



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2022-0976; FRL-10788-02-R5]

**Air Plan Approval; Michigan; Attainment Plan for the Detroit
2010 Sulfur Dioxide Nonattainment Area**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving the State Implementation Plan (SIP) revision submitted by Michigan on December 20, 2022, and supplemented on February 21, 2023, December 14, 2023, and April 2, 2024, which amends a SIP submission previously submitted to EPA on May 31, 2016, and June 30, 2016, for attaining the 2010 sulfur dioxide (SO₂) primary national ambient air quality standard (NAAQS) for the Detroit SO₂ nonattainment area. This action follows a prior action which found that Michigan had satisfied emission inventory and new source review (NSR) requirements for this area but had not met requirements under the Clean Air Act (CAA) for the elements that EPA is approving here. This action also follows the promulgation of the 2022 Federal Implementation Plan (FIP) for the Detroit SO₂ nonattainment area.

DATES: This final rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-R05-OAR-2022-0976. All documents in the

docket are listed on the <https://www.regulations.gov> web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI), Proprietary Business Information (PBI), or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either through <https://www.regulations.gov> or 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 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays. We recommend that you telephone Abigail Teener, Environmental Protection Specialist, at (312) 353-7314 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Abigail Teener, Air and Radiation Division (AR18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-7314, teener.abigail@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background Information.

On August 5, 2013 (78 FR 47191), EPA designated the Detroit area within the State of Michigan as nonattainment for the 2010 SO₂ NAAQS, in conjunction with designating multiple areas in other states as nonattainment.

On March 18, 2016 (81 FR 14736), EPA published an action

finding that Michigan had failed to submit the required SO₂ nonattainment plan by the submittal deadline. This finding initiated deadlines under CAA section 179(a) for the potential imposition of 2-to-1 NSR offset and Federal highway funding sanctions. Additionally, under CAA section 110(c), the finding triggered a requirement that EPA promulgate a FIP within two years of the finding unless, by that time, (a) the State had made the necessary complete submittal, and (b) EPA had approved the submittal as meeting applicable requirements.

On May 31, 2016, Michigan submitted a Detroit SO₂ attainment plan and on June 30, 2016, submitted associated final enforceable measures. Michigan's submission of a complete attainment plan terminated the deadlines for imposing sanctions, pursuant to 40 CFR 52.31(d)(5), but it did not terminate EPA's FIP obligation.

On March 19, 2021 (86 FR 14827), EPA partially approved and partially disapproved Michigan's SO₂ plan as submitted in 2016. EPA's March 19, 2021, action approved the enforceable control measures for two facilities, approved the base-year emissions inventory, and affirmed that the NSR requirements for the area had previously been met on December 16, 2013 (78 FR 76064). In the same March 19, 2021, action, EPA disapproved the attainment demonstration, as well as the requirements for meeting reasonable further progress (RFP) toward attainment of the NAAQS, reasonably available control measures/reasonably available control technology (RACM/RACT), and contingency

measures. Additionally, EPA disapproved the plan's control measures for two facilities as insufficient to demonstrate attainment. These disapprovals started new sanctions clocks under CAA section 179(a).

On January 28, 2022 (87 FR 4501), EPA issued a finding of failure to attain for the Detroit SO₂ nonattainment area, determining that the area failed to attain the 2010 SO₂ NAAQS by the applicable attainment date of October 4, 2018, and established a requirement that Michigan submit a revised SIP by January 30, 2023, that provides for expeditious attainment of the NAAQS within the time period specified in CAA sections 179(d)(3) and 172(a)(2).

