



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R05-OAR-2025-0165; FRL-12974-01-R5]

**Air Plan Approval; Ohio; Muskingum River 2010 Sulfur Dioxide
Redesignation and Maintenance Plan**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to redesignate the Muskingum River sulfur dioxide (SO₂) nonattainment area, located in Center Township in Morgan County and Waterford Township in Washington County, Ohio, to attainment for the 2010 SO₂ National Ambient Air Quality Standard (NAAQS). EPA is also proposing to approve Ohio's maintenance plan for the area and Ohio's Director's Final Findings and Orders (DFFOs), issued March 26, 2025. Ohio submitted the request for approval on March 31, 2025.

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

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2025-0165 at <https://www.regulations.gov>, or via email to arra.sarah@epa.gov. For comments submitted at [Regulations.gov](https://www.regulations.gov), follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from the docket. EPA may publish any comment received to its public docket. Do not submit electronically any information you

consider to be Confidential Business Information (CBI), Proprietary Business Information (PBI), or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI, PBI, or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Gina Harrison, Air and Radiation Division (AR18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-6956, harrison.gina@epa.gov. The EPA Region 5 office is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays and facility closures.

SUPPLEMENTARY INFORMATION:

I. What is EPA proposing?

EPA is proposing to determine that the Muskingum River SO₂ nonattainment area, located in Center Township in Morgan County and Waterford Township in Washington County, Ohio, is attaining the 2010 SO₂ NAAQS, based on quality-assured and certified

monitoring data for the period 2015-2024, in accordance with Ohio's March 31, 2025, request. EPA has determined that the area is attaining the 2010 SO₂ NAAQS and that the improvement in air quality is due to permanent and enforceable SO₂ emission reductions in the area. Therefore, EPA is proposing to change the legal designation of the Muskingum River SO₂ nonattainment area to attainment for the 2010 SO₂ NAAQS. EPA is also proposing to approve Ohio's maintenance plan into the Ohio State Implementation Plan (SIP), which is designed to ensure that the area will continue to meet the SO₂ NAAQS. Finally, EPA is proposing to approve the site-specific DFFOs which were issued on March 26, 2025, into the SIP. Ohio's submittal, which includes the maintenance plan and DFFOs, will be available for public review as part of the rulemaking docket for this action.

II. What is the background for these actions?

On June 22, 2010 (75 FR 35520), EPA revised the primary SO₂ NAAQS, establishing a new 1-hour standard of 75 parts per billion (ppb), which is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of daily maximum 1-hour average concentrations is less than or equal to 75 ppb, as determined in accordance with appendix T of 40 CFR part 50. 40 CFR 50.17(a)-(b). EPA promulgated designations for this standard in four rounds.

On June 3, 2011, Ohio submitted its recommendations to EPA to designate certain areas of the State as attaining, not attaining, or unclassifiable for attaining the SO₂ NAAQS. Ohio

recommended that the area located in southeastern Ohio that includes Center Township in Morgan County and Waterford Township in Washington County be designated as nonattainment for the 2010 SO₂ NAAQS. EPA concurred with Ohio's analysis and, on August 15, 2013, published a final action designating the area as nonattainment of the 2010 SO₂ NAAQS, effective October 4, 2013 (78 FR 47191).

Under section 192(a) of the Clean Air Act (CAA), States are also required to submit attainment plans to demonstrate that the respective areas will attain the NAAQS as expeditiously as practicable, but no later than five years from the effective date of designation. Ohio submitted statewide nonattainment area SIPs to EPA on April 3, 2015, and October 13, 2015, and submitted supplemental attainment plans for the Muskingum River SO₂ nonattainment area on June 24, 2020, July 28, 2022, and May 23, 2023.

Ohio's fully approved attainment plan included modeling for the Globe Metallurgical, Inc., facility (Globe) and the State's DFFOs, which set forth emission limits at Globe and monitoring and testing requirements to confirm the source modeling characterization (September 8, 2023, 88 FR 61969). Ohio's modeled emissions for this area showed the DFFO-required emission limits for Globe, in conjunction with the SO₂ reductions from the permanent retirement of the Muskingum River Power Plant in 2015, provide for attainment of the SO₂ standard throughout the area. In addition, the DFFOs required the installation and

operation of an ambient air monitor downwind of Globe for a period of three years.

