analyses show continued maintenance of the 1997 annual standard during the maintenance period. Based on 2010-2012 air quality data, the current design values for the area is 13.0 $\mu g/m^3$, which is well below the 1997 annual $PM_{2.5}$ NAAQS of 15 $\mu g/ m^3$. Moreover, the modeling analysis conducted for the RIA for the 2012 $PM_{2.5}$ NAAQS indicates that the annual design value for this area is expected to continue to decline through 2020. In the RIA analysis, the 2020 modeled annual design value for the Cleveland area is

[12] These emissions estimates were taken from the emissions inventories developed for the RIA for the 2012 $PM_{2.5}$ NAAQS.

10.7 µg/m^3. Given that overall precursor emissions are projected to decrease through 2022, it is reasonable to conclude that monitored $PM_{2.5}$ levels in this area will also continue to decrease through the maintenance period.

Thus, EPA believes that there is ample justification to conclude that the Cleveland area maintenance plans should be approved, even taking into consideration the emissions of other precursors potentially relevant to $PM_{2.5}$. 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 plans.

e. Monitoring Network

Ohio currently operates twelve monitors for purposes of determining attainment with the 1997 annual and 2006 24-hour $PM_{2.5}$ standard in the Cleveland area. Ohio EPA has committed to continue to operate and maintain these monitors and will consult with EPA prior to making any changes to the existing monitoring network. Ohio EPA remains obligated to continue to quality assure monitoring data in accordance with 40 CFR part 58 and enter all data into the AQS in accordance with Federal guidelines.

f. Verification of Continued Attainment

Continued attainment of the $PM_{2.5}$ NAAQS in the Cleveland area depends, in part, on the state's efforts toward tracking

indicators of continued attainment during the maintenance period. Ohio's plans for verifying continued attainment of the 1997 annual and 24-hour $PM_{2.5}$ standards in the Cleveland area consists of continued ambient $PM_{2.5}$ monitoring in accordance with the requirements of 40 CFR part 58. Ohio EPA will also continue to develop and submit periodic emission inventories as required by the Federal Consolidated Emissions Reporting Rule (codified at 40 CFR 51 Subpart A) to track future levels of emissions.

g. 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 ensure 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 measures with respect to control of the pollutant(s) that were contained in the SIP before redesignation

of the area to attainment. See section 175A(d) of the CAA.

As required by section 175A of the CAA, Ohio has adopted contingency plans for the Cleveland area to address possible future 1997 annual and 2006 24-hour $PM_{2.5}$ air quality problems. Ohio's contingency plans include Warning Level Responses and Action Level Responses. An initial Warning Level Response is triggered when either 1) the weighted annual mean is equal to or greater than 15.5 $\mu g/m^3$ within the maintenance area in a single calendar year or 2) a 98^{th} percentile 24-hour $PM_{2.5}$ concentration of 35.5 $\mu g/m^3$ or greater occurs within a single year in the maintenance area. If a Warning Level Response is triggered, a study will be conducted to determine whether emissions appear to be increasing; whether the trend, if any, is likely to continue; and, if so what control measures are necessary to reverse the trend. Should it be determined through the warning level study that action is necessary to reverse the noted trend, Ohio will follow the same procedures for control selection and implementation as for an Action Level Response.

An Action Level Response will be prompted by any one of the following: a two year average of the weighted annual means of 15.0 $\mu g/m^3$ or greater; a violation of the 1997 annual $PM_{2.5}$ standard; a two year average of the 98^{th} percentile 24-hour $PM_{2.5}$ concentration of 35.0 $\mu g/m^3$ or greater; or, a violation of the 24-hour $PM_{2.5}$ standard. If an Action Level Response is

triggered, Ohio EPA will determine what additional control measures are needed to assure future attainment of the $PM_{2.5}$ standards. Selected measures are to be in place within 18 months from the close of the calendar year that prompted the action level. Ohio EPA will determine if significant new regulations not currently included as part of the maintenance provisions will be implemented in a timely manner so as to constitute the state's response. If such a determination is made, Ohio will submit to EPA an analysis to demonstrate the proposed measures are adequate to return the area to attainment. Ohio EPA included the following list of potential contingency measures:

i. Diesel reduction emission strategies;

ii. Alternative fuel (e.g., liquid propane and compressed natural gas) and diesel retrofit programs for fleet vehicle operations;

iii. Tighter NO_X, SO_2, or $PM_{2.5}$ emissions offsets for new and modified major sources

iv. Impact crushers located at recycle scrap yards – upgrade wet suppression;

v. Concrete manufacturing – upgrade wet suppression; and,

vi. Additional NO_X RACT statewide.