On October 12, 2022 (87 FR 61514), EPA promulgated a FIP for the Detroit SO₂ nonattainment area, which satisfied EPA's duty to promulgate a FIP for the area under CAA section 110(c) that resulted from the March 18, 2016, finding of failure to submit. While EPA's FIP for the Detroit area met the requirements for SO₂ nonattainment area plans, the FIP did not relieve Michigan of the previously discussed CAA requirement to submit a plan that provides for attainment of the 2010 SO₂ NAAQS for the Detroit nonattainment area. On December 20, 2022, Michigan submitted a revised attainment plan for the Detroit SO₂ nonattainment area mirroring EPA's FIP in order to remedy Michigan's 2016 plan deficiencies specified in EPA's March 19, 2021, rulemaking partially approving and partially disapproving Michigan's SIP.

Michigan's revised plan, as submitted on December 20, 2022, depended, in part, upon permits that had not yet been issued but would include limits and associated requirements for the United States Steel Corporation (U.S. Steel), EES Coke Battery (EES Coke), and Dearborn Industrial Generation (DIG) facilities that are no less stringent than those set forth in EPA's FIP, codified at 40 CFR 52.1189. On February 21, 2023, Michigan submitted a clarification letter committing to submit the necessary permits by April 30, 2024. On March 23, 2023 (88 FR 17488), EPA proposed to conditionally approve Michigan's plan, conditioned upon the issuance of and submission for incorporation into the SIP the applicable permits for the U.S. Steel, EES Coke, and DIG facilities. Also on March 23, 2023 (88 FR 17376), EPA issued an interim final determination to stay and defer sanctions in the Detroit SO₂ nonattainment area based on EPA's proposed conditional approval. In this final action, EPA is finalizing the determination that the conditions articulated in 40 CFR 52.31(d) have been met, thereby terminating the sanctions clocks resulting from EPA's March 19, 2021, partial disapproval of the prior SIP.

On December 14, 2023, the State submitted three applicable permits for the U.S. Steel, EES Coke, and DIG facilities. On April 2, 2024, the State submitted the final applicable permit for the DIG facility, along with a request that EPA approve its revised plan. On April 29, 2024, EPA issued a completeness letter, included in the docket for this action, determining that

Michigan's submittal had satisfied the completeness criteria set forth at 40 CFR part 51, appendix V and met the requirement for a SIP submittal that provides for expeditious attainment set forth in EPA's January 28, 2022, finding of failure to attain.

EPA published a notice of proposed rulemaking on October 3, 2024 (89 FR 80439), proposing to approve Michigan's revised SIP submission, which the State submitted to EPA on December 20, 2022, and supplemented on February 21, 2023, December 14, 2023, and April 2, 2024, for attaining the 2010 SO₂ NAAQS for the Detroit area and for meeting other nonattainment area planning requirements of CAA sections 110, 172, 179 and 192. EPA proposed approval of Michigan's demonstration that these requirements provide for attainment of the 2010 SO₂ NAAQS in Detroit. Finally, EPA proposed approval of the other applicable requirements for nonattainment areas, including requirements for RACM/RACT, RFP, and contingency measures. The proposal followed a previous action in which EPA approved emissions inventories for the Detroit area and nonattainment area NSR.

II. Public Comments.

EPA received one adverse comment and one partially adverse comment during the comment period on the proposed action. The adverse comments are summarized below along with EPA's responses.

Comment: The commenter expresses concern with the compliance timelines, particularly for the U.S. Steel Boilerhouse 2 stack construction, and urges EPA and Michigan to accelerate the

timelines.

Response: All compliance dates included in Michigan's plan have passed. The latest compliance date was for U.S. Steel Boilerhouse 2 on November 14, 2024, which allowed 90 days for the owner or operator to submit a construction permit application to the State of Michigan, as well as time for the State of Michigan to issue the permit, the owner or operator to send out requests for proposal and award a construction contract and procure materials, and for completion of construction. EES Coke, the current operator of U.S. Steel Boilerhouse 2, commenced operation of Boilerhouse 2 using the newly constructed stack and a continuous emissions monitoring system (CEMS) on October 25, 2024, ahead of the November 14, 2024, deadline. The notification of completion of installation of the Boilerhouse 2 stack is included in the docket for this action.

