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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52 and 81

[EPA-R04-OAR-2026-0034; FRL-13499-01-R4]

Air Plan Approval and Air Quality Designation; TN; Attainment Plan and Redesignation of the Sullivan County Nonattainment Area for the 2010 1-Hour Primary SO_2 NAAQS

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA or Agency) is proposing to approve the State of Tennessee's attainment plan for the Sullivan County Nonattainment Area (Sullivan County Area or Area) for the 2010 Sulfur Dioxide (SO_2) National Ambient Air Quality Standards (NAAQS). Additionally, the EPA is proposing to determine that the Area has attained the 2010 SO_2 NAAQS and to approve Tennessee's maintenance plan for continued attainment. With these approvals, the EPA is proposing to approve Tennessee's comprehensive source-specific SO_2 permitted limits for two facilities in the Area, other control measures, and provisions for Reasonably Available Control Measures (RACM) and Reasonably Available Control Technology (RACT), reasonable further progress (RFP), a modeling demonstration of SO_2 attainment and maintenance, and to approve Tennessee's request to redesignate the Area from nonattainment to attainment of the 2010 SO_2 NAAQS. The EPA is taking these actions in accordance with the Clean Air Act (CAA or Act).

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-R04-OAR-2026-0034 at *regulations.gov*. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information you

consider to be Confidential Business Information (CBI) 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. The 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, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets*.

FOR FURTHER INFORMATION CONTACT: Pearlene Williams-Miles, Multi-Air Pollutant Coordination Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-9144. Ms. Williams-Miles can also be reached via electronic mail at *williamsmiles.pearlene@epa.gov*.

SUPPLEMENTARY INFORMATION: The EPA uses multiple abbreviations and terms in this NPRM. While this list may not be exhaustive, for ease of reading and for reference purposes, the EPA defines the following terms and acronyms here:

AQS – Air Quality System
BART – Best Available Retrofit Technology
CAA – Clean Air Act
CBI – Confidential Business Information
CEMS – Continuous Emission Monitoring Systems
CEV – Critical Emission Value
CFR – Code of Federal Regulations
DSI – Dry Sorbent Injection
DV – Design Value
EPA – Environmental Protection Agency
FFA – Finding of Failure to Attain
FFS – Finding of Failure to Submit
FR – Federal Register
HWI – Hazardous Waste Incinerator
LTA – Longer Term Average
MMBtu – Million British Thermal Units
MOVES – EPA's Motor Vehicle Emission Simulator
MRR – Monitoring, Recordkeeping, and Reporting
NAAQS – National Ambient Air Quality Standard
NEI – National Emissions Inventory

NNSR – Nonattainment New Source Review
NPRM – Notice of Proposed Rulemaking
ppb – Parts per billion
ppm – Parts per million
PES – Permitted Emission Source
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit
RACM – Reasonably Available Control Measures
RACT – Reasonably Available Control Technology
RFP – Reasonable Further Progress
SIP – State Implementation Plan
SO_2 – Sulfur Dioxide
TDEC – Tennessee Department of Environment and Conservation
TSD – Technical Support Document

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I. Executive Summary

A. What Action is the EPA Taking?

The Environmental Protection Agency (EPA, or Agency) is proposing to approve Tennessee's remaining required State Implementation Plan (SIP) elements which provide for attainment of the 2010 1-hour sulfur dioxide (SO_2) National Ambient Air Quality Standards (NAAQS). Specifically, the EPA is proposing to approve the following elements of the Tennessee Department of Environment and Conservation (TDEC)'s February 9, 2023, nonattainment SIP submission: (1) Reasonably Available Control Technology (RACT) and

Reasonably Available Control Measures (RACM) determination; (2) reasonable further progress (RFP); (3) the attainment demonstration; (4) permanent and enforceable emission limits and other control measures that provide for attainment of the NAAQS;[1] and (5) contingency measures.

The EPA is also proposing to take the following actions addressing the TDEC's June 18, 2025, redesignation request and SIP submission,[2] as supplemented on January 27, 2026, and May 20, 2026, and clarified on August 20, 2026: (1) to approve Tennessee's plan for maintaining the 2010 SO_2 NAAQS (maintenance plan) in the Sullivan County, Tennessee, SO_2 nonattainment area (or Area), including provisions for RACM and RACT, source-specific SO_2 permitted limits, other control measures and associated monitoring, recordkeeping, and reporting (MRR) parameters for two facilities in the Area – Eastman Chemical (Eastman) and Primester;[3] (2) to determine that the Sullivan County Area has attained the 2010 SO_2 NAAQS as a result of compliance with permitted limits and control measures for Eastman and Primester; and (3) to redesignate the Sullivan County Area to attainment for the 2010 SO_2 NAAQS. These proposed actions are summarized below and are described in greater detail throughout this Notice of Proposed Rulemaking (NPRM).

The EPA is proposing to approve Tennessee's maintenance plan for the Sullivan County Area as meeting the requirements of section 175A of the Act and incorporate it into the SIP. The maintenance plan is designed to keep the Sullivan County Area in attainment of the 2010 SO_2 NAAQS through 2037. The June 18, 2025, submission also includes source-specific SO_2 permitted limits for Eastman and Primester, other control measures, and provisions for RACM and RACT which are being proposed for approval and incorporation into the SIP.

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[1] Where noted, the emission limits and control measures that are also submitted in the June 18, 2025, submission include updates to the emission limits or associated monitoring, recordkeeping, or reporting, and the most up-to-date source-specific permit terms are being proposed to be incorporated into the SIP.

[2] TDEC's submission providing the redesignation request and maintenance plan is dated June 11, 2025, under a cover letter dated June 17, 2025. The EPA received the final package on June 18, 2025, thus this submission is identified as TDEC's June 18, 2025, submission throughout this proposed rulemaking.

[3] Primester is a nearby cellulose manufacturing facility in the Sullivan County Area southwest of Eastman. Primester operates under the parent company, Cerdia.

The EPA is also proposing to determine that the Sullivan County Area has met the requirements for redesignation under CAA section 107(d)(3)(E). Accordingly, the Agency is proposing to approve Tennessee's request to change the legal designation of Sullivan County as found at title 40 of the Code of Federal Regulations (CFR) part 81, from nonattainment to attainment for the 2010 SO_2 NAAQS.

B. What is the Legal Authority and What are the Requirements?

CAA section 110 includes relevant statutory provisions for SIP requirements, which States develop and submit for EPA approval. Under CAA section 110(k)(3), the EPA shall approve a SIP submission, in whole or in part, if the submission meets all applicable requirements of the CAA. CAA section 172 sets forth the general requirements for nonattainment plans. CAA section 172(c) contains nine requirements for nonattainment plan provisions.

CAA section 107(d)(3)(D) establishes the process for redesignations. Under that provision, the EPA must approve or deny a State's redesignation request and may redesignate a nonattainment area to attainment only after determining that the five criteria set forth in CAA section 107(d)(3)(E) have been satisfied. CAA section 175A(a) requires each State submits a request under CAA section 107(d) for redesignation of a nonattainment area to attainment to submit a SIP revision providing for maintenance of the relevant NAAQS for at least 10 years after redesignation. Pursuant to CAA section 107(d)(3)(E)(iv), the EPA cannot redesignate a nonattainment area to attainment unless it has fully approved a maintenance plan for the area as meeting the requirements of CAA section 175A.

II. Background

Under CAA section 109, the EPA has established primary and secondary NAAQS for certain air pollutants (referred to as "criteria pollutants") and conducts periodic reviews of the NAAQS to determine whether they should be revised or whether new NAAQS should be established. The primary NAAQS represent ambient air quality standards, the attainment and

maintenance of which the EPA has determined are requisite to protect the public health with an adequate margin of safety. The secondary NAAQS represent ambient air quality standards, the attainment and maintenance of which the EPA has determined are requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air.

Under the CAA, the EPA must establish NAAQS for criteria pollutants, including SO_2. SO_2 is released into the atmosphere primarily through the burning of fossil fuels for power generation and certain industrial processes. On June 22, 2010, the EPA promulgated the revised primary SO_2 NAAQS, establishing a new 1-hour primary standard of 75 parts per billion (ppb).[4] Under the EPA's regulations at 40 CFR part 50, the 2010 SO_2 NAAQS is met at a monitoring site when the design value[5] is less than or equal to 75 ppb (based on the rounding convention in 40 CFR part 50, appendix T).[6] Ambient air quality monitoring data for the three-year period must meet a data completeness requirement. A year meets data completeness requirements when all four quarters are complete, and a quarter is complete when at least 75 percent of the sampling days in the quarter have complete data. A sampling day has complete data if 75 percent of the hourly concentration values, including State-flagged data affected by exceptional events that have been approved for exclusion by the Administrator, are reported.[7]

Upon promulgation of a new or revised NAAQS, CAA section 107(d) requires the EPA to designate as nonattainment any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS.[8] Effective October 4, 2013, the EPA designated the Sullivan County Area as nonattainment based on a 2009 through 2011 three-year design value of 196 ppb from an air quality SO_2 monitor operating at the time of designation.[9,10]

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[4] *See* 75 FR 35520 (June 22, 2010).
[5] For the 2010 SO_2 NAAQS, the design value is calculated as the three-year average of the annual 99th percentile of daily maximum 1-hour average concentrations of SO_2.
[6] *See* 40 CFR 50.17(b).
[7] *See* 40 CFR part 50, Appendix T, section 3.1(b).
[8] *See* CAA section 107(d)(1)(A)(i).
[9] *See* 78 FR 47191 (Aug. 5, 2013).
[10] Air Quality System (AQS) Site ID: 47-163-0007.

The Sullivan County Area is comprised of a circle with a three-kilometer (km) radius having its center at coordinates 36.5186 N; 82.5350 W, at the B-253 powerhouse at Eastman in Kingsport, Tennessee, which encompasses the SO_2 monitor that was operating at the time of designation.[11] Eastman produces organic acids, aldehydes, esters, polymers, cellulose esters, specialty plastics, and acetate fibers, and is the primary SO_2-emitting point source located within the Sullivan County Area. The facility also generates process steam and electricity for most of its operations, including hazardous waste combustion and wastewater treatment. Eastman SO_2 emission sources include three powerhouses and one incinerator complex as defined below, and several smaller emitters:

- Powerhouse B-83 consists of seven coal-fired boilers, denoted as B-18–B-24, which provide steam for facility operations.
- Powerhouse B-253 consists of five coal-fired boilers, B-25–B-29, which provide steam for facility operations.
- Powerhouse B-325 consists of two coal-fired boilers, B-30 and B-31, which provide steam for facility operations.
- Incinerator Complex B-248 consists of three hazardous waste incinerators (HWIs): one liquid chemical waste incinerator, B-248-2 (Vent A), and two rotary kilns that can burn solid or liquid chemical waste, B-248-1 (Vents D and E).

The other SO_2 source within the nonattainment area is Primester. The Primester facility consists of one main SO_2 emitter—a cellulose scrap recovery process B-441-2 (Vent C).