On March 31, 2025, Ohio submitted a redesignation request and maintenance plan to EPA for the Muskingum River SO₂ nonattainment area for the 2010 SO₂ NAAQS. The submitted redesignation request and maintenance plan include complete quality-assured ambient air quality monitoring data meeting the 2010 SO₂ standard from 2015 to 2024. These NAAQS attainment monitoring demonstrations, in addition to decreases in emission levels attributable to the shutdown of the Muskingum River Power Plant and the promulgation of emission limits and other measures set forth in Ohio's DFFOs to Globe, provide the framework for Ohio's request for redesignation to attainment for the Muskingum River SO₂ nonattainment area. In addition, Ohio is requesting that EPA approve the March 26, 2025, revised DFFOs that replace emission limits established in the 2020 DFFOs for Globe to provide for maintenance in the area. The 2020 DFFOs contain emission limits that are currently in Ohio's approved SIP. Ohio is also requesting that EPA approve the new emission limits from the March 26, 2025, revised DFFOs into the SIP.

Under section 107(d)(3)(E) of the CAA, EPA may not promulgate a redesignation of a nonattainment area (or portion thereof) unless:

1. EPA has determined that the area has attained the NAAQS;
2. EPA has fully approved the applicable implementation plan for the area under section 110(k) of the CAA;

3. EPA has determined that improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollution control regulations and other permanent and enforceable reductions;

4. EPA has fully approved a maintenance plan for the area under section 175A of the CAA; and

5. The State containing such area has met all requirements applicable to the area under section 110 of the CAA and part D.

On April 16, 1992 (57 FR 13498), EPA provided guidance on redesignations in the "General Preamble for the Implementation of Title I of the CAA Amendments of 1990" and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in policy memoranda.

III. What is EPA's Analysis of Ohio's Redesignation Request and Maintenance Plan?

On October 2, 2023, Ohio submitted a request that EPA redesignate the Muskingum River SO₂ nonattainment area to attainment and a SIP revision containing a maintenance plan for the area. EPA's evaluation of Ohio's redesignation request and maintenance plan was based on consideration of the five redesignation criteria provided under CAA section 107(d)(3)(E).

Criterion (1) - The Muskingum River SO₂ Nonattainment Area has Attained the 2010 SO₂ NAAQS.

In accordance with CAA section 107(d)(3)(E)(i), for

redesignation of a nonattainment area to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS. In accordance with 40 CFR 50.17 and appendix T of part 50, an area is attaining the 1-hour primary SO₂ standard at an ambient air quality monitoring site when the three-year average of the annual (99th percentile) of the daily maximum 1-hour average concentrations is less than or equal to 75 ppb. As stated in EPA's April 23, 2014 "Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions" (April 2014 SO₂ Guidance), there are two components needed to support an attainment determination: (1) a review of representative air quality monitoring data located in the area of maximum concentration; and (2) a further analysis, where there are no monitors, using air quality dispersion modeling, which will generally be needed to estimate SO₂ concentrations throughout the nonattainment area to demonstrate that the entire area is attaining the applicable NAAQS, based on current actual emissions or the fully implemented control strategy.¹ The April 2014 SO₂ Guidance further states that dispersion modeling should be conducted to estimate SO₂ concentrations throughout the nonattainment area using actual emissions and meteorological information for the most recent three calendar years.

EPA has reviewed the available SO₂ monitoring data from Ohio's two monitoring sites in the Muskingum River SO₂

¹ EPA's "Guidance for 1-Hour Sulfur Dioxide (SO₂) Nonattainment Area State Implementation Plans (SIP) Submissions" can be found at <https://www.epa.gov/so2-pollution/guidance-1-hour-sulfur-dioxide-so2-nonattainment-area-state-implementation-plans-sip>.