Comment: The commenter states that Michigan and EPA have significantly delayed SO₂ attainment in the Detroit area since the promulgation of the 2010 SO₂ NAAQS. As the FIP was promulgated in 2022 and new technology was not considered in Michigan's plan, the commenter contends that Michigan adopting the requirements set forth in EPA's FIP is insufficient to fulfill the RACM/RACT requirement. The commenter states that the RACM/RACT requirement is particularly important for SO₂, as SO₂ pollution is driven primarily by emissions from industrial facilities, unlike other pollutants such as ozone and particulate matter, and argues that Michigan and EPA have not

shown that the emission limits included in Michigan's plan continue to qualify as RACM/RACT. The commenter states that recent advancements in technology could result in additional SO₂ reductions. The commenter also states that Michigan has not shown that the requirements set forth in EPA's FIP will continue to result in attainment of the SO₂ NAAQS. As EPA's modeling relies on meteorological data from 2016-2020, the commenter contends that Michigan must update the modeling with more recent meteorological data to account for any changes. The commenter urges EPA to disapprove Michigan's SIP submission and require that Michigan resubmit with an updated control technology analysis and updated attainment modeling.

Additionally, the commenter contends that EPA approval of Michigan's plan would only address Michigan's requirement to submit an attainment plan following the 2013 nonattainment designation and would not address Michigan's requirement to submit a revised plan for the Detroit area following EPA's 2022 finding of failure to attain by the applicable attainment date. The commenter argues that under CAA section 179(d), the finding of failure to attain requires a SIP submission that addresses additional measures beyond the general nonattainment SIP requirements, "including all measures that can be feasibly implemented in the area in light of technological achievability, costs, and any non-air quality and other air quality-related health and environmental impacts." The commenter argues that such additional measures should include an updated analysis of

technologies that would reduce SO₂ emissions as well as an examination of whether there are additional RACM/RACT control requirements that should apply or other additional control measures that would further reduce SO₂ emissions. To fulfill its requirements under CAA section 179(d), the commenter suggests that Michigan consider additional control measures at the Carleton Farms Landfill and Carmeuse Lime, which the commenter states are among the top ten emitters of SO₂ in Wayne County. The commenter contends that five of the sources addressed in Michigan's plan are part of the Wayne County steel supply chain and that the plan must address the technological advances in steel production such as direct reduced iron and electric arc furnace technology, which would greatly reduce SO₂ and other pollutant emissions in the Detroit area. The commenter argues that the Cleveland-Cliffs Steel Corporation is transitioning one of its other facilities to cleaner steel production and that making the transition at this facility would result in strong benefits to the health and environment of surrounding communities with environmental justice concerns, create jobs, and help Michigan meet its carbon neutrality goals.

The commenter concludes that EPA should disapprove the nonattainment SIP.

Response: Section 172 (c) (1) of the CAA provides that nonattainment plans "shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from

existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." EPA has long defined RACT for SO₂ as that control technology which will achieve the NAAQS within statutory timeframes. See State Implementation Plans; General Preamble for the Implementation of Title I of the CAA Amendments of 1990; Proposed Rule, 57 FR 13498, 13547 (April 16, 1992) (General Preamble); see also, SO₂ Guideline Document, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, EPA-452/R-94-008, February 1994 (SO₂ Guideline), at 6-39. Since SO₂ RACT is already defined as the technology necessary to achieve the SO₂ NAAQS, control technology which failed to achieve the NAAQS would fail to be SO₂ RACT. EPA intends to continue defining RACT for SO₂ as that control technology which will achieve the NAAQS, as it has in numerous SIP actions since promulgating the 2010 SO₂ NAAQS. Here, the emission limits and other associated requirements in Michigan's plan provide for such NAAQS attainment, as demonstrated by the plan's modeling analysis. Consequently, under EPA's longstanding approach to SO₂ RACT, the CAA section 172(c)(1) RACM/RACT requirement is met. CAA section 172(c)(6) also requires plans to include enforceable emission limits and control measures as may be necessary or appropriate to provide for attainment. The emission limits and associated requirements included as part of Michigan's plan show

attainment of the 2010 SO₂ NAAQS of 75 parts per billion (ppb), because the modeling analysis shows a maximum concentration of 73.6 ppb. Thus, further controls are not necessary to satisfy the requirement for RACT.¹