On March 18, 2016, the EPA published a finding of failure to submit (FFS) a complete SIP pursuant to CAA section 110(k)(1)(B)because Tennessee had failed to submit the SO_2 nonattainment SIP by the submission deadline of April 4, 2015.[12] Tennessee was required to address the Sullivan County Area's nonattainment area planning obligations by this deadline to

[11] For exact descriptions of the Sullivan County Area, refer to 40 CFR 81.343.
[12] *See* 81 FR 14736 (Mar. 18, 2016).

demonstrate it would attain the NAAQS no later than the October 4, 2018, statutory attainment date.[13] This finding initiated a deadline of October 18, 2017, under CAA section 179(a), for the imposition of offset and highway funding sanctions unless Tennessee submitted a complete SIP and the EPA deemed it complete by that date. Additionally, under CAA section 110(c), the finding triggered a requirement that the EPA promulgate a Federal Implementation Plan within two years of the finding's effective date (*i.e.,* April 18, 2018) unless Tennessee submitted, and the EPA approved, the required SIP submission by that date. On May 12, 2017, Tennessee submitted a nonattainment SIP with a modeled attainment demonstration (first nonattainment SIP).[14] On October 10, 2017, the EPA determined that Tennessee's May 12, 2017, nonattainment SIP was complete pursuant to 40 CFR part 51, appendix V; thus, the CAA section 179(a) sanctions were not imposed.

The EPA proposed to approve Tennessee's May 12, 2017, nonattainment SIP for the Sullivan County Area on June 29, 2018, and received adverse comments.[15,16] Subsequently, in 2019, ambient monitors in the Area recorded exceedances of the 2010 SO_2, and in response, Eastman developed and implemented operational changes as necessary to prevent future monitored violations.

The EPA was subsequently sued by the Center for Biological Diversity, the Center for Environmental Health, and the Sierra Club[17] for not determining whether the Sullivan County Area attained the 2010 SO_2 standard by the October 4, 2018, statutory attainment date.[18] On June

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[13] *See Id*. The FFS, effective April 18, 2016, found that 16 nonattainment areas in 11 States, which included Sullivan County, Tennessee, had failed to submit the required SO_2 nonattainment SIPs.
[14] Tennessee's May 12, 2017, nonattainment SIP was submitted with a cover letter dated May 11, 2017. In Tennessee's redesignation request, TDEC refers to this nonattainment SIP with the May 11, 2017, date.
[15] *See* 83 FR 30609 (June 29, 2018).
[16] The EPA finalized only the portions of the attainment plan that consisted of the emissions inventory and nonattainment new source review requirements of 172(c)(3) and (5), respectively, for which the Agency did not receive adverse comments in the June 29, 2018, NPRM. Tennessee withdrew the remaining portions of the May 12, 2017, attainment demonstration from EPA consideration on April 29, 2025, in a letter dated April 28, 2025, thus the EPA has no further obligation to act on the May 12, 2017, attainment demonstration. This letter is included in the docket for this action.
[17] Center for Biological Diversity et al. v. Regan; Case No. 3:20-cv-05436-EMC (N.D. Cal.).
[18] Under CAA section 179(c), within six months of the attainment date, the EPA is required to determine based on the area's air quality as of the attainment date, whether an area attained by the attainment date. If the EPA

25, 2021, the EPA entered into a consent decree requiring the Agency to finalize by March 31, 2022, a determination as to whether the Sullivan County Area had attained the 1-hour SO_2 standard by the October 4, 2018, attainment date.

For the Area to have attained the 2010 SO_2 NAAQS by the October 4, 2018, attainment date, the 1-hour SO_2 design value needed to be equal to or less than 75 ppb for the 1-hour standard based upon an available quality-assured and certified air quality monitoring data from January 2015 through December 2017 at each eligible monitoring site. On April 5, 2022, the EPA finalized a finding of failure to attain (FFA) for the Sullivan County Area, effective May 5, 2022, in which the Agency determined that the Area did not attain the 1-hour SO_2 standard by October 4, 2018.[19]

The EPA's FFA triggered a requirement pursuant to CAA section 179(d) for Tennessee to submit to the EPA a revised nonattainment SIP for the Sullivan County Area, within one year of the FFA publication in the *Federal Register* (*i.e.,* by April 5, 2023), that provided for attainment of the 2010 SO_2 standard as expeditiously as practicable but no later than five years from the FFA's *Federal Register* publication date (*i.e.,* April 5, 2027).

In response to the EPA's April 5, 2022, FFA, TDEC submitted a revised nonattainment SIP (second nonattainment SIP) on February 9, 2023, which provided for modeled attainment of the 2010 SO_2 NAAQS based on enforceable control measures for the three coal-fired boilers at Eastman established in SIP operating permit No. 080222. Additionally, the February 9, 2023, nonattainment SIP included existing SO_2 emission limits for other Eastman sources and Primester as measures to be adopted into the SIP.

On June 18, 2025, TDEC submitted a request to the EPA to redesignate the Sullivan County Area from nonattainment to attainment, with an accompanying SIP revision consisting of a maintenance plan for the Area. The submission also included source-specific SO_2 permitted

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determines that an area failed to attain by the attainment date, the Agency is required to publish the determination in the *Federal Register* pursuant to CAA section 179(c)(2).

[19] *See* 87 FR 19645 (Apr. 5, 2022).

limits for two facilities in the Area, other control measures, and provisions for RACM and RACT that are being proposed for approval and incorporation into the SIP. Tennessee supplemented the June 18, 2025, submission on January 27, 2026 and May 20, 2026, providing corrections and clarifications to portions of the SIP narrative and attachments and further clarified its submission via email on August 20, 2026. The EPA is proposing to approve elements of Tennessee's February 9, 2023, second nonattainment SIP and Tennessee's June 18, 2025, submission, as supplemented on January 27, 2026 and May 20, 2026, and clarified on August 20, 2026, as discussed in further detail below.

III. Nonattainment Planning and Redesignation

A. Requirements for SO_2 Nonattainment Areas

All States must submit SIPs or SIP revisions to show they have the basic air quality management program components in place to implement a new or revised NAAQS, as specified in CAA section 110(a)(1). These plans are called "infrastructure SIPs." For areas designated nonattainment for a specific NAAQS, States must also submit "nonattainment plans" that outline strategies and emissions control measures and demonstrate how the area will improve in air quality as well as attain and maintain the NAAQS.[20]

Under CAA sections 110(a)(1) and (2), States are required to submit "infrastructure SIPs" to ensure that they have the basic air quality management program components in place to provide for implementation, maintenance, and enforcement of the NAAQS, including the 2010 1-hour SO_2 NAAQS. The EPA approved Tennessee's infrastructure SIP for the 2010 1-hour SO_2 NAAQS.[21] For the 2010 1-hour SO_2 NAAQS, Tennessee's infrastructure SIP addressed CAA sections 110(a)(2)(A) through (H) and (J) through (M), except 110(a)(2)(C) to the extent that subsection refers to a permit program as required in part D, title I of the CAA, *i.e.*, nonattainment new source review (NNSR). CAA sections 110(a)(2)(I) and (K), which specifically address the

[20] *See* CAA section 172(c).
[21] *See* 81 FR 85410 (Nov. 28, 2016), 83 FR 48237 (Sept. 24, 2018), and 88 FR 53800 (Aug. 9, 2023).

nonattainment plan provisions, are addressed in section V.B of this NPRM.

CAA section 110(l) contains two main provisions applicable to SIPs, including nonattainment plans. First, CAA section 110(l) requires that each SIP revision submitted by a State must be adopted by a State after reasonable notice and public hearing. Second, under CAA section 110(l), the EPA may not approve a SIP if it would interfere with any applicable requirement concerning NAAQS attainment, reasonable further progress toward attainment, or any other applicable requirement of the CAA. For the reasons discussed in section V.D of this NPRM, the EPA is proposing that Tennessee has met these requirements.

Nonattainment plans must meet the applicable requirements of the CAA, specifically CAA title I, section 110 and part D. To address plan requirements for nonattainment areas, there are two elements of CAA section 110(a)(2) pertaining to part D in title I of the CAA that are outside the scope of infrastructure SIPs. The first is CAA section 110(a)(2)(C) to the extent it refers to NNSR under part D of title I of the CAA, and the second is CAA section 110(a)(2)(I) in its entirety.[22] For the first of these two elements, the EPA approved Tennessee's SIP revisions comprising the State's rules for NNSR most recently on July 30, 2012.[23] For the second of these two elements, the EPA's "SIP Lean Toolkit for Collaboration Between EPA and Air Agencies," December 6, 2019 (2019 SIP Lean Toolkit)[24] identifies CAA sections 172, 191, and 192 as the applicable planning requirements specific to SO_2 nonattainment areas.

In areas designated as nonattainment for a particular NAAQS, CAA section 172 includes nonattainment plan provisions that require States to submit SIPs that demonstrate the affected area will attain the relevant NAAQS as expeditiously as practicable, but no later than the applicable statutory attainment date. To support such an attainment demonstration for SO_2

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[22] *See Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)*; EPA, Sep. 13, 2013, can be found at *https://www.epa.gov/sites/default/files/2015-12/documents/guidance_on_infrastructure_sip_elements_multipollutant_final_sept_2013.pdf* at p. 4, available in the docket for this action.

[23] *See* 77 FR 44481 (July 30, 2012).

[24] *https://www.epa.gov/sites/default/files/2019-12/documents/sip_lean_toolkit_for_collaboration_between_epa_and_air_agencies.pdf* at pp. 22–23.

nonattainment plans, the EPA's 2019 SIP Lean Toolkit specifies the applicable provisions of the CAA as sections 172(a)(2), (b), (c)(1) through (c)(6), and (c)(9). As discussed in section V.B of this NPRM, the EPA is proposing to find that Tennessee's 2023 second nonattainment plan meets each of these applicable provisions of CAA section 172.

CAA section 191(a) directs States to submit SIPs to the EPA for areas designated as nonattainment with respect to the primary NAAQS for sulfur oxides, nitrogen dioxide, or lead within 18 months of the effective date of the designation. As noted above, on March 18, 2016, the EPA determined that Tennessee failed to submit a complete SIP within 18 months of the effective designation of the Sullivan County Area to nonattainment. TDEC initially submitted a May 12, 2017, attainment SIP following the FFS. CAA section 192(a) requires that SIPs for nonattainment areas must provide for attainment of the relevant NAAQS as expeditiously as practicable, but no later than five years from the effective date of the nonattainment designation. However, on April 5, 2022, the EPA determined that the State failed to attain by the applicable attainment date, triggering a requirement under CAA section 179(d) to submit a SIP revision by April 5, 2023 including "such additional measures as the Administrator may reasonably prescribe, including all measures that can be feasibly implemented in the area in light of technological achievability, costs, and any nonair quality and other air quality-related health and environmental impacts" and which would provide for attainment by April 5, 2027.[25] As discussed in section V.B of this NPRM, Tennessee's 2023 second nonattainment SIP includes an attainment demonstration for the Sullivan County Nonattainment Area that demonstrated attainment of the 2010 1-hour SO_2 NAAQS as expeditiously as practicable, by the date of the June 18, 2025, redesignation request and maintenance plan, and in less than five years from the Apri 5, 2022, publication date.

B. Criteria for Redesignation

The CAA provides the requirements for redesignating a nonattainment area to attainment.

[25] The EPA did not prescribe additional measures under CAA section 179(d)(2) at the time of the finding.