nonattainment area for the 2015-2024 period - the Hackney monitor (site 39-115-004), and the Globe monitor (site 39-167-0011). On December 18, 2023, Ohio EPA requested to discontinue the Hackney monitor (39-115-0004) due to the consistently low SO₂ values following the permanent shutdown of the Muskingum River Power Plant in 2015. On January 1, 2021, Ohio began operating the Globe monitor near the Globe Metallurgical facility in an area of maximum concentration to monitor emissions from this facility. These data have been quality assured in accordance with 40 CFR 58.10, are recorded in the EPA Air Quality System (AQS), and were certified in advance of EPA's publication of this proposal. Data from both monitors demonstrate that the Muskingum River SO₂ nonattainment area is attaining the 2010 SO₂ NAAQS. Since 2011, the highest three-year average of the annual 99th percentile of 1-hour daily maximum concentrations was 42 ppb for the Hackney monitor and 24 ppb for the Globe monitor. Data for all monitoring sites and three-year design values are summarized in Tables 1 and 2, respectively.

Table 1. Annual 99th Percentile Monitoring data for the Muskingum River nonattainment area (Site 39-115-004, Hackney, and Site 39-167-0011, Globe) for 2011-2024.

Site	County	Year (ppb)													
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Hackney	Morgan	175	142	124	148	91	17	17	18*	15	13	18*	13	24	N/A
Globe	Morgan											17*	24	26	22

*Less than 75% data capture in at least one quarter

Table 2. Three-year design values for the Muskingum River nonattainment area (Site 39-115-004, Hackney, and Site 39-167-0011, Globe) for 2011-2024.

Site	County	Year (ppb)											
		2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023	2022-2024
Hackney	Morgan	147	138	121	85	42	17*	17*	15*	15	15	18	N/A
Globe	Morgan											22*	24

*Less than 75% data capture in at least one quarter

The Muskingum River SO₂ nonattainment area's 3-year SO₂ design value at the Hackney monitor² first began attaining in the 2015-2017 design period with a value of 42 ppb,³ which meets the 2010 SO₂ NAAQS. In addition, the highest 3-year design value at the Globe monitor is 24 ppb. Therefore, EPA proposes to determine that the Muskingum River SO₂ nonattainment area is attaining the 2010 SO₂ NAAQS.

EPA also considered Ohio's air quality modeling analyses submitted in the State's attainment plan SIP revision. On June 23, 2020, Ohio submitted a supplement to the attainment demonstration and control strategy for the Muskingum River SO₂ nonattainment area, which included twenty-six sets of SO₂ emission limits for Globe along with air quality modeling. These emission limit sets were based on modeled values demonstrating attainment and maintenance of the standard. Ohio's air quality modeling submitted in its attainment demonstration used the emission limit sets and yielded design values below the 2010 SO₂ NAAQS for the Muskingum River area. The April 2014 SO₂ Guidance provides an extensive discussion of EPA's view that appropriately set comparably stringent limits based on averaging times as long as 30 days can be found to provide for attainment of the 2010 SO₂ NAAQS. The April 2014 SO₂ Guidance also offers specific recommendations for determining an

² On December 8, 2023, Ohio requested to discontinue the Hackney monitor due to the shutdown of the Muskingum River Power Plant and the subsequent low levels of SO₂ measured at that monitor.

³ The SO₂ design value for the Hackney monitor with the highest 3-year averaged concentration following the 2015 shutdown of the Muskingum River Power Plant.

appropriate longer-term average limit.

Based on the limits and other information submitted in the June 23, 2020, supplement, Ohio EPA issued DFFOs that set forth the 26 sets of 1-hour emission limits, monitoring requirements, and testing and compliance plans for the Globe facility. EPA approved the emission limits on January 18, 2022 (87 FR 2555), and on September 8, 2023 (88 FR 61969), as a part of Ohio's attainment demonstration SIP. Ohio's plan applies 1-hour emission rate combination emission limits as a 24-hour average to Globe's two baghouses. More detail on EPA's analysis of the attainment plan for the Muskingum River SO₂ nonattainment area can be found in the September 8, 2023 (88 FR 61969), attainment plan approval.