EPA disagrees that updated modeling is required for Michigan's attainment plan. The commenter did not present any evidence or argument to suggest that the meteorological data EPA used in the FIP modeling analysis is no longer representative, and EPA notes that when comparing the wind roses of the Detroit Metropolitan Wayne County Airport's 2016-2020 wind data and the 2019-2023 wind data, the wind roses are very similar in wind direction frequency and wind speed classes.² There also have not been any major bug fixes to AERMET, the AERMOD preprocessor with which meteorological data is processed, since EPA's FIP modeling was completed. Moreover, the Carleton Farms Landfill that the commenter points to is located outside of the nonattainment area and EPA's modeling domain approximately 23 kilometers to the southwest of the Allen Park monitor. While EPA would not expect such long-range transport to impact receptors within the nonattainment area, any SO₂ emissions from the source would be captured in the background concentrations due to the prevailing southwest winds. Therefore, EPA would not expect any significant changes in SO₂ concentrations in the Detroit nonattainment area if Michigan were to complete an updated

¹ See SO₂ Guideline. See also EPA's 2014 SO₂ Nonattainment Guidance; General Preamble.

² A comparison of the wind roses of the Detroit Metropolitan Wayne County Airport's 2016-2020 and 2019-2023 wind data is included in the docket for this action.

modeling analysis.

EPA disagrees that approval of Michigan's SIP does not address Michigan's requirement to submit a revised plan for the Detroit area following EPA's January 28, 2022, finding of failure to attain by the applicable attainment date. EPA's 2014 SO₂ Nonattainment Guidance states that a revision required under CAA section 179 "is to achieve attainment of the 1-hour SO₂ NAAQS as expeditiously as practicable." Michigan's revised SIP, as submitted on December 20, 2022, and supplemented on February 21, 2023, December 14, 2023, and April 2, 2024, provides for attainment of the SO₂ NAAQS, and all compliance dates included in the plan have passed. Therefore, on April 29, 2024, EPA issued a finding of completeness, included in the docket for this action, determining that Michigan's plan satisfies the completeness criteria set forth at 40 CFR Part 51, appendix V and meets the requirement set forth in EPA's January 28, 2022, finding of failure to attain that Michigan submit a complete revision to its SIP that, among other elements, provides for expeditious attainment of the 2010 SO₂ NAAQS.

III. What Action is EPA Taking?

EPA is approving Michigan's revised SIP submission, which the State submitted to EPA on December 20, 2022, and supplemented on February 21, 2023, December 14, 2023, and April 2, 2024, for attaining the 2010 SO₂ NAAQS for the Detroit area and for meeting other nonattainment area planning requirements of CAA sections 110, 172, 179 and 192. This SO₂ attainment plan

includes Michigan's attainment demonstration for the Detroit area. The plan also addresses requirements for RFP, RACT/RACM, enforceable emission limits and control measures, and contingency measures. EPA previously concluded that Michigan has addressed the requirements for emissions inventories for the Detroit area and nonattainment area NSR. EPA is determining in this action that Michigan's Detroit SO₂ attainment plan meets applicable requirements of sections 110, 172, 179, and 192 of the CAA.

Michigan's Detroit SO₂ attainment plan is based on enforceable emission limits and associated requirements, which include the Carmeuse Lime emission limits specified in Permit to Install 193-14A, the DTE Trenton Channel emission limits specified in Permit to Install 125-11C, the U.S. Steel limits specified in Permit to Install 110-23 and Permit to Install 108-23, the EES Coke emission limits specified in Permit to Install 51-08C, the Cleveland-Cliffs Steel Corporation emission limits specified in Permit MI-ROP-A8640-2016a, and the DIG emission limits specified in Permit 253-02A and Permit to Install 109-23. The Carmeuse Lime and DTE Trenton Channel permits have already been incorporated into Michigan's SIP, so EPA is not re-incorporating them into 40 CFR part 52 here.