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

IV. Tennessee's Submissions

Tennessee's February 9, 2023, second nonattainment SIP includes: (1) RACT and RACM determinations; (2) reasonable further progress (RFP); (3) a base year nonattainment inventory; (4) a projected attainment year inventory; (5) the attainment demonstration; (6) permanent and enforceable emission limits and other control measures that provide for attainment of the NAAQS; and (7) contingency measures. Tennessee's June 18, 2025, submission includes a request for the EPA to redesignate the Sullivan County Area to attainment for the 2010 SO_2 NAAQS and to approve the associated SIP revision containing a maintenance plan for the Area. The submission also requests that the EPA adopt into the SIP source-specific SO_2 permit limits, other control measures, and associated MRR compliance parameters for Eastman and Primester, as well as RACT and RACM provisions for the Area.[26]

As noted previously, on January 27, 2026 and May 20, 2026, TDEC transmitted to the EPA supplements to the June 18, 2025, submission that make corrections and clarifications to portions of the SIP narrative and attachments, including to SIP operating permit No. 082237 in Attachment J1 of the June 18, 2025, submission and further clarified its submission in an email

[26] *See* section V.A below.

on August 20, 2026.

The January 27, 2026, supplement revises the Description of Monitoring Protocol (Monitoring Protocol) for Eastman B-248 HWIs at Appendix 5 of SIP operating permit No. 082237 to establish a practicably enforceable process to obtain monitoring values and demonstrate compliance with the modeled SO_2 emission limit. The revised Monitoring Protocol was established in Appendix 1 of a new SIP operating permit No. 083740 that TDEC issued on January 14, 2026.[27] See section V.A.5 below for additional discussion of the parametric monitoring changes established in SIP operating permit No. 083740 for Eastman's HWI.[28]

On May 20, 2026, Tennessee submitted a second supplement correcting portions of the State's 2025 redesignation request and maintenance plan narrative, attachments, and SIP operating permit No. 082237.[29] The following discussion summarizes the corrections and clarifications to TDEC's SIP narrative and attachments.

The May 20, 2026, supplement adds a detailed discussion and Table 4: SO_2 Emissions from Batch Chemical Manufacturing **(**MSOP-25, Permitted Emission Source (PES) OC-BATCH**)** in Section 2.2 (Air Quality Modeling) of the redesignation request and maintenance plan submission that explains the State's rationale to consider Eastman's batch specialty chemical operations as an intermittent emissions source and exclude it from the redesignation SIP modeling analysis.

The supplement narrative includes Table 2, which provides changes to Table 2-7 (Summary of Model Results) of the redesignation request and maintenance plan submission and lists the maximum modeled concentration for each air dispersion model run. The original Table

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[27] *See* the January 27, 2026, supplement in the docket for this NPRM.

[28] Parametric monitoring is a common method to ensure continuous compliance with an emissions limit in lieu of continuous direct sampling/monitoring of the subject pollutant, in this case SO_2. This is a common regulatory approach used in various federal regulations such as the Maximum Achievable Control Technology and New Source Performance Standards. In parametric monitoring, certain performance parameters that are critical to the proper operation of the emission control device are continuously monitored. These parameters can include scrubber recirculation flow, pH, and pressure drop. The compliance parameter minimum levels are typically established during emission source testing to ensure operating at those parameter levels meets the underlying emission control requirement.

[29] *See* SIP permit #083740 in TDEC's January 27, 2026, supplement in the docket for this NPRM.

2-7 in the June 18, 2025, submission did not fully summarize the results of all the model runs performed by Tennessee. The supplement replaces Table 2-7 with a comprehensive list of all modeling run results in Table 2: Summary of Model Results (Updated Version of Table 2-7 of the June 18, 2025, submission) and Table 3: Description of Critical Model Runs. Table 2 also includes the latitude, longitude, and distance to the nearest monitor for all of Tennessee's model runs.

The supplement provides a longer term averaging (LTA) discussion for the B-351 coal-gasification flare, including a summary of the actual flare emissions for 2019 through 2021 listed in Table 1. The new discussion explains the State's procedures and rationale for calculating the 30-day rolling average 14.6 pounds per hour (lb/hr) SO_2 emission limit that TDEC requested the EPA adopt into the SIP as a permanent control measure in the June 18, 2025, submission (*see* section 4.0). Attachment D of the supplement includes a revised spreadsheet of hourly flare emissions data that shows the frequency over the critical emission value (16.28 lb/hr) for calendar years 2019 and 2020.

Table 4-4 of the June 18, 2025, submission and TDEC's August 20, 2026, email clarify the list of the specific emission limits Tennessee requests that the EPA adopt into the SIP as permanent emission reduction measures. The supplement corrects the numerical SO_2 emission limit for the B-351 coal gasification flare from 16.28 lb/hr to 14.6 lb/hr in section 4 of the narrative. The revised Table 4-4 in Attachment C of the supplement replaces the original Table 4-4 in the June 18, 2025, submission.[30] TDEC also replaces the numerical limit in SIP permit No. 082237 (*see* discussion below).

The supplement also corrects an entry in the June 18, 2025, submission for Table 4-3 (Calculation of 30-Day Rolling Average Emission Limit, Coal Gasification Flare). Although Table 4-3 was referenced in the narrative table of contents during the drafting process, the flare discussion was moved to Attachment I prior to public participation and Board approval. As a

[30] *See* a redline version of Table 4-4 in Attachment C of TDEC's May 20, 2026, supplement.

result, Table 4-3 was missing from the June 18, 2025, submission, and the supplement includes this Table as Table 11-2 of Attachment II: Modeling of Flare Actual Emissions.

The supplement also revises the contingency measure trigger language in section 6 of the June 18, 2025, submission narrative to add the phrase "any calendar year" before the phrase "during the maintenance period" to clarify a full system audit is required if a monitor in the maintenance area records four exceedances in any calendar year within the maintenance period. The supplement also corrects the citation to CAA section 172(c)(9) by replacing it with a citation to section 175A in section 6 of the narrative.

The following discussion summarizes corrections and clarifications to SIP operating permit No. 082237 (Amendment #1) in TDEC's May 20, 2026, supplement to the June 18, 2025, submission. The revisions to the contingency measure language including the CAA section 175A citation in section 6.0 of the narrative discussed above is also updated in the SIP permit contingency measure at Condition G4. Condition S3-1 is revised to add the 14.6 lb/hr numerical SO_2 emission limit for the B-351 coal gasification flare at new subparagraph B (*see* section V.A.6 of this NPRM) and clarify that Conditions S3-1 A and C, along with Compliance Method B, are not requested for incorporation into the SIP. Appendix 3 of the permit is revised to clarify the Monitoring Protocol and compliance method to calculate the SO_2 emissions for the B-351 coal gasification flare. Finally, the supplement clarifies that SIP permit No. 083740 supersedes the revised permit No. 082237 for the B-248 HWIs.

V. The EPA's Analysis of Tennessee's Submissions

In accordance with the CAA, the EPA is proposing to approve elements of Tennessee's February 9, 2023, second nonattainment SIP. The EPA is also proposing to approve Tennessee's June 18, 2025, submission, as supplemented on January 27, 2026, and May 20, 2026, and as clarified on August 20, 2026, for the 2010 SO_2 NAAQS. In this section of the NPRM, the EPA analyzes the source-specific SO_2 emission limits, other control measures, and MRR compliance parameters the State requested that the EPA approve into the SIP from the February 9, 2023,

submission and June 18, 2025, submission, as supplemented, and the consistency of the June 18, 2025, submission, as supplemented, with the five redesignation criteria provided under CAA section 107(d)(3)(E) (section V.C).

A. Source-Specific SO_2 Emission Limits and Other Control Measures

TDEC's February 9, 2023, submission requests that the EPA incorporate measures into the SIP that provide for attainment, thereby making them permanent and enforceable. TDEC's June 18, 2025, submission requests that the EPA redesignate the Sullivan County Area from nonattainment to attainment based, in part, on the implementation of new enforceable SO_2 emission reducing control measures and existing limits for the primary SO_2 sources in the Area. The June 18, 2025, submission also resubmits the SO_2 emission reducing control measures and existing emission limits from the February 9, 2023, submission, in some cases with updated emission limits or revised associated MRR. Additionally, some of these control measures and limits are already incorporated into Tennessee's SIP.[31] For the remaining control measures and limits relied upon for demonstrating attainment and meeting the nonattainment SIP requirements, Tennessee's February 9, 2023, submission requests that the EPA make these enforceable SO_2 emission limits, other control measures, and MRR compliance parameters permanent via incorporation into the SIP for Eastman's coal-fired boilers and other significant SO_2-emitting sources at Eastman established in SIP operating permit No. 080222 and prevention of significant deterioration (PSD) permits Nos. 955272F and 966859F, and for the nearby source, Primester, in title V operating permit No. 574994. Tennessee's June 18, 2025, submission requests that the EPA incorporate the SO_2 emission limits, other control measures, and MRR compliance parameters into the SIP for Eastman's coal-fired boilers and other significant SO_2 emitting sources at Eastman that have significantly reduced SO_2 emissions in the Sullivan County Area, resulting in monitored and modeled attainment of the 2010 SO_2 standard, as well as existing emission limits for other process emission sources at Eastman and for the nearby source,

[31] *See* Table 1A, below, for a list of permanent and enforceable control measures incorporated into the SIP.

Primester. Specifically, the June 18, 2025, submission, as supplemented, requests that the EPA incorporate emission limits and control measures and associated MRR for: Eastman's SIP operating permit No. 082237 (Amendment #1), which supersedes SIP operating permit No. 080222; Eastman's SIP operating permit No. 083740, which supersedes SIP operating permit No. 082237 for specific emission units; Eastman's PSD construction permits Nos. 955272F and 966859F; and Primester's title V operating permit No. 574994.[32]

As discussed above in section II, Eastman is the primary SO_2 emitting point source located within the Sullivan County Area. The enforceable control measures are responsible for reducing SO_2 emissions at Eastman by approximately 85 percent and a significant decrease in ambient SO_2 monitored concentrations within the Area to support the State's request to redesignate the area based on permanent and enforceable measures. Additionally, the SO_2 emissions from Primester were assessed for any potential contribution to monitored and modeled violations of the 1-hour standard.

Section 4 of the February 9, 2023, submission and Section 4 of the June 18, 2025, submission discuss the enforceable control measures implemented at Eastman's coal-fired boilers, HWIs, coal gasification flares, and other existing emitting sources, and at Primester. Table 4-4 in the submission lists the specific numerical SO_2 emission limits and/or qualitative control measures; the enforceable permits authorizing the measures and the associated conditions for each permit and source emission unit; and the MRR compliance parameters for sources at Eastman and Primester for incorporation into the SIP.[33, 34] As discussed in this section of the NPRM, the EPA incorporated some of these permit conditions into the SIP after June 18, 2025.

On January 27, 2026, Tennessee provided a supplement to the June 18, 2025, submission. This supplement contains operating permit No. 083740, which supersedes operating permit No.

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[32] *See* Table 1B, below, for a list of control measures proposed to be incorporated into the SIP.

[33] A copy of each enforceable permit initially requested for incorporation into the SIP in the February 9, 2023, submission is provided in Attachment I of that submission.

[34] A copy of each enforceable permit is provided in Attachment J of the June 18, 2025, submission, Attachment A of the January 27, 2026, supplement, Attachments A and B of the May 20, 2026, supplement, or Attachment I of the February 9, 2023, submission included in the docket of this NPRM.

082237 in the June 18, 2025, submission only for Eastman's HWIs B-248-1 and 248-2 and modifies the Monitoring Protocol and compliance methodology for these units at Appendix 1 of the permit. On May 20, 2026, Tennessee submitted an additional supplement to the June 18, 2025, submission. This supplement contains modifications to the contingency measure trigger language and CAA citation in the June 18, 2025, submission narrative and contains operating permit No. 082237 (Amendment #1), which modifies the contingency measure provision at Condition G4, corrects the numerical emission limit for the B-351-5 coal gasification flares at Condition S3-1, and updates the Monitoring Protocol in Appendix 3 to clarify the frequency of emission calculations.