The attainment plan required that Globe perform further source testing to verify the accuracy of the previously modeled parameters. Globe performed these additional tests in June 2024 and updated the attainment strategy modeling to revise two of the emission limit sets - specifically, to revise one and remove one of the sets. These changes better align the limits with expected production scenarios. On March 26, 2025, Ohio revised its DFFOs and issued new DFFOs reflecting these changes. The final emission limit sets are summarized in Table 3 with the modeled rate and adjusted limit with a 24-hour averaging rate. For more information on the modeling, emission limit sets, and averaging rate, see EPA's proposed attainment plan for this

area.⁴

Table 3. Globe’s modeled attainment rates and final attainment SO₂ emission limits included in Ohio’s March 26, 2025, DFFOs.

Emission Limit set	Modeled 1-hour Emission rate Combinations (lb/hr)		Modeled Design Value (µg/m ³)*	Final Attainment 24-hour Average SO ₂ Emission Limit Combinations (lb/hr)	
	Shop 1 Baghouse: P902 (EAF 1) P903 (EAF 2) P904 (EAF 3)	Shop 2 Baghouse: P907 (EAF 5) P908 (EAF 7)		Shop 1 Baghouse: P902 (EAF 1) P903 (EAF 2) P904 (EAF 3)	Shop 2 Baghouse: P907 (EAF 5) P908 (EAF 7)
1	210.0	0.0	149.6	195.3	0.0
2	205.0	60.0	150	190.6	55.8
3	200.0	80.0	146.8	186.0	74.4
4	195.0	110.0	149.5	181.3	102.3
5	190.0	125.0	150.6	176.7	116.2
6	185.0	140.0	152.2	172.0	130.2
7	180.0	155.0	153.8	167.4	144.1
8	175.0	170.0	155.6	162.7	158.1
9	170.0	180.0	157.9	158.1	167.4
10	165.0	190.0	159.2	153.4	176.7
11	160.0	200.0	162.8	148.8	186.0
12	155.0	205.0	163.8	144.1	190.6
13	150.0	210.0	165.4	139.5	195.3
14	145.0	215.0	168.5	134.8	199.9
15	140.0	220.0	171.6	130.2	204.6
16	135.0	230.0	178.2	125.5	213.9
17	130.0	235.0	181.3	120.9	218.5
18	125.0	240.0	183.9	116.2	223.2
19	120.0	240.0	184.4	111.6	223.2
20	115.0	245.0	187	106.9	227.8
21	95.0	250.0	188.9	88.3	232.5
22	80.0	255.0	191.1	74.4	237.1
23	65.0	260.0	193.4	60.4	241.8
24	45.0	265.0	195.2	41.8	246.4
25	0.0	270.0	194.7	0.0	251.1

* Converting from µg/m³ to ppb into Concentration (ppb) = 24.45 x concentration (µg/m³) ÷ molecular weight of SO₂ (64.07 g/mol). The 75 ppb standard is equivalent to 196.5 µg/m³.

Ohio’s modeled demonstration of attainment for EPA’s modeling demonstrated a maximum design value of 194.7 µg/m³, or 74.3 ppb, with the revised SO₂ emission limits that will provide for attainment based on the new requirements for Globe, which are both permanently and federally enforceable. EPA concluded that Ohio’s modeling is a suitable demonstration that its

⁴ See EPA’s proposed attainment plan approval for the Muskingum River SO₂ nonattainment area. 88 FR 40726 (June 22, 2023).

requirements in the DFFOs for Globe were properly addressed in the attainment plan. EPA's supplemental modeling demonstrated that the updated limits for Globe provide for attainment and, along with monitoring data showing the area is attaining the standard, is the secondary basis to conclude that the area is attaining the 2010 SO₂ NAAQS. Ohio's redesignation request for the Muskingum River SO₂ nonattainment area relied upon the demonstration of attainment based on the permanent shutdown of the Muskingum River Power Plant, the revised emission limits for Globe, and monitoring data from the nearest AQS monitors.

In this action, EPA is proposing to find that the Muskingum River SO₂ nonattainment area has attained and will continue to attain the 2010 SO₂ NAAQS with respect to the redesignation criteria under CAA section 107(d)(3)(E)(i).

Criterion (2) and Criterion (5) - Ohio has met all applicable requirements under CAA section 110 and part D of the CAA, and EPA has fully approved the applicable implementation plan under CAA section 110(k).