EPA believes that Ohio's contingency plan satisfies the pertinent requirements of section 175A(d).

h. Provisions for Future Updates of the Annual $PM_{2.5}$ Maintenance Plan

As required by section 175A(b) of the CAA, Ohio commits to submit to EPA updated maintenance plans eight years after redesignation of the Cleveland area to attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ standards to cover an additional ten-year period beyond the initial ten year maintenance period. As required by section 175A of the CAA, Ohio has committed to retain the control measures contained in the SIP prior to redesignation, and to submit to EPA for approval as a SIP revision, any changes to its rules or emission limits applicable to SO_2, NO_X, or direct $PM_{2.5}$ sources as required for maintenance of the 1997 annual and 2006 24-hour $PM_{2.5}$ standard in the Cleveland area.

EPA has concluded that the maintenance plan adequately addresses the five basic components of a maintenance plan: attainment inventory, maintenance demonstration, monitoring network, verification of continued attainment, and a contingency plan.

B. Comprehensive Emissions Inventories

As discussed above in section IV.A.2.a.ii., section 173(c)(3) of the CAA requires areas to submit a comprehensive, accurate and current emissions inventory. As part of the redesignation request, Ohio submitted 2005 and 2008 emissions

inventories for NO_X, primary $PM_{2.5}$, and SO_2. These emissions inventories are discussed in section IV.A.3.b., above, and the data are shown in Table 5.

On April 30, 2013, Ohio submitted 2007/2008 ammonia and VOC emissions inventories to supplement the comprehensive emissions inventories submitted as part of the redesignation requests. These emissions inventories were developed by LADCO, in conjunction with its member states, as described below.

To generate point source emissions estimates, LADCO ran the EMS model using STARShip data provided by Ohio. For area sources, LADCO ran the EMS model using the 2008 National Emissions Inventory (NEI) data provided by Ohio. LADCO followed Eastern Regional Technical Advisory Committee (ERTAC) recommendations on area sources when preparing the data. Agricultural ammonia emissions were not taken from NEI; instead emissions were based on Carnegie Mellon University's Ammonia Emission Inventory for the Continental United States (CMU). Specifically, the CMU 2002 annual emissions were grown to reflect 2007 conditions. A process-based ammonia emissions model developed for LADCO was then used to develop temporal factors to reflect the impact of average meteorology on livestock emissions.

Onroad mobile source emissions were generated using EPA's MOVES2010a emissions model. Nonroad mobile source emissions

were generated using the NMIM2008 emissions model. LADCO also accounted for three other nonroad categories not covered by the NMIM model: commercial marine vessels, aircraft, and railroads. Marine emissions were based on reports prepared by Environ entitled "LADCO Nonroad Emissions Inventory Project for Locomotive, Commercial Marine, and Recreational Marine Emission Sources, Final Report, December 2004" and "LADCO 2005 Commercial Marine Emissions, Draft, March 2, 2007." Aircraft emissions were provided by Ohio and calculated using AP-42 emission factors and landing and take-off data provided by the Federal Aviation Administration. Rail emissions were based on the 2008 inventory developed by ERTAC.

EPA notes that the emissions inventory developed by LADCO is documented in "Regional Air Quality Analyses for Ozone, $PM_{2.5}$, and Regional Haze: Base C Emissions Inventory" (September 12, 2011). Ammonia and VOC emissions data are shown in Table 10 below.

Table 10. 2007/2008 VOC and Ammonia Emission Totals for the Cleveland Area by Source Sector (tpy)

Sector	Ammonia	VOC
Point	65	6,627
Area	13,329	36,530
Nonroad	23	27,721
Onroad	1,384	29,285
Total	14,801	100,163

EPA has concluded that the emissions inventories provided

by the state are complete and as accurate as possible given the input data available for the relevant source categories. EPA also believes that these inventories provide information about VOC and ammonia as $PM_{2.5}$ precursors in the context of evaluating redesignation of the Cleveland area under subpart 4. Therefore, we are proposing to approve the 2007/2008 ammonia and VOC emissions inventories submitted by the state, in conjunction with the 2005 and 2008 NO_X, direct $PM_{2.5}$, and SO_2 emissions inventories, as fully meeting the comprehensive inventory requirement of section 172(c)(3) of the CAA for the Cleveland area for the 1997 annual and 2006 24-hour $PM_{2.5}$ standards.