Tennessee's June 18, 2025, submission relies on emission reduction control measures and enforceable emission limits for primary SO_2 emitting sources at Eastman (B-253, B-83, B-325, and B-248 and other process units discussed below) and nearby sources. The submission includes modeling that demonstrates the Sullivan County Area has attained and will maintain the SO_2 NAAQS through compliance with these multi-unit permit limits and control measures. The modeling demonstration included in the June 18, 2025, submission is the same modeling included in the February 9, 2023, nonattainment SIP submission. Additionally, the June 18, 2025, submission includes operating permit No. 082237, which includes emission limits, other control measures, and compliance parameters for the Eastman primary SO_2 sources first established in SIP operating permit No. 080222 (issued March 1, 2023) included in Tennessee's February 9, 2023, nonattainment SIP submission for the Sullivan County Area.[35]

On December 11, 2025, the EPA approved the State's February 23, 2022, regional haze SIP for the second planning period and incorporated into Tennessee's SIP certain conditions from SIP operating permit No. 080222 and title V operating permit No. 576501 submitted with

[35] SIP operating permit No. 080222 establishes SO_2 control measures and MRR parameters to demonstrate modeled attainment of the Sullivan County Area by the 2027 attainment date. *See* below.

Tennessee's February 9, 2023, nonattainment SIP submission.[36, 37, 38] Specifically, the EPA approved the following SO_2 control measures and compliance parameters for Eastman's coal-fired boilers B-83 and B-325 from SIP operating permit No. 080222 and title V operating permit No. 576501:

- From permit No. 080222: the portion of Condition 1 containing the 30-day rolling average SO_2 emission limit of 1,248 lb/hr for Eastman Boilers 18 through 24, 30, and 31; all of Condition 2; the portion of Condition 3 containing compliance parameters for the 1,248 lb/hr SO_2 limit; and Attachment A.
- From permit No. 576501: all of Conditions E3-8 and E3-9, which include the 317 lb/hr and 293 lb/hr individual SO_2 limits applicable to Boilers 30 and 31, respectively, at B-325; Condition E3-20; and Attachment 3.[39]

These control measures, emission limits, and compliance parameters were established and/or incorporated into enforceable permits governed by Tennessee's federally enforceable permit regulations.[40] Below is a summary of the federally enforceable permits for emission sources at Eastman and Primester that establish control measures responsible for improvement in air quality in the Sullivan County Area and support Tennessee's 2025 request to redesignate the area to attainment.

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[36] *See* 90 FR 57367 (Dec. 11, 2025).
[37] On December 20, 2024, Tennessee submitted a letter to EPA asking the Agency to incorporate certain existing SO_2 control measures from the permit for Eastman coal-fired Boilers 21, 22, 30 and 31 with the February 23, 2022, regional haze SIP to generally strengthen Tennessee's SIP as part of the Agency's approval of the regional haze SIP. *See* Document ID EPA-R04-OAR-2019-0308-0070 at *www.regulations.gov*.
[38] Tennessee's February 9, 2023, nonattainment SIP operating permit No. 080222 and the June 18, 2025, submission operating permit 082237, establish identical enforceable SO_2 control measures for Eastman sources, except in the case of the B-351-5 coal gasification flare as mentioned below. Thus, the numerical SO_2 emission limits, control measures, and MRR for Eastman's coal-fired boilers at Powerhouses B-83 and B-325 established in operating permit 082237 are permanent and enforceable through the approval of certain permit conditions from SIP operating permit No. 080222 with the February 23, 2022, regional haze SIP. *See* 90 FR 57367 (Dec. 11, 2025).
[39] *See* 90 FR 57367 (Dec. 11, 2025).
[40] *See* Tennessee Air Pollution Control Regulations (TAPCR) Chapter 1200-03-09 as SIP-approved at *https://www.epa.gov/air-quality-implementation-plans/tennessee-air-pollution-control-regulations-chapter-1200-3-9*.

- Eastman SIP operating permit No. 080222[41] - Issued March 1, 2023, this permit established enforceable SO_2 emission limits (Condition 1), control measures (Conditions 2 and 4), and MRR parameters (Condition 3) for Eastman SO_2 emission sources B-83, B-235, B-248, B-334-1, B-351-5, and B-55-1, effective September 1, 2023. This permit was submitted with Tennessee's February 9, 2023, nonattainment SIP for the Sullivan County Area to demonstrate that the Area would attain the 2010 SO_2 standard by the April 5, 2027, attainment date based on modeling of the Eastman enforceable emission limits and control measures. As mentioned above, on December 11, 2025,[42] the EPA incorporated into the Tennessee SIP portions of permit No. 080222 relating to those enforceable SO_2 limits and MRR parameters at the same time that it approved the State's regional haze SIP for the second planning period. *See* Table 1A, below, for the list of permit conditions previously incorporated into the SIP.
- Eastman title V operating permit 576501[43] - Issued May 15, 2020, this permit requires Eastman to operate the two coal-fired boilers at B-325 (Boilers B-30 and B-31), in accordance with the individual emission limits and monitoring requirements established in Conditions E3-8 and E3-9. This title V permit incorporates the individual SO_2 emission limits from Eastman PSD permit 955272F.[44] As mentioned above, on December 11, 2025,[45] the EPA incorporated into the Tennessee SIP portions of permit No. 080222 at the same time that it approved the State's regional haze SIP for the second planning period. *See* Table 1A, below, for the list of permit

[41] A copy of SIP operating permit No. 080222 is included in the docket for this NPRM.
[42] *See* 90 FR 57367 (Dec. 11, 2025) and Docket ID: EPA-R04-OAR-2019-0308.
[43] A copy of title V operating permit No. 576501 was submitted as part of Tennessee's December 20, 2024, supplemental letter, and is included in the docket for this NPRM. *See supra* Footnote 39.
[44] The EPA is not proposing to approve into the SIP the remaining SO_2 emission limits for Eastman units established in Eastman SIP Operating Permit No. 080222 as these limits and MRR parameters are included in Eastman SIP Operating Permit No. 082237 submitted with TDEC's June 18, 2025, redesignation, which supersedes SIP Operating Permit No. 080222.
[45] *See* 90 FR 57367 (Dec. 11, 2025) and Docket ID: EPA-R04-OAR-2019-0308.

conditions incorporated into the SIP.

- Eastman SIP operating permit No. 082237[46] - Issued June 11, 2025, and submitted with Tennessee's June 18, 2025, submission, this permit adds periodic reporting requirements but contains the same SO_2 emission limits, control measures, and monitoring requirements from SIP operating permit No. 080222 for boilers at B-83, B-325, B-55, B-351, B-334 and B-248, effective September 1, 2023, except for the coal gasification flare B-351-5. This permit also establishes general permit conditions for recordkeeping and contingency measures at Condition G2 and G4 and separate recordkeeping and reporting conditions for all Eastman boilers. This permit was submitted to support Tennessee's redesignation of the Sullivan County Area from nonattainment to attainment based on modeling that included these, among other, enforceable control measures and an attaining three-year design value for the period 2020–2022. A modification to SIP operating permit No. 082237,[47] referred to as 082237 (Amendment #1), was issued May 13, 2026, and submitted with Tennessee's May 20, 2026, supplement which corrects administrative errors and clarifies conditions for portions of the June 11, 2025, permit. Specifically, the modification corrects the SO_2 emission limit for the B-351-5 coal gasification flare from 16.28 lb/hr to 14.6 lb/hr at Condition S3-1 and updates the flare's Monitoring Protocol and compliance method at Appendix 3 to clarify that Eastman's Distributed Control System calculates the flare SO_2 emissions automatically each hour. This permit also corrects the primary trigger language and a CAA citation for the enforceable contingency measures at Condition G4. Finally, the supplement clarifies that the Monitoring Protocol for the B-248 HWIs at Condition S5-1 and Appendix 5 is

[46] A copy of SIP operating permit No. 082337 is included in Attachment J1 of Tennessee's June 18, 2025, submission, which is included in the docket for this NPRM.
[47] The supplement SIP permit replaces the original permit No. 082237 issued June 11, 2025, and submitted with the June 18, 2025, redesignation request SIP submission.

superseded by the SIP permit No. 083740 (issued and effective January 14, 2026, and submitted with the January 27, 2026, supplement). Amendments to SIP permit No. 082237 became effective May 13, 2026, through SIP permit No. 082237 (Amendment #1). *See* Table 1B, below, for the list of permit conditions proposed for incorporation into the SIP.

- Eastman SIP operating permit No. 083740 - Issued January 14, 2026, and submitted with Tennessee's January 27, 2026, supplement, this permit supersedes No. 082237 only for Eastman's HWIs B-248-1 and 248-2's Monitoring Protocol and compliance methodology at Appendix 1 of permit 083740 (corresponding to Appendix 5 of permit 082237). The SO_2 emission limits and reporting requirements for B-248-1 and 248-2 at Conditions S5-1 and S6-1, respectively, are unchanged from permit No. 082237 except to reference Appendix 1 for the updated Monitoring Protocol. These modifications became effective January 14, 2026. *See* Table 1B, below, for the list of permit conditions proposed for incorporation into the SIP.
- Eastman PSD Construction permit No. 966859F - Issued June 5, 2013, and submitted as part of Tennessee's June 18, 2025, submission, this permit authorized Eastman to repower the five B-253 coal-fired boilers to natural gas. Condition 6 of this permit states that on and after the startup date of each modified boiler in the B-253 fuel-burning installation, only natural gas shall be used as fuel. Tennessee's June 18, 2025, submission requests that the EPA incorporate Condition 6 into the SIP. *See* Table 1B., below.
- Primester title V operating permit No. 574994 - Issued January 1, 2020, and submitted as part of Tennessee's June 18, 2025, submission, this permit includes the SO_2 emission limit and compliance requirements for Primester's Vent C - Cellulose Scrap Recovery Process, B-441-2 at Condition E5-1. The cellulose scrap recovery process is subject to an SO_2 limit of 1,000 parts per million, 0.10 percent by volume,

dry basis (one hour average), and 0.25 lbs/hr (three-hour average). Tennessee's June 18, 2025, submission requests that the EPA incorporate Condition E5-1 into the SIP. *See* Table 1B, below.

The SO_2 emission limits, other control measures, and compliance parameters for Eastman's B-83 and B-325 coal-fired boilers that are already incorporated into the SIP are listed in Table 1A, below. As mentioned above, the EPA incorporated these conditions from SIP operating permit No. 080222 and operating permit No. 576501.[48]

Table 1A: Permanent and Enforceable SO_2 Control Measures for Eastman Emission Sources Already Approved in the Tennessee SIP

Eastman Emission Source	SO_2 Emission Limit or Control Measure	Permit	Condition
B-83, Boilers B-18 through B-24 and B-325, Boilers B-30 and B-31	1,248 lb/hr 30-day rolling average	SIP Operating Permit No. 080222	1, 3, Attachment A
B-83, Boilers B-23 and B-24	Operation of Dry Sorbent Injection System	SIP Operating Permit No. 080222	2
B-325, Boiler B-30	317 lb/hr 30-calendar day rolling average	Operating Permit No. 576501	E3–8, E3-20, Attachment 3
B-325, Boiler B-31	293 lb/hr 30-calendar day rolling average	Operating Permit No. 576501	E3–9, E3-20, Attachment 3

Summarized below are brief descriptions of each emission source in Table 1A. Further discussion for these SO_2 emission limits, other control measures, and compliance parameters may be found in section 4.0 of the June 18, 2025, submission.