EPA is incorporating Permit to Install 110-23 and Permit to Install 108-23, governing U.S. Steel SO₂ emissions; Permit to Install 51-08C, governing EES Coke SO₂ emissions; Permit MI-ROP-A8640-2016a, governing Cleveland-Cliffs Steel Corporation SO₂

emissions; and Permit to Install 109-23 and the cover sheet, section 5.1d (SO₂ emission limit), and sections 5.2-5.10 (Special Conditions) of Permit 253-02A, governing DIG SO₂ emissions into Michigan's SIP in this action.

This approval terminates the sanctions clock started under CAA section 179 resulting from EPA's March 19, 2021, partial disapproval of the prior SIP.

IV. Incorporation by Reference.

In this rule, EPA is finalizing regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is finalizing the incorporation by reference of the Michigan Regulations described in section III of this preamble and set forth in the amendments to 40 CFR part 52 below. EPA has made, and will continue to make, these documents generally available through <https://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). Therefore, these materials have been approved by EPA for inclusion in the SIP, have been incorporated by reference by EPA into that plan, are fully federally enforceable under sections 110 and 113 of the CAA as of the effective date of the final rulemaking of EPA's approval, and will be incorporated by reference in the next update to the SIP compilation.³

³ 62 FR 27968 (May 22, 1997).

V. Statutory and Executive Order Reviews.

Under the CAA, 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 that reason, 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).

This action is subject to the Congressional Review Act, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the

purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

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: May 5, 2025.

Anne Vogel,
Regional Administrator, Region 5.

For the reasons stated in the preamble, title 40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

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

2. Amend § 52.1170:

a. In the table in paragraph (d) by adding in alphabetical order entries for "Cleveland-Cliffs Steel Corporation, Wayne County", "Dearborn Industrial Generation, LLC", "Dearborn Industrial Generation, LLC", "EES Coke Battery, LLC", "EES Coke Battery, LLC", and "United States Steel Corporation - Great Lakes Works"; and

b. In the table in paragraph (e), under the heading "Attainment Demonstrations" by adding an entry for "SO₂ (2010)" after the entry for "Carbon monoxide and 1-hour ozone attainment demonstrations and I/M program".

The additions read as follows:

§ 52.1170 Identification of plan.

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(d) * * *

EPA--APPROVED MICHIGAN SOURCE-SPECIFIC PROVISIONS

Name of source	Order number	State effective date	EPA Approval date	Comments
Cleveland-Cliffs Steel Corporation, Wayne County	MI-ROP-A8640-2016a	1/19/2017	[Insert date of publication in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	
* * *	* * *	* * *	* * *	
Dearborn	253-02A	9/25/2003	[Insert date of publication	Cover sheet,

Industrial Generation, LLC			in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	section 5.1d, and sections 5.2 through 5.10
Dearborn Industrial Generation, LLC	109-23	9/26/2023	[Insert date of publication in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	
* * * * *				
EES Coke Battery, LLC	51-08C	11/21/2014	[Insert date of publication in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	
EES Coke Battery, LLC	108-23	9/26/2023	[Insert date of publication in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	
* * * * *				
United States Steel Corporation - Great Lakes Works	110-23	9/26/2023	[Insert date of publication in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	
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(e) * * *

EPA--APPROVED MICHIGAN NONREGULATORY AND QUASI-REGULATORY PROVISIONS

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date	EPA Approval date	Comments
* * * * *				
Attainment Demonstrations				
* * * * *				
SO ₂ (2010)	Detroit area (Wayne County, part)	12/20/2022, 02/21/2023, 12/14/2023 and 04/2/2024	[Insert date of publication in the <i>Federal Register</i>], 90 FR [Insert <i>Federal Register</i> page where the document begins]	
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