For redesignation of an area from nonattainment to attainment of a NAAQS, the CAA requires EPA to determine that the State has met all applicable requirements under section 110 and part D of title I of the CAA (see section 107(d)(3)(E)(v) of the CAA) and that the State has a fully approved SIP under section 110(k) of the CAA (see section 107(d)(3)(E)(ii) of the CAA). Part D is comprised of the general nonattainment area plan requirements in subpart 1 (section 172) as well as

pollutant specific subparts, including section 191 (or subpart 5), which applies to areas designated nonattainment for SO₂, nitrogen dioxide, or lead. While some nonattainment planning requirements are not applicable for purposes of CAA section 107(d)(3)(E)(ii) and (v) for areas that are attaining the NAAQS, Ohio has in any case submitted a complete attainment plan and EPA has fully approved that plan, including emissions inventories, Reasonably Available Control Technology/Reasonably Available Control Measures, Reasonable Further Progress, and contingency measures.

On April 3, 2015, and supplemented on October 13, 2015, March 13, 2017, June 25, 2019, June 23, 2020, June 24, 2022, and May 24, 2023, Ohio submitted its attainment demonstration SIP for the Muskingum River SO₂ nonattainment area. EPA approved Ohio's attainment plan SIP effective October 10, 2023 (88 FR 61969). EPA has reviewed Ohio's SIP submittals and proposes to find that that by these submittals Ohio meets the general SIP requirements under section 110 of the CAA for the 2010 SO₂ standard. Therefore, EPA proposes to find that Ohio has satisfied the requirements in section 110 and part D, and that Ohio has met all applicable SIP requirements for purposes of redesignation under section 119 and part D of title I of the CAA (requirements specific to nonattainment areas for the 2010 SO₂ NAAQS).

Additionally, EPA proposes to find that Ohio has a fully approved SIP under section 110(k) of the CAA. Section 110(a)(2)

of the CAA delineates the general requirements for a SIP. Section 110(a)(2) provides that the SIP must have been adopted by the State after reasonable public notice and hearing, and that, among other things, it 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 stationary sources 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 permit programs; (5) include provisions 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.

In Ohio's June 7, 2013, infrastructure SIP submission, Ohio verified that the State fulfills the requirements of section 110(a)(1) and section 110(a)(2) of the CAA with respect to the 2010 SO₂ NAAQS. Ohio's June 7, 2013, infrastructure SIP for the 2010 SO₂ standard contains SIP approved Ohio Administrative Code Chapter 3745-18, through which SO₂ emissions are directly regulated. As discussed in "Criterion 4," below, EPA already approved Ohio's base year emissions inventory and emission

statement program as meeting the requirements of sections 110 and part D, and section 110(k), respectively, as they relate to the 2010 SO₂ NAAQS.⁵ EPA has determined which requirements are applicable for purposes of redesignation, and whether the required Ohio SIP elements are fully approved under section 110(k) and part D of the CAA. Therefore, EPA proposes to find that Ohio has met all applicable requirements under CAA section 110 and part D, including CAA section 110(k).

Criterion (3) - The Air Quality Improvement in the Muskingum River SO₂ Nonattainment Area Is Due to Permanent and Enforceable Emission Reductions

To redesignate an area from nonattainment to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from the implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable emission reductions.

Ohio's attainment plan incorporates confirmation of the permanent shutdown of the Muskingum River Power Plant. In 2011, Muskingum River Power Plant accounted for approximately 99% of SO₂ emissions in the area—emitting 104,138.03 tons of SO₂ of the entire 2011 EGU and non-EGU inventory of 105,341.03 tons of SO₂. The last coal fired boiler at the Muskingum River Power Plant

⁵ Ohio submitted its 2011 base year inventory and 2018 future year inventory as a part of Ohio's October 13, 2015, attainment demonstration SIP, which was approved by EPA on October 11, 2018 (83 FR 51361).

ceased operations on May 15, 2015, and all coal fired boilers at the facility were permanently retired on May 31, 2015.

Emissions of SO₂, by unit and for the entire facility, from 2011 through 2016 are shown in Table 4 below.