1. B-325 Powerhouse (Boilers B-30 and B-31) Individual limits: Eastman's B-325 powerhouse serves two coal-fired boilers – Boilers B-30 and B-31 – that vent to a single stack. These boilers have a nominal heat input capacity of 780 Million British Thermal Units/hour

[48] *See* 90 FR 57367 (Dec. 11, 2025).

(MMBtu/hr) (B-30) and 880 MMBtu/hr (B-31) and provide steam for facility operations. SO_2 emissions from these boilers are controlled by a spray dryer absorber[49] (SDA) for each boiler. Boiler B-30 is equipped with an electrostatic precipitator, and B-31 is equipped with a fabric filter to capture the dry, solid waste byproduct from the SDA chemical reaction. The boilers have individual SO_2 emission limits of 317 lbs/hr (B-30) and 293 lbs/hr (B-31) based on a 30-calendar day rolling average established in Conditions E3-8 and E3-9 of title V operating permit No. 576501.[50]

2. B-83 Powerhouse Boilers B-23 and B-24 DSI System: Eastman's B-83 includes coal fired boilers B-23 and B-24, which provide steam and electricity for the facility and vent to stack C. In 2019, Eastman installed a portable Dry Sorbent Injection (DSI) system[51] on Boilers B-23 and B-24 at the B-83 powerhouse in response to SO_2 exceedances at monitors in the Sullivan County Area. This control measure was installed to further reduce SO_2 emissions to address these monitored violations and ensure attainment of the standard. This installation occurred after the natural gas repowering and start-up of the last B-253 boiler – Boiler B-26 – on October 4, 2018.

At that time, Eastman selected the portable DSI emission control because the B-253 boilers were well-controlled, Boilers B-18 through B-24 at the B-83 powerhouse were uncontrolled for SO_2, and because B-23 and B-24 are high pressure baseload boilers that are operated preferentially over Boilers B-18 through B-22, which are smaller and operate at a lower pressure. Eastman subsequently installed and began operation of a permanent DSI system at B-23 and B-24 in November 2021, designed to reduce SO_2 emissions from the B-83 boilers as

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[49] SDA is an air pollution control system that uses a mist of alkaline slurry such as lime sprayed into hot flue gas to remove acid gases such as SO_2, hydrochloric acid and particulates, creating dry, solid byproducts that are then captured by a baghouse or filter. This semi-dry process cools the gas, captures pollutants efficiently, and produces easily manageable solid waste.

[50] B-325 individual limits were initially authorized in PSD construction permit No. 955272F, Condition 4 on April 8, 2002, and incorporated by reference into the title V permit 576501.

[51] DSI is a cost-effective air pollution control technology that injects powdered alkaline sorbents (like hydrated lime or Trona) into a flue gas stream to neutralize and remove acid gases (SO_2, hydrochloric acid, sulfur trioxide) and heavy metals (mercury) before they exit smokestacks, using devices like bag filters or electrostatic precipitators to capture the reacted pollutants.

required to maintain and assure compliance with the B-83 and B-325 combined 30-day rolling average 1,248 lb/hr SO_2 emission limit established at Condition 1 of SIP permit No. 080222. The permanent DSI system was designed based on a nominal operating efficiency of 60 percent using sodium bicarbonate as the sorbent. Operation of the permanent DSI was made enforceable and effective on March 1, 2023, through SIP operating permit No. 080222, Condition 2.[52]

3. B-83 Powerhouse (Boilers B-18 through B-24) and B-325 Powerhouse (Boilers B-30 and B-31) Combined SO_2 Emission Limit: TDEC used air dispersion modeling to establish a 1,248 lb/hr emission limit for all seven coal-fired boilers at B-83 (B-18 through B-24) and the two coal-fired boilers at B-325 (B-30 and B-31). The modeled values were converted to a single 30-day rolling average emission limit (combined total for all nine boilers) based on the EPA's longer term average policy established in the SO_2 Nonattainment Area Guidance.[53] For details on how Tennessee established the 30-day, combined SO_2 emission limit, *see* section V.C.1.b below and the EPA's Longer Term Average (LTA) Emission Limits Technical Support Document (TSD) (LTA TSD).[54] For reasons discussed in section V.C.1.b, below, and the EPA's LTA TSD, the EPA proposes to determine that appropriately set LTA limits provide a reasonable basis by which permit limits may provide for attainment of the 2010 SO_2 NAAQS. The combined limit and MRR compliance parameters were authorized in SIP operating permit No 080222,[55] Conditions 1 and 3 and Attachment A. Condition 1 provides a table of affected Eastman emission sources and the SO_2 emission limits including the 1,248 lb/hr combined limit for B-83 and B-325. Condition 3 establishes the compliance parameters in Attachment A of which were

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[52] Authorization to operate the DSI system effective March 1, 2023, for B-83, B-23 and B-24 is also established in SIP permit No. 082237, Condition S1-2. *See* Attachment J1 of Tennessee's on June 18, 2025, submission.

[53] *See Guidance for 1-Hour SO_2 Nonattainment Area SIP Submissions*; EPA, April 23, 2014, (SO_2 Nonattainment Area Guidance), which can be found at *https://www.epa.gov/so2-pollution/guidance-1-hour-sulfur-dioxide-so2-nonattainment-area-state-implementation-plans-sip* (2014) at pp. 22–39 and Appendices B, C, and D, available in the docket for this action.

[54] The EPA's LTA TSD is included in the docket for this NPRM.

[55] SIP operating permit No. 080222 is a federally enforceable State operating permit issued on March 1, 2023, by TDEC establishing enforceable SO_2 emission limits and control measures for Eastman as part of Tennessee's February 23, 2023, nonattainment SIP for the Sullivan County Area. The permit is included in the docket for this NPRM.

incorporated by reference as enforceable conditions.[56]

The coal-fired boilers at B-83 and B-325 are equipped with SO_2 Continuous Emission Monitoring Systems (CEMS), but emissions from the larger boilers (B-23, 24, 30, and 31) are calculated differently than the older B-83, B-18 through B-22 boilers. Boilers 23, 24, 30, and 31 are subject to the Nitrogen Oxide SIP Call ozone season program pursuant to 40 CFR part 75 and, therefore, are required to install and operate in-stack flow monitors. Thus, hourly SO_2 emissions from these four boilers are calculated based on the SO_2 CEMS data and flow monitoring.[57]

Boilers B-18 through B-22, however, are not equipped with flow monitors, thus SO_2 emissions are calculated in lb/MMBtu using CEMS data and calculated heat input (from the energy rise of steam across the boilers) in accordance with 40 CFR 60 appendix A, Method 19. All 30-day rolling averages must be calculated as specified in 40 CFR part 63, subpart UUUUU at 63.10021(b), Equation 8) (which is presented as Equation 4-1 in the June 18, 2025, submission), which utilizes the hourly emissions rate for a given hour (combined total emissions for all boilers) and the number of hourly emissions rate values collected over 30 boiler operating days.[58] Attachment A of SIP operating permit No. 080222 requires each CEMS to be fully operational for at least 95 percent of the operational time of the monitored boiler during any calendar quarter, and missing data must be addressed by substituting the higher value of: (1) the last valid hourly emission rate before, or (2) the first valid hourly emission rate after, the period of missing data.

For the reasons noted above and as discussed further in the LTA TSD, the EPA is

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[56] The combined SO_2 emission limit for B-83 and B-325 is established in SIP operating permit No. 082237, which is included in Tennessee's June 18, 2025, submission.

[57] The B-325 individual boilers are equipped with SO_2 CEMS and flow monitoring system (operated and maintained in accordance with 40 CFR part 60 appendix B Performance Specification 6 or 40 CFR part 75 appendix A) with an automated data acquisition and handling system for measuring and recording SO_2 concentration (in parts per million), volumetric gas flow (in standard cubic feet per hour), and SO_2 mass emissions (in lb/hr) discharged to the atmosphere. Compliance with the individual limits is determined by calculating hourly SO_2 emissions from the CEMS data and flow monitoring established in Condition E3-20, Attachment 3 of the SIP operating permit.

[58] Boiler operating day means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in any of the boilers. It is not necessary for the fuel to be combusted the entire 24-hour period.

proposing to find that the 30-day rolling average combined SO_2 emission limit for the coal-fired boilers at B-83 (B-18 through B-24) and B-325 (B-30 and B-31) is comparably stringent to a 1-hour limit and provides for modeled attainment of the SO_2 standard in the Sullivan County Area. As mentioned above, the combined 30-day rolling average 1,248 lb/hr SO_2 emission limit for B-83 and B-325 and the DSI control operations at B-83, Boilers B-23 and B-24, established in SIP operating permit No. 080222 and the B-325 individual 317 lb/hr and 293 lb/hr SO_2 limits for Boilers B-30 and B-31, respectively, established at Conditions E3-8 and E3-9 of title V operating permit No. 576501 were made permanent through incorporation into the Tennessee SIP on December 11, 2025.[59]

The EPA is proposing to incorporate into the SIP the remaining SO_2 emission limits and other control measures requested for approval in the State's June 18, 2025, submission that were not made permanent in the EPA's December 11, 2025, action. Tennessee requests that the EPA approve into Tennessee's SIP the remaining SO_2 control measures from SIP operating permit No. 082237, which are modified in Tennessee's January 27, 2026, SIP operating permit No. 083740 and May 20, 2026, SIP operating permit No. 082237 – (Amendment #1).[60] These remaining SO_2 control measures apply to the following Eastman emission sources: B-253 coal-fired units, B-248 hazardous waste incinerators, B-351-5 coal gasification flare, B-334 tail gas incinerator, and B-55-1 organic acids and anhydrides manufacturing, and Primester B-441 cellulose recovery scrap process. Table 1B, below, lists the enforceable SO_2 emission limits, other control measures, and compliance parameters for these remaining emission sources.[61]

Table 1B: Sullivan County Area Enforceable SO_2 Control Measures Proposed for Incorporation into the Tennessee SIP

[59] *See* 90 FR 57367 (Dec. 11, 2025).
[60] Conditions from SIP operating permit No. 083740 and SIP operating permit No. 082237 (Amendment #1) will be incorporated into the SIP. These permits contain the most up-to-date version of all of the requirements included in SIP operating permit 082237.
[61] *See* the May 20, 2026, supplement, Attachment C version of Table 4-4 and Attachment J of Tennessee's June 18, 2025, submission.