C. Ohio's MVEBs

1. How Are MVEBs Developed?

Under the CAA, states are required to submit, at various times, control strategy SIP revisions and maintenance plans for $PM_{2.5}$ nonattainment areas and for areas seeking redesignations to attainment of the $PM_{2.5}$ standard. These emission control strategy SIP revisions (*e.g.*, RFP and attainment demonstration SIP revisions) and maintenance plans create MVEBs based on onroad mobile source emissions for criteria pollutants and/or their precursors to address pollution from onroad 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. 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, transportation plans and transportation improvement programs (TIPs) must be evaluated to determine if they conform with 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" or approve for use in determining transportation conformity before the MVEBs can be used. Once EPA affirmatively approves 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 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 $PM_{2.5}$ maintenance plan, and conclude that the SIP will achieve its overall purpose, in this case providing for maintenance of the 1997 annual $PM_{2.5}$ standard.

EPA's process for determining adequacy of a MVEB consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to comment on the MVEB during a public comment period; and, (3) EPA taking action on the MVEB. The process for determining the adequacy of submitted SIP MVEBs is codified at 40 CFR 93.118.

2. 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 6, NO_X emissions in the Cleveland area are projected to have safety margins of 50,795 tpy and 75,893 tpy in 2015 and 2022, respectively (the difference between the attainment year, 2008, emissions and the projected 2015 and 2022 emissions for

all sources in the Cleveland area). Table 7 shows direct $PM_{2.5}$ emissions in the Cleveland area are projected to have safety margins of 1,737 tpy and 2,512 tpy in 2015 and 2022, respectively. Even if emissions reached the full level of the safety margin, the area would still demonstrate maintenance since emission levels would equal those in the attainment year.

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 93.124(a))

3. What Are the MVEBs for the Cleveland Area?

The maintenance plans submitted by Ohio for the Cleveland area contain primary $PM_{2.5}$ and NO_X MVEBs for the area for the years 2015 and 2022. Ohio EPA has determined the 2015 MVEBs for the Cleveland area to be 1,371.35 tpy for primary $PM_{2.5}$ and 35,094.70 tpy for NO_X. Ohio EPA has determined the 2022 MVEBs for the Cleveland area to be 880.89 tpy for primary $PM_{2.5}$ and 17,263.65 tpy for NO_X. Ohio EPA allocated 178.87 tpy and 4,477.57 tpy to the 2015 primary $PM_{2.5}$ and NO_X MVEBs, respectively, to provide for mobile source growth. Similarly, Ohio EPA allocated 114.90 tpy and 2,251.78 tpy to the 2022 primary $PM_{2.5}$ and NO_X MVEBs, respectively.

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 93.124(a)) The state is not

requesting allocation to the MVEBs of the entire available safety margins reflected in the demonstration of maintenance. Therefore, even though the state has submitted MVEBs that exceed the projected onroad mobile source emissions for 2015 and 2022 contained in the demonstration of maintenance, the increase in onroad mobile source emissions that can be considered for transportation conformity purposes is well within the safety margins of the $PM_{2.5}$ maintenance demonstration. Further, once allocated to mobile sources, these safety margins will not be available for use by other sources.

Ohio did not provide emission budgets for SO_2, VOCs, and ammonia because it concluded, consistent with the presumptions regarding these precursors in the conformity rule at 40 CFR 93.102(b)(2)(v), which predated and was not disturbed by the litigation on the $PM_{2.5}$ implementation rule, that emissions of these precursors from motor vehicles are not significant contributors to the area's $PM_{2.5}$ air quality problem.

EPA issued conformity regulations to implement the 1997 $PM_{2.5}$ NAAQS in July 2004 and May 2005 (69 FR 40004, July 1, 2004 and 70 FR 24280, May 6, 2005, respectively). Those actions were not part of the final rule recently remanded to EPA by the Court of Appeals for the District of Columbia in *NRDC v. EPA*, No. 08-1250 (Jan. 4, 2013), in which the Court remanded to EPA the implementation rule for the $PM_{2.5}$ NAAQS because it concluded that

EPA must implement that NAAQS pursuant to the PM-specific implementation provisions of subpart 4 of part D of title I of the CAA, rather than solely under the general provisions of subpart 1. That decision does not affect EPA's proposed approval of the Cleveland area MVEBs.