Table 4. Muskingum River Power Plant SO₂ emissions 2011-2016 (tpy)

Unit	2011	2012	2013	2014	2015	2016
B001	16.33	0.28	0.25	0.38	0.00	0.00
B002	18190.00	2644.61	0.00	0.00	0.00	0.00
B003	17420.30	2887.61	0.00	0.00	0.00	0.00
B004	24684.50	15309.30	16273.40	13961.90	0.00	0.00
B005	24314.00	9431.73	3831.13	4337.55	1927.51	0.00
B006	19512.90	5864.48	12919.80	31276.80	13734.30	0.00
Facility	104138.03	36138.01	33024.58	49576.63	15661.81	0.00

As explained in further detail under "Criterion 1," above, EPA approved Globe's limits into Ohio's SIP on January 18, 2022 (87 FR 2555), and on September 8, 2023 (88 FR 61969), which renders them federally enforceable. Any new sources of SO₂ are limited by new source performance standards under sections 111 and 129 of the CAA; and the national emission standards for hazardous air pollutants under section 112 of the CAA.

EPA is proposing to find, consistent with its approval of Ohio's attainment plan, that the combination of the Globe emission modeling results and the lack of emissions from other sources in the area demonstrates attainment and continued maintenance of the 2010 SO₂ NAAQS, and that the air quality improvement in the Muskingum River SO₂ nonattainment area is due to permanent and enforceable reductions in emissions.

Criterion (4) - The Muskingum River SO₂ Nonattainment Area Has a Fully Approved Maintenance Plan Pursuant to Section 175A

Section 175A of the CAA sets forth the 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 the nonattainment area is redesignated to attainment. Eight years after the redesignation, the State must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the ten years following the initial ten-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures as EPA deems necessary to ensure prompt correction of any future one-hour violations.

Specifically, the maintenance plan should address five requirements: the attainment emissions inventory, maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan. EPA is proposing to determine that Ohio's March 31, 2025, redesignation request contains its maintenance plan and all the necessary components, which Ohio has committed to review eight years after the redesignation.

1. Attainment emissions inventory

As a part of a State's maintenance plan, the air agency should develop an attainment emissions inventory to identify the level of emissions in the affected area which is sufficient to attain and maintain the SO₂ NAAQS.⁶ Ohio submitted its 2011 base year inventory and 2018 future year inventory as a part of

⁶ See April 2014 SO₂ Guidance, page 66.

Ohio's October 13, 2015, attainment demonstration SIP. In its redesignation request, Ohio provided an emissions inventory for SO₂ in the nonattainment area for 2015, which is one of the years in the design value where attainment was first achieved. See Table 5, below.

Table 5. Muskingum River, Ohio (Waterford Township, Washington County, plus Center Township, Morgan County) SO₂ emission inventory totals for 2011 base, 2015 attainment, 2026 projected interim, and 2038 projected maintenance (tpy), and safety margin comparing 2015 attainment to 2038 projected maintenance.

Sector	2011 Base	2015 Attainment	2026 Projected Interim	2038 Projected Maintenance	Safety Margin
EGU Point	104148.62	15687.43	22.98	0.01	15687.42
Non-EGU	1192.41	1013.74	1842.84	1752.14	-738.40
Non-road	0.06	0.05	0.01	0.01	0.04
On-road	0.26	0.27	0.07	0.05	0.22
Other	4.66	4.33	2.53	2.55	1.78
TOTAL	105346.01	16705.82	1868.43	1754.76	17951.06

Total actual emissions in the Muskingum River SO₂ nonattainment area for the 2015 attainment year were 16,705.82 tons. This level of emissions, in combination with emission limits set forth at the Globe facility, are sufficient to maintain the NAAQS. In its redesignation request, Ohio reported that total actual SO₂ emissions for the Muskingum River SO₂ nonattainment area from 2011, a year during which the area was not attaining the NAAQS, were 105,346.01 tons. The permanent shutdown of the Muskingum River Power Plant in 2015 led to decreases in actual SO₂ emissions by over 88,641 tons in the Muskingum River SO₂ nonattainment area when comparing the years 2011 and 2015. These data satisfy the attainment emissions inventory requirement for the Muskingum River SO₂ nonattainment area maintenance plan.