Emission Source	SO_2 Emission Limit or Other Control Measure	Permit	Condition(s)
Eastman B-253-1 Boilers B-25 through B-29	Only natural gas shall be used as fuel	PSD Construction Permit 966859F	6
Eastman B-334-1 Incinerator for Acid Gas Removal and Sulfur Recovery Plant	21.8 lb/hr 24-hour block average	SIP Operating Permit 082237 (Amendment #1)	*S2-1 and S2-2 Appendix 2
Eastman B-55-1	6.74 lb/hr	SIP Operating Permit 082237 (Amendment #1)	*S4-1 and S4-2
Eastman B-248-1 Solid/Liquid Chemical Waste Incinerators	15.2 lb/hr 30-day average, combined limit for both rotary kilns	SIP Operating Permit 083740**	*S5-1 and S5-2 Appendix 1
Eastman B-248-2 Liquid Chemical Waste	2.0 lb/hr 30-day average	SIP Operating Permit 083740**	*S6-1 and S6-2 Appendix 1
Eastman B-351-5 Coal Gasification Cold and Warm Flares	14.6 lb/hr 30-day rolling average	SIP Operating*** Permit 082237 (Amendment #1)	S3-1(B) S3-2 S3-3 Appendix 3
Primester B-441-2, Vent C	1,000 ppm by volume (dry basis) 1-hour average and 0.25 pounds per hour 3-hour average	Title V Operating Permit 574994	E5-1

*For Eastman SIP operating permits Nos. 082237 (Amendment #1) and 083740, Conditions S2-1, S3-1(B), S4-1, S5-1, and S6-1 represent the numerical SO_2 emission limit/averaging time or control measure and compliance monitoring; Conditions S2-2, S3-2, S4-2, S5-2, and S6-2 represent the recordkeeping and reporting compliance requirements. TDEC also requests that general permit conditions G2, G3, and G4 be adopted into the SIP for both permits Nos. 082237 (Amendment #1) and 083740.

** Permit No. 083740 modifies the parametric monitoring for Eastman B-248-1 and 248-2 HWI and supersedes permit No. 082237 effective January 14, 2026.

***Permit No. 082237 (Amendment #1) effective May 13, 2026, corrects the 16.28 lb/hr limit to 14.6 lb/hr and clarifies the frequency by which SO_2 emissions for the B-351 coal gasification flare are automatically calculated. The permit also updates Condition G4 contingency measures.

A brief description of each emission source in Table 1B is summarized below. For a more detailed discussion of each SO_2 emitting unit at Eastman and Primester addressed in Table 1B, please *see* section 4.0 of the June 18, 2025, submission including the updated Table 4-4 submitted with TDEC's May 20, 2026, supplement.

4. *B-253 (Boilers B-25 through B-29):* From 2014 to 2018, Eastman converted Boilers

B-25 through B-29 from coal-fired boilers to natural gas-fired boilers. The EPA approved this conversion as an alternative to best available retrofit technology (BART) for SO_2 for the B-253 Powerhouse during the first regional haze planning period.[62]

Condition 6 of PSD permit No. 966859F established a natural gas fuel restriction for all five B-253–boilers once repowering was installed and operational.[63] Compliance with the fuel usage restriction is based on the design and construction of the boilers, which include natural gas feed lines and burners that physically restrict the source's ability to burn other fuels. The start-up date for the first repowered boiler was April 23, 2014, and the start-up date for the last repowered boiler was October 4, 2018. Tennessee's February 9, 2023, and June 18, 2025, submissions request that the EPA incorporate into the SIP the natural gas fuel usage restriction at Condition 6 of PSD permit No. 966859F for Boilers B-25 through B-29. The EPA is proposing to approve this fuel restriction to support Tennessee's redesignation request showing that attainment of the 2010 SO_2 standard in the Sullivan County Area is due to permanent and enforceable SO_2 control measures.

5. Solid/Liquid Chemical Waste Incinerators (PES B-248-1: Vents D and E) and Liquid Chemical Waste Incinerator (PES B-248-2: Vent A): The B-248 incinerator complex consists of three HWIs, one liquid chemical waste incinerator (B-248-2, Vent A), and two rotary kilns that can burn solid or liquid chemical waste (B-248-1, Vents D and E). These units incinerate solid and liquid waste from other processes at Eastman and are subject to enforceable SO_2 emission limits of 15.2 lb/hr (B-248-1) and 2.0 lb/hr (B-248-2). SO_2 emissions from these units are

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[62] TDEC's original April 4, 2008, regional haze SIP identified the B-253 Powerhouse as a BART-eligible unit. Tennessee subsequently amended its regional haze SIP (on May 14, 2012, and May 25, 2012) to establish BART requirements for Eastman including an alternative BART option to repower (convert coal-fired boilers to natural gas) Boilers 25-29 by December 31, 2018. Tennessee adopted requirements on May 9, 2012, to establish BART for B-253, Boilers B-25 through B-29 during the first regional haze implementation period. *See* 77 FR 24392 (Apr. 24, 2012) and 77 FR 70689 (Nov. 27, 2012). The BART alternative became federally enforceable through the issuance of BART permit No. 066116H (Condition 4(f)) on May 9, 2012, and amended on May 22, 2012, which changed the conversion completion date to align with the 1-hour SO_2 NAAQS compliance deadline of October 4, 2018.

[63] All five B-253 boilers were converted to natural gas from 2014 to 2018. *See* Table 4-1 in Tennessee's February 9, 2023, submission and Table 4-2 in Tennessee's June 18, 2025, submission for specific natural gas commercial operation for each boiler.

continuously controlled by wet scrubbers (Croll-Reynolds Clean Air Technologies multi-rod scrubber for each emission point). These emission limits were first made enforceable through SIP operating permit No. 080222 submitted with the February 9, 2023, submission. This permit was superseded by SIP operating permit No. 082237 submitted with the June 18, 2025, submission, and again superseded by operating permit No. 083740 submitted with the January 27, 2026, supplement.[64] Conditions S5-1 and S5-2 establish the 15.2 lb/hr combined SO_2 limit for the B-248-1 chemical waste incinerators rotary kilns. Conditions S6-1 and S6-2 establish the 2.0 lb/hr SO_2 emission limit for B-248-2 liquid chemical waste incinerators.

These two incinerators are not equipped with CEMS. In lieu of CEMS, compliance with the SO_2 emission limits is based on continuous calculations of SO_2 emissions using parametric monitoring of the sulfur feed rate and the pH of the rod scrubber underflow. Computer simulations using Aspen Plus, a commercially available software package, were conducted to establish the pH of the rod scrubber underflow at varying sulfur loading conditions, and the correlation curve for the highest sulfur feed modeled was used to develop the relationship between pH and removal efficiency. All removal efficiencies were determined using the minimum liquid to gas flow rate ratio (L/G ratio) determined during the most recent Comprehensive Performance Test (CPT), as required by 40 CFR part 63, subpart EEE, for each unit.

Appendix 1 to permit No. 083740 includes the parametric monitoring requirements for units PES B-248-1 and PES B-248-2. This includes the continuous monitoring of rod scrubber underflow pH via a pH sensor and transmitter installed in either the rod scrubber underflow line or the sump pump. The L/G ratio is calculated from two directly measured parameters: the stack gas flow rate (which is measured in the ductwork between the final control device, the wet electrostatic precipitator, and the induced draft fan located at the stack inlet) and the scrubbing

[64] *See* TDEC's August 25, 2026, email to the EPA Regional Administrator Kevin McOmber in the docket for this action.

liquid flow rate (which is measured by liquid flow meters located between each heat exchanger and the rod scrubber spray). If the L/G ratio drops below the minimum value set by the most recent CPT, the SO_2 removal efficiency shall be assumed to be zero for the purposes of estimating emissions and determining compliance. *See* "Description of Monitoring Protocol," in Appendix 1 of permit No. 083740 in the January 27, 2026, supplement.

TDEC issued permit No. 083740 on January 14, 2026, to update the Monitoring Protocol for the hazardous waste incinerators. The parametric Monitoring Protocol requires Eastman to base the parametric relationship on the most recently modeled simulations determining the correlation between the scrubber pH and SO_2 removal efficiency for the multi-rod scrubbers. If a comprehensive performance test is conducted in accordance with 40 CFR part 63, subpart EEE after May 1, 2025, the results of that test may be used to determine the SO_2 removal rate until a change in the sulfur feed rate makes the test result unrepresentative of current conditions or until a subsequent modeled simulation is performed. Additionally, the Monitoring Protocol requires that when the L/G ratio drops below the minimum value set by the most recent comprehensive performance test, then the SO_2 removal efficiency shall be assumed to be zero.

Items 2 and 5 in the Description of Monitoring Protocol section establish the process for determining the parametric values which are used to calculate SO_2 emissions. Outlining the applicable methodology will ensure that the most accurate data is used to determine SO_2 emissions without delay. If a change to the method used to set the minimum L/G ratio or pH/SO_2 removal efficiency correlation curve or to the method used to calculate SO_2 emissions from the hazardous waste incinerators is required, TDEC must submit a SIP revision to the EPA for consideration. Additionally, any changes to the underlying SO_2 emission rate cannot occur without the EPA approval of a SIP revision. The Monitoring Protocol does not include operational limits that would be updated such that it would impact compliance with the modeled SO_2 limit.

While SO_2 removal efficiencies may be established through performance testing, SO_2

emissions from the hazardous waste incinerators are minimal and expected to remain low because of the sale of Eastman's resin business, and therefore, Eastman is unlikely to have sulfur feed in sufficient quantity to provide valid test results.

Tennessee's June 18, 2025, submission requests that the EPA approve as a permanent and enforceable control measure into the SIP the SO_2 emission limits for B-248-1 and B-248-2 established in SIP operating permit No. 082237, Conditions S5-1, S5-2, S6-1 and S6-2, respectively.[65] The EPA is proposing to adopt into the Tennessee SIP, SO_2 emission limits for B-248-1 and B-248-2 as permanent and enforceable control measures. Additionally, the EPA is proposing to approve the Monitoring Protocol in Appendix 1 used to calculate SO_2 emissions and determine compliance with B-248 emission limits through SIP operating permit No. 083740 submitted as part of Tennessee's January 27, 2026, supplement.

6. Coal Gasification Cold and Warm Flares (B-351-5): These flares are subject to a combined 14.6 lb/hr, 30-day rolling average SO_2 emission limit. Tennessee used air dispersion modeling to establish this emission limit based on the EPA's LTA policy in the SO_2 Nonattainment Area Guidance. For details on how Tennessee established the 30-day, combined SO_2 emission limit, *see* section V.C.1.b below and the EPA's LTA TSD. Initially, TDEC established a 16.28 lb/hr emission limit in SIP operating permit No. 080222, included with the February 9, 2023, submission. The updated emission limit is enforceable through SIP operating permit No. 082237 (Amendment #1)[66] as issued on May 13, 2026.[67]

The cold and warm flares are each equipped with three High Energy Ignition / High Btu flare pilots. These flares have "flame on" and temperature indicators to ensure reliable

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[65] As discussed above, operating permit No. 083740 supersedes operating permit No. 082237 for the HWIs.
[66] The B-351 emission limit included in SIP operating permit No. 0822337 is incorrect. Tennessee corrected the permit limit from 16.28 lb/hr to 14.6 lb/hr in its May 20, 2026, supplement.
[67] Tennessee's May 20, 2026, supplement notes that the inclusion of the 16.28 lb/hr limit in the final permit for 082237 was an error, leading to the need to issue 082237 (Amendment #1). Tennessee clarifies in its August 20, 2026, letter to the EPA Regional Administrator Kevin McOmber that with the submission of the May 20, 2026, supplement, the State is not asking for the EPA to take action on the 16.28 lb/hr limit, and that it is included in permit 082237 (Amendment #1) for informational purposes only. Both emission limits apply to the flare, and only the 14.6 lb/hr limit is requested for incorporation into the SIP.

combustion. In lieu of CEMS, compliance with the SO_2 emission limit is based on parametric monitoring of the control valve position and control valve upstream pressure. Eastman is required to continuously track the control valve opening position and upstream pressure each hour (at least once every 15 minutes). These parameters are used to calculate the volumetric flow rate of the gas stream routed to the flares. The known plant gas stream composition is also used to calculate the sulfur content of the gas stream routed to the flares (assuming a total conversion of sulfur to SO_2 when calculating emissions). Tennessee's June 18, 2025, submission requests the EPA incorporate into the SIP as a permanent and enforceable control measure the enforceable SO_2 emission limit for B-351-5 established in the May 13, 2026, version of SIP operating permit No. 082237 (Amendment #1), Condition S3-1(B) along with compliance method (A) (including Appendix 3 which contains the Monitoring Protocol), and the recordkeeping and reporting requirements at Condition S3-2.