First, as noted above, EPA's conformity rule implementing the 1997 $PM_{2.5}$ NAAQS was a separate action from the overall $PM_{2.5}$ implementation rule addressed by the Court and was not considered or disturbed by the decision. Therefore, the conformity regulations were not at issue in *NRDC v. EPA*.[13] In addition, as discussed in section III.B., the Cleveland area is attaining the 1997 annual and 2006 24-hour standards for $PM_{2.5}$ with 2010-2012 design values of 13.0 $\mu g/m^3$ and 30 $\mu g/m^3$, respectively, which are well below the 1997 annual $PM_{2.5}$ NAAQS of 15 $\mu g/m^3$ and the 2006 24-hour $PM_{2.5}$ NAAQS of 35 $\mu g/m^3$. The modeling analysis conducted for the RIA for the 2012 PM NAAQS indicates that the design value for this area is expected to continue to decline through 2020. Further, the state's maintenance plan shows continued maintenance through 2022 by

[13] The 2004 rulemaking addressed most of the transportation conformity requirements that apply in $PM_{2.5}$ nonattainment and maintenance areas. The 2005 conformity rule included provisions addressing treatment of $PM_{2.5}$ precursors in MVEBs. *See* 40 CFR 93.102(b)(2). While none of these provisions were challenged in the NRDC case, EPA also notes that the Court declined to address challenges to EPA's presumptions regarding $PM_{2.5}$ precursors in the $PM_{2.5}$ implementation rule. *NRDC v. EPA*, at 27, n. 10.

demonstrating that NO_X, SO_2, and direct $PM_{2.5}$ emissions continue to decrease through the maintenance period. For VOC and ammonia, RIA inventories for 2007 and 2020 show that both onroad and total emissions for these pollutants are expected to decrease, supporting the state's conclusion, consistent with the presumptions regarding these precursors in the conformity rule, that emissions of these precursors from motor vehicles are not significant contributors to the area's $PM_{2.5}$ air quality problem and the MVEBs for these precursors are unnecessary. With regard to SO_2, the 2005 final conformity rule (70 FR 24280) based its presumption concerning onroad SO_2 motor vehicle emissions budgets on emissions inventories that show that SO_2 emissions from onroad sources constitute a "de minimis" portion of total SO_2 emissions. As can be seen from the data presented in Table 8, onroad emissions in 2022 are less than 0.3% of total SO_2 emissions in the area. In addition, onroad SO_2 emissions decrease throughout the maintenance period.

The availability of the SIP submissions with these 2015 and 2022 MVEBs was announced for public comment on EPA's Adequacy Website on October 6, 2011, for the 1997 annual $PM_{2.5}$ standard and August 9, 2012, for the 2006 24-hour $PM_{2.5}$ standard, at: http://www.epa.gov/otaq/stateresources/transconf/currsips.htm. The EPA public comment periods on adequacy of the 2015 and 2022 MVEBs for the Cleveland area closed on November 7, 2011, and

September 10, 2012, for the 1997 annual and 2006 24-hour $PM_{2.5}$ standards, respectively. No adverse comments on the submittals were received during the adequacy comment period.

EPA has reviewed the submitted budgets for 2015 and 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 determined that the area can maintain attainment of the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS for the relevant maintenance period with onroad mobile source emissions at the levels of the MVEBs since total emissions will still remain under attainment year emission levels. EPA is therefore finding adequate and proposing to approve the MVEBs submitted by Ohio EPA for use in determining transportation conformity in the Cleveland area.

V. Summary of Proposed Actions

EPA is proposing to determine that the Cleveland area is attaining the 1997 annual and 2006 24-hour $PM_{2.5}$ standards and that the area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. EPA is thus proposing to approve the requests from Ohio EPA to change the legal designations of the Cleveland area from nonattainment to attainment for the 1997 annual and 2006 24-hour $PM_{2.5}$ standards. EPA is proposing to approve Ohio's $PM_{2.5}$ maintenance plans for

the Cleveland area as revisions to the Ohio SIP because the plans meet the requirements of section 175A of the CAA. EPA is proposing to approve 2005 and 2008 emissions inventories for primary $PM_{2.5}$, NO_X, and SO_2, and 2007/2008 emissions inventories for VOC and ammonia as satisfying the requirement in section 172(c)(3) of the CAA for a comprehensive, current emission inventory. Finally, EPA finds adequate and is proposing to approve 2015 and 2022 primary $PM_{2.5}$ and NO_X MVEBs for the Cleveland area. These MVEBs will be used in future transportation conformity analyses for the area.

VI. 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 CAA 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, these proposed actions do not impose additional requirements beyond those imposed by state law and the CAA. For that reason, these proposed actions:

- are not "significant regulatory actions" 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 CAA; 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 proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because a determination of attainment is an action that affects the status of a geographical area and does not impose any new regulatory requirements on tribes, impact any existing sources of air pollution on tribal lands, nor impair the maintenance of ozone national ambient air quality standards in tribal lands.

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.

Dated: July 12, 2013

Susan Hedman
Regional Administrator, Region 5.

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