2. Maintenance Demonstration

EPA's "Procedures for Processing Requests to Redesignate Areas to Attainment" (Calcagni Memo)⁷ describes two ways for a State to demonstrate maintenance of the NAAQS following the redesignation of the area: (1) the State can show that future emissions of a pollutant will not exceed the level of the attainment inventory, or (2) the State can model to show that the future mix of sources and emission rate will not cause a violation of the standard. In both instances, the demonstration should be for a period of 10 years following the redesignation. Furthermore, the plan should contain a summary of air quality concentrations resulting from control measures implemented where modeling is relied upon to demonstrate maintenance. Ohio's maintenance demonstration consists of the attainment SIP air quality modeling analysis showing that the emission reductions now in effect in the Muskingum River SO₂ nonattainment area will provide for attainment of the 2010 SO₂ NAAQS for the 2026 projected interim date and will also be below the 2015 attainment year totals by the year 2038 projected maintenance date. The permanent and enforceable SO₂ emission reductions described above ensure that the area emissions will be equal to or less than the emission levels that were evaluated in the air quality modeling analysis, and Ohio's enforceable emission requirements will ensure that the Muskingum River area SO₂

⁷ Calcagni, John, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards, "Procedures for Processing Requests to Redesignate Areas to Attainment," September 4, 1992.

emission limits are met continuously.

Table 6. Muskingum River, Ohio (Waterford Township, Washington County, plus Center Township, Morgan County) emission estimates (tpy) comparing the 2015 attainment year to projected maintenance dates.

	2015 Attainment	2026 Projected Interim	2026 Projected Interim Decrease	2038 Projected Maintenance	2038 Projected Maintenance Decrease
SO ₂	16705.82	1868.43	14837.69	1754.76	14951.06

As demonstrated in Table 6, SO₂ emissions in the area are projected to decrease by almost 15,000 tpy in 2026 and 2038 from 2015 attainment levels, which demonstrates maintenance.

3. Monitoring

By providing actual monitoring data from the national emissions inventory and State inventory databases (e.g., Ohio's Emission Inventory System), for non-road EGU and non-EGU point sources of SO₂, from time periods including when the area was not meeting the NAAQS (2011) and when the area was attaining the NAAQS (2015), Ohio has demonstrated a 99 percent reduction in actual annual SO₂ emissions in the area. Ohio's monitoring, described above, shows the combination of the 2015 Muskingum River Power Plant shutdown and the newly imposed and federally enforceable DFFOs SO₂ limits for Globe result in the area maintaining attainment of the SO₂ NAAQS.

4. Verification of Continued Attainment

For continuing verification, Ohio will track the emissions and compliance status of the Globe facility in the Muskingum River SO₂ nonattainment area so that future emissions will not exceed the allowable emissions-based attainment inventory. All

major sources in Ohio are required to submit annual emissions data, which the State uses to update its emission inventories as required by the CAA. The Globe facility must submit annual compliance certifications to ensure the facility is meeting its SIP limits and the facility must submit a semi-annual Monitoring Report to Ohio, summarizing required monitoring results and identifying all instances of deviation from the permit and other regulations.

Ohio will also continue operating its air quality monitoring network to verify maintenance of the attainment status of the Muskingum River SO₂ nonattainment area. The closest monitor to the Muskingum River SO₂ nonattainment area is the Globe monitor (AQS ID: 39-167-0011). Ohio will provide EPA with annual emissions reports as part of Ohio's annual network plan submittal to provide ongoing verification of attainment and will consult with EPA prior to discontinuing

5. Contingency Plan

Section 175A(d) of the CAA provides that a maintenance plan must contain contingency provisions that will promptly correct any violation of the SO₂ NAAQS after the area is redesignated to attainment.⁸ The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation, and a time limit for action by the State.