7. *Incinerator for Acid Gas Removal and Sulfur Recovery Plant (or Tail Gas B-334-1):* Eastman's tail gas incinerator oxidizes residual sulfur compounds such as hydrogen sulfide (H_2S) left over from the combustion of the gas stream. The emission unit is subject to an SO_2 emission limit of 21.8 lb/hr (24-hour block average), first made enforceable through SIP operating permit No. 080222 submitted with the February 9, 2023, submission and subsequently included in SIP operating permit No. 082237 (Amendment #1) at Condition S2-1 and the Monitoring Protocol and periodic reporting requirements at Appendix 2 and Condition S2-2, submitted in the June 25, 2025, submission, as amended in the May 20, 2026, supplement. The tail gas incinerator is equipped with a direct flame afterburner. Compliance with the SO_2 emission limit is based on continuous (at least once every 15 minutes) parametric monitoring of the H_2S and gas flow rate of the tail gas to calculate the emission rate in lb/hr for a 24-hour block average. The EPA is proposing to incorporate into the SIP as a permanent and enforceable control measure the SO_2 emission limit for B-334-1 established in SIP operating permit No. 082237 (Amendment #1) at Condition S2-1, the periodic reporting requirements at Condition S2-2, and the Monitoring

Protocol at Appendix 2.

8. B-55-1, Organic Acids & Anhydrides Manufacturing, Vents B, C, E, I, and K:

Tennessee has established a 6.74 lb/hr SO_2 emission limit for B-55-1 effective March 8, 2026, at Condition S4-1 of SIP operating permit No. 082237 (Amendment #1), with associated reporting requirements at Condition S4-2. To assess the need for temporary SO_2 emission controls on the batch reactors and/or sludge handling belt to meet this limit under maximum operating conditions, Eastman was required to conduct an initial performance test to determine the amount of SO_2 emitted from this source no later than June 6, 2026, in accordance with the methods and procedures specified in 40 CFR part 60 appendix A. As Vent E was not in service at the issuance date of Permit 082237 or 082237 (Amendment #1), condition S4-1 requires an initial performance test be conducted no later than 180 days following any restart of the associated process.

On October 10, 2025, TDEC accepted the test reports for B-55-1 Vent K, with testing done June 02, 2025, and B-55-1 Vents C and I, with testing done May 08 through June 09, 2025. On April 1, 2026, TDEC accepted the test report for B-55-1 Vent B summarizing testing completed February 20 through 23, 2026. The EPA is proposing to incorporate into the SIP as a permanent and enforceable control measure the SO_2 emission limit for B-55-1 established in SIP operating permit No. 082237 (Amendment #1) Conditions S4-1 and the periodic reporting requirements at Condition S4-2.

9. Primester (B-441-2: Vent C) - Cellulose Scrap Recovery Process: This source rejects dope from various points in the acetylation operation to recover cellulose sludge for reuse at the plant. Emissions are controlled by a scrubber using a water solution with caustic added. The cellulose scrap recovery process is subject to SO_2 limits of 1,000 parts per million, 0.10 percent by volume, dry basis (one hour average) and 0.25 lbs/hr (three-hour average).

In lieu of CEMS, compliance with the SO_2 emission limits is based on parametric monitoring of the scrubber flow rate and scrubber underflow pH. Per Condition E5-1 of title V

permit No. 574994, the scrubber flow rate and pH shall be continuously monitored and recorded. Primester is required to maintain a minimum scrubber flow rate and a minimum scrubber pH, for which both minimum parametric values are included in the compliance method of condition E5-1 of title V permit No. 574994, to assure compliance with the SO_2 limits. Any updates to these minimum parametric values would require the EPA approval of a SIP revision. The EPA is proposing to incorporate into the SIP Condition E5-1 of title V operating permit No. 574994 as a permanent and enforceable measure.

B. Nonattainment Planning Requirements

1. Clean Air Act Requirements

Subpart 1 of part D, comprised of CAA sections 171-179B, sets forth the basic nonattainment requirements applicable to all nonattainment areas. CAA Section 172(c) sets forth the basic requirements of attainment plans for nonattainment areas that are required to submit them pursuant to CAA section 172(b). All areas that were designated nonattainment for the 2010 1-hour SO_2 NAAQS were designated under CAA subpart 1 in accordance with the deadlines in subpart 5. A thorough discussion of the requirements contained in CAA section 172(c) can be found in the General Preamble for Implementation of Title I.[68]

CAA section 172 requires States with nonattainment areas to submit plans providing for timely attainment and meeting a variety of other requirements. Tennessee has satisfied the part D obligation to submit attainment planning requirements for the Sullivan County Area through the State's May 12, 2017, and February 9, 2023, nonattainment SIP submissions and resubmission of RACM/RACT in the June 18, 2025, redesignation request and maintenance plan submission. *See* section II of this NPRM. The February 9, 2023, nonattainment SIP included a modeled demonstration of attainment for the 2010 SO_2 NAAQS by the April 5, 2027, attainment date. The EPA addresses how Tennessee satisfied each CAA section 172(c) element below.

CAA Sections 172(a)(2), 192(a), and 179(d) – Attainment Dates for Nonattainment

[68] S*ee* CAA section 107(d)(3)(E)(iv).

Areas: For a nonattainment area, CAA section 172(a)(2) establishes that the attainment date shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than five years from the date the area was designated nonattainment, unless the Administrator determines an extension of up to 10 years is appropriate. CAA section 192(a) requires that SIPs for nonattainment areas must provide for attainment of the relevant NAAQS as expeditiously as practicable, but no later than five years from the effective date of the nonattainment designation. The effective date of the designation of the Sullivan County Area to nonattainment was October 4, 2013,[69] and five years from that date was October 4, 2018. As detailed in section II of this NPRM, Tennessee initially submitted its first nonattainment SIP on October 12, 2017, which included a modeled attainment demonstration. Subsequently, on April 5, 2022, the EPA published a FFA determining that the State failed to attain by the applicable attainment date, triggering a requirement under CAA section 179(d) for Tennessee to submit to the EPA a revised nonattainment SIP for the Sullivan County Area within one year of the publication of the FFA *Federal Register* (*i.e.,* April 5, 2023), which provides for attainment of the 2010 SO_2 standard as expeditiously as practicable, but no later than five years from the FFA's *Federal Register* publication date (*i.e.,* April 5, 2027).

The EPA previously determined that the State did not meet its obligation to provide for attainment within five years of the nonattainment designation. The EPA proposes to find that TDEC met its obligation to provide its revised nonattainment planning SIP through the February 9, 2023, second nonattainment SIP and that the State appropriately developed its modeled attainment demonstration, as discussed in section V.C.1.b. The EPA is also proposing that the nonattainment SIP ensured attainment of the 2010 SO_2 NAAQS as expeditiously as practicable and earlier than the April 5, 2027, date as evidenced by TDEC submitting its redesignation request and maintenance plan by June 18, 2025, with the same modeling demonstration used for attainment supporting its maintenance demonstration. In section V.C.1.a of this NPRM, the EPA

[69] *See* 78 FR 47191 (Aug. 5, 2013).

also examines the actual monitored SO_2 concentrations in Table 2, below, and notes that with 2020-2022 design values, all monitors in the Area were in attainment and have remained in attainment through 2023-2025. Moreover, Table 3, below, shows that the annual 99th percentile daily maximum 1-hour SO_2 concentration has remained below the standard at all four monitors since 2022. If there are no air quality monitors located in the affected area, or there are air quality monitors located in the area but analyses show that none of the monitors are in the area of maximum concentration, then air quality dispersion modeling will generally be needed to estimate SO_2 concentrations in the area. The monitoring information, taken together with the air quality modeling, ensures that the area attained by the submission of the State's June 18, 2025, redesignation request and maintenance plan, slightly more than two years after publication of the FFA and over 21 months ahead of the CAA section 179(d) attainment date.

CAA Sections 172(b), 191(a), and 179(d) – Schedule for Plan Submission: Under CAA section 172(b) and consistent with CAA section 191(a), the Administrator required Tennessee to submit a SIP revision for the Sullivan County Nonattainment Area within 18 months of the October 4, 2013, effective date of the nonattainment redesignation. As noted in section II of this NPRM, on March 18, 2016, the EPA published a FFS pursuant to CAA section 110(k)(1)(B), finding that Tennessee had failed to submit the SO_2 nonattainment SIP by the submission deadline of April 4, 2015.[70] TDEC submitted its first nonattainment plan on May 12, 2017. Subsequently, with the publication of the FFA on April 5, 2022, the Administrator required Tennessee to submit a SIP revision within one year of the publication (*i.e.*, April 5, 2023), pursuant to CAA section 179(d). The EPA proposes to find that TDEC met this requirement by submitting its SIP revision on February 9, 2023, which was sooner than one year from when the FFA published.

CAA Section 172(c)(1) – Subpart 1 RACM/RACT Requirements: Subpart 1 requires that each attainment plan "provide for the implementation of all reasonably available control

[70] *See* 81 FR 14736.

measures as expeditiously as practicable (including such reductions in emissions from the 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."[71] The EPA has consistently interpreted this provision to require only implementation of potential RACM that could advance attainment.[72] Thus, when an area is already attaining the standard, no additional RACM measures are required. The EPA's interpretation that Subpart 1 requires only the implementation of RACM measures that would advance attainment was upheld by the United States Court of Appeals for the Fifth Circuit[73] and by the United States Court of Appeals for the D.C. Circuit.[74] In its June 18, 2025, submission, Tennessee determined that no additional control measures are necessary in the Sullivan County Area to satisfy the CAA section 172(c)(1) RACM requirement beyond those measures that provide for attainment of the 1-hour SO_2 NAAQS.

The EPA is proposing to determine that Tennessee's Subpart 1 RACM determination is approvable on the basis that no additional reasonably available controls would have advanced the April 5, 2027, statutory attainment date. Tennessee's plan for attaining the 1-hour SO_2 NAAQS in the Sullivan County Area is based on several measures, as mentioned above, including repowering the B-253 boilers from coal to natural gas operation, which was completed October 4, 2018, as an alternative to SO_2 BART for Eastman. The BART alternative became federally enforceable with the issuance of BART permit 066116H on May 9, 2012. Condition 4(f) of permit 066116H requires the repowering of B-253 to be completed no later than the compliance deadline for the 1-hour SO_2 NAAQS.

As discussed above, the EPA is proposing to incorporate into the SIP Condition 6 of PSD construction permit 966859F, which states that on and after the startup date of each modified

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[71] *See* CAA section 172(c)(1).
[72] *See NRDC v. EPA*, 571 F.3d 1245 (D.C. Cir. 2009); *Sierra Club v. EPA*, 294 F.3d 155 (D.C. Cir. 2002).
[73] *Sierra Club v. EPA*, 314 F.3d 735, 743–745 (5th Cir. 2002).
[74] *Sierra Club v. EPA*, 294 F.3d 155, 162–163 (D.C. Cir. 2002); NRDC v. EPA, 571 F.3d 1245, 1252 (D.C. Cir. 2009).

boiler in the B-253 fuel-burning installation, only natural gas shall be used as fuel. Also, Tennessee evaluated B-325 Boiler 31 and determined that the SDA/fabric filter baghouse combination already in place constitutes RACT, and therefore, that no further analysis is required. Tennessee considered a range of measures to reduce SO_2 emissions for the remaining B-83 and B-325 boilers including switching to low-sulfur coal, upgrading or adding new control equipment, converting existing coal-fired boilers to natural gas, and replacing existing coal-fired boilers with natural gas boilers. Tennessee determined that these other measures are not reasonable for a variety reasons, including infeasibility and cost, and that they were not needed to attain the NAAQS and would not advance the attainment date.[75] In addition, Tennessee evaluated other operations at Eastman as well as additional sources within and adjacent to the Area and determined that no additional controls were required as RACT.

Tennessee has determined that existing emission limits also constitute RACT, and the EPA proposes to concur with the State's RACT analysis, initially submitted in the February 9, 2023, submission and subsequently included in the June 18, 2025, submission. Based on air dispersion modeling of the repowering of Eastman's powerhouse,[76] the installation of add-on controls for Eastman's B-83 boilers B-23 and B-24, the adoption of a combined emission limit for Eastman's B-83 and B-325 powerhouses, and the adoption of existing emission limits into the SIP for other SO_2 emitting sources at Eastman and Primester, Tennessee determined that no additional measures are necessary for attainment and no potential measures which, if considered collectively, would advance the April 5, 2027, attainment year by one year or more.[77] The EPA notes that the Area first started monitoring attainment of the 2010 SO_2 NAAQS with a 2018-2020 design value and continues to attain the standard. Therefore, the EPA proposes to approve Tennessee's determination that the State has satisfied its RACM obligations under CAA section

[75] *See* Section 5 of Tennessee's February 9, 2023, submission and Section 4 of Tennessee's submission for additional details on the measures analyzed.
[76] *See* section V.C.1.b of this NPRM for discussion of the air dispersion modeling.
[77] Reviewing courts have upheld EPA's interpretation of RACM as encompassing only those measures necessary to advance attainment. *See Sierra Club v. EPA*, 314 F.3d 735, 743–745 (5th Cir. 2002); *Sierra Club v. EPA*, 294 F.3d 155, 162–163 (D.C. Cir. 2002); *NRDC v. EPA*, 571 F.3d 1245, 1252 (D.C. Cir. 2009).

172(c)(1).

CAA Section 172(c)(2) – RFP: CAA section 172(c)(2) states that nonattainment plans must require RFP. RFP is defined in CAA section 171(1) as "such annual incremental reductions in emissions of the relevant air pollutant as are required by part D or may reasonably be required by EPA for the purpose of ensuring attainment of the applicable NAAQS by the applicable attainment date."

In the SO_2 Nonattainment Area Guidance, the EPA notes that the definition at CAA section 171(1) is "most appropriate for pollutants that are emitted by numerous and diverse sources, where the relationship between any individual source and the overall air quality is not explicitly quantified, and where the emission reductions necessary to attain the NAAQS are inventory-wide."[78] The Guidance explains that "the definition is generally less pertinent to pollutants like SO_2 that usually have a limited number of sources affecting areas of air quality which are relatively well defined, and emissions control measures for such sources result in swift and dramatic improvement in air quality."[79] As a result, the Guidance goes on to note that in the 1992 General Preamble, the EPA explained that RFP for SO_2 is best construed as "adherence to an ambitious compliance schedule."[80]

While the EPA expects that RFP for SO_2 nonattainment areas should yield significant emission reductions under an ambitious compliance schedule, the Sullivan County Area has already achieved significant permanent and enforceable reductions in SO_2 emissions, such as the reduction of SO_2 emissions from 2011 to 2022 from coal-fired boilers at Eastman from 21,859 tons to 3,334 tons.[81] These reductions have led to sustained monitored ambient SO_2 concentrations below the 2010 1-hour SO_2 NAAQS substantially earlier than the applicable attainment date, as demonstrated in Table 2. As stated above, TDEC determined, and the EPA

[78] *See SO₂ Nonattainment Area Guidance* at p. 40. The document is available in the docket for this action.
[79] *Id*. at 40.
[80] *See* 57 FR 13498, 13547 (Apr. 16, 1992).
[81] *See* Table 5 in this NPRM.

agrees, that no RACM exists that would advance the attainment date for the Area. With the emission reductions already achieved resulting in sustained ambient SO_2 concentrations below the 2010 1-hour SO_2 NAAQS, the EPA is proposing to find that RFP has already been made and that Tennessee's second nonattainment SIP has met the RFP provisions of CAA section 172(c)(2).

CAA Section 172(c)(3) – Emissions Inventory: CAA section 172(c)(3) requires nonattainment plans to include a comprehensive, accurate, and current inventory of actual emissions from all sources of the relevant pollutant or pollutants in the nonattainment area. As noted in section II of this NPRM, the EPA approved Tennessee's 2011 base year emission inventory for the Sullivan County Area March 1, 2021,[82] as satisfying the requirements of CAA section 172(c)(3).[83]

CAA Section 172(c)(4) and 172(c)(5) – Identification and Quantification of Emissions and Nonattainment New Source Review Permits: CAA section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources to be allowed in an area, and CAA section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. Tennessee currently has a SIP-approved part D NNSR permitting program in place in Chapter 1200-03-09 of the Tennessee Air Pollution Control Regulations (TAPCR). As mentioned above, on March 1, 2021, the EPA determined that Tennessee's SIP-approved NNSR program satisfies the requirements of section 172(c)(5) of the CAA for the Sullivan County Area.[84]

Furthermore, Tennessee's air quality modeling, submitted initially in the February 9, 2023, second nonattainment plan and resubmitted in the June 18, 2025, submittal, accounts for known expected growth within the Area that consists of the construction and startup of three new

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[82] *Id*.
[83] Tennessee also included a base year inventory of 2017 to support its February 9, 2023, second nonattainment SIP.
[84] *See* 86 FR 11873 (Mar. 1, 2021).

natural gas boilers (0.64 tons per year, each) and a methanolysis plant (0.43 tons per year), each of which is modeled at their potential to emit (PTE). Tennessee has met CAA section 172(c)(4) and 172(c)(5) requirements. The EPA is further proposing that the use of the future PTE for the natural gas boilers and the methanolysis plant's natural gas-fired furnace in the modeling also meets CAA section 172(c)(4).

CAA Section 172(c)(6) – Other Measures: CAA section 172(c)(6) requires each nonattainment plan to include enforceable emission limitations and other control measures, means, or techniques, as well as schedules and timetables for compliance as necessary to provide for attainment by the applicable attainment date. The requirements under CAA section 172(c)(6) for nonattainment plans are similar to those under CAA section 110(a)(2)(A) for infrastructure SIPs, which the EPA previously approved for Tennessee.[85] However, in the EPA's action approving Tennessee's infrastructure SIP as satisfying CAA section 110(a)(2)(A) for the 2010 1-hour SO_2 NAAQS, the EPA explained that for nonattainment plans, "Emissions limitations and other control measures, whether on coal-fired EGUs or other SO_2 sources, that may be needed to attain and maintain the NAAQS in areas designated nonattainment for that NAAQS are due on a different schedule from the section 110 infrastructure SIP submission. A state, like Tennessee, may reference pre-existing SIP emission limits or other rules contained in part D plans for previous NAAQS in an infrastructure SIP submission for purposes of section 110(a)(2)(A)."[86] In its February 9, 2023, second nonattainment plan, TDEC notes that compliance dates for control measures in the attainment demonstration must be as expeditious as practicable, and attainment plans should require sources to comply with the requirements of the attainment strategy at least one calendar year before the attainment date. SIPs should be able to provide at least one calendar year of air quality monitoring data before the attainment deadline to demonstrate that the plan is providing for attainment. To account for its control measures that were put in place

[85] *See* 81 FR 85410 (Nov. 28, 2016).
[86] *See id*. at 85415.

expeditiously, Tennessee provided the permits for selected controls that were determined necessary to bring the area into attainment. Tennessee, in its February 9, 2023, second nonattainment plan, determined that there were no additional control measures that would advance the attainment date. Additionally, as discussed below, Tennessee's February 9, 2023, submission contains contingency measures that would be enacted within specified timeframes in the event ambient air monitoring exceeds SO_2 levels to ensure attainment of the 2010 1-hour SO_2 NAAQS by the applicable attainment date. Furthermore, Tennessee has demonstrated in its redesignation request and maintenance plan that the Area has attained well in advance of the 2027 attainment date. Therefore, the EPA is proposing to find that Tennessee's February 9, 2023, SIP submittal has met the requirements of 172(c)(6).

CAA Section 172(c)(9) – Contingency Measures: CAA section 172(c)(9) requires that nonattainment plans contain contingency measures that take effect without further action by the State or the EPA if the nonattainment area fails to meet RFP or attain the NAAQS by the applicable attainment date. Although CAA section 172(c)(9) requires plans to contain contingency measures that take effect if a nonattainment area fails to make RFP, the EPA notes that the Sullivan County Area has already demonstrated RFP with the emission reductions achieved at Eastman, which are submitted for the SIP to be permanent and enforceable, including fuel conversion of B-253 boilers 25–29, the installation of the permanent DSI controls on B-83 for boilers 23 and 24, the adoption of a combined emission limit for boiler houses B-83 and B-325, individual emission limits for boilers 30 and 31, and updates to emission limits for HWIs, flares, and the sulfur recovery plant incinerator, and the emission limits included for the nearby source of Primester. These required controls are proposed for incorporation into the SIP via conditions in SIP operating permit No. 080222 (superseded in part by SIP operating permit No. 082237 (Amendment #1)) and SIP operating permit No. 083740, PSD permit No. 955272F for Eastman, and title V operating permit No. 574994 for Primester. As described above, the EPA is proposing to find that RFP has already been made and that Tennessee's February 9, 2023, SIP

submission has therefore met CAA section 172(c)(2).

Furthermore, although CAA section 172(c)(9) requires plans to contain contingency measures that take effect if a nonattainment area fails to meet the NAAQS, the EPA notes that the Sullivan County Area has already demonstrated attainment with the permanent and enforceable emission reductions achieved at Eastman and emission limits included for the nearby source of Primester. As to the contingency measures required to take effect under CAA section 172(c)(9) if a nonattainment area fails to attain the NAAQS by the applicable attainment date, Tennessee's February 9, 2023 SIP submission contains contingency measures consistent with the 2014 SO_2 Guidance for 1-hour SO_2 Nonattainment Area SIP Submissions.[87] These contingency measures would be triggered upon notification by Tennessee that either: (1) a reference monitor for the area has registered four validated daily maximum one-hour ambient SO_2 concentrations in excess of the standard during calendar years 2024, 2025, 2026, or 2027; or (2) that a monitored SO_2 violation based on the design value occurred during or after calendar year 2028.

Upon activation of a trigger, Tennessee will notify Eastman that a reference monitor has registered four validated daily maximum 1-hour ambient SO_2 concentrations in excess of the standard during a calendar year. Eastman would then be required, without any further action from Tennessee or the EPA, to undertake a full system audit of all SO_2-emitting emissions units. Then, within 30 days of the notification, Eastman must submit a written system audit report to Tennessee. The system audit report must include certain information identified in the submittal, including, but not limited to, recommended provisional SO_2 emission control strategies for