A State should also identify specific indicators to be used

⁸ See also Calcagni Memo.

to determine when the contingency measures need to be implemented. The maintenance plan must also include a requirement that a State will implement all measures with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d). Unlike CAA section 172(c)(9), section 175A of the CAA does not explicitly require that contingency measures must take effect without further action by the air agency in order for the maintenance plan to be approved. However, the maintenance plan's contingency plan would become an enforceable part of the SIP and should ensure that contingency measures are adopted and implemented as expeditiously as practicable once they are triggered.⁹ In the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," published on April 16, 1992 (57 FR 13498), EPA provides further discussion of contingency measures for SO₂. This guidance states that in many cases, attainment revolves around compliance of a single source or a small set of sources with emission limits shown to provide for attainment. Although this guidance applies to contingency measures under section 172(c)(9), EPA applies a similar policy with respect to contingency measures for SO₂ required in maintenance plans under section 175A(d). The requirement to submit contingency measures in accordance with section 175A of the CAA can be adequately addressed for SO₂ by the operation of a comprehensive enforcement

⁹ See April 2014 SO₂ Guidance, page 74.

program¹⁰, which can quickly identify and address sources that might be causing exceedances of the NAAQS.

Ohio's enforcement program is active and capable of prompt action to remedy compliance issues. Ohio commits to ongoing compliance and enforcement of the control measures contained in the DFFOs issued to Globe that were approved and incorporated into the Ohio SIP (88 FR 61969), and the newly issued March 26, 2025, DFFOs proposed for approval in this action. In its redesignation request, Ohio commits to review its maintenance plan eight years after redesignation, as required by section 175A of the CAA. Ohio also has the necessary resources in the event of violations to enforce its permit provisions and rules. Ohio has the authority to expeditiously adopt, implement, and enforce any subsequent emission control measures deemed necessary to correct any future SO₂ violations. Ohio commits to adopting and implementing such corrective actions as necessary to address violations of the SO₂ NAAQS. Another contingency measure option is the implementation of a PSD program for new or modified existing sources of SO₂, which includes requirements for Best Available Control Technology, in the Muskingum River SO₂ nonattainment area once redesignated to attainment. The Globe DFFOs have been adopted into the Ohio SIP and include emission limits, monitoring, recordkeeping, compliance testing and reporting requirements that will be used to confirm ongoing compliance. Based on the foregoing, EPA proposes to find that

¹⁰ See April 2014 SO₂ Guidance, page 41-42

Ohio has addressed the contingency measure requirement.

EPA is proposing to find that Ohio's maintenance plan adequately addresses the five basic components of a maintenance plan necessary to maintain the SO₂ NAAQS in the Muskingum River SO₂ nonattainment area. Therefore, EPA proposes to find that the redesignation and maintenance plan SIP revision submitted by Ohio for the Muskingum River SO₂ nonattainment area meets the requirements of section 175A of the CAA and proposes to approve this plan.

IV. What Action is EPA Taking?

EPA is proposing to redesignate the Muskingum River SO₂ nonattainment area from nonattainment to attainment for the 2010 SO₂ NAAQS in accordance with Ohio's March 31, 2025, request. EPA has determined that the area is attaining the 2010 SO₂ NAAQS and that the improvement in air quality is due to permanent and enforceable SO₂ emission reductions in the area. EPA is also proposing to approve Ohio's maintenance plan, which is designed to ensure that the area will continue to maintain attainment of the 2010 SO₂ NAAQS. Finally, EPA is proposing to approve Ohio's DFFOs issued to Globe on March 26, 2025, which set forth emission limits and other requirements that will provide for attainment of the 2010 SO₂ NAAQS in this area.

V. Incorporation by Reference

In this rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to

incorporate by reference Ohio's DFFOs issued to Globe, effective March 26, 2025, discussed in section II. of this preamble. EPA has made, and will continue to make, these documents generally available through www.regulations.gov and at the EPA Region 5 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VI. Statutory and Executive Order Reviews.

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan 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, this action merely approves State law as meeting Federal requirements and does not impose additional requirements beyond those imposed by State law. For these reasons, this action:

- Is not a significant regulatory action subject to review by

the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);

- Is not subject to Executive Order 14192 (90 FR 9065, February 6, 2025) because SIP actions are exempt from review under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is 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.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a State program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is 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.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian

tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: September 23, 2025.

Cheryl Newton,
Acting Regional Administrator, Region 5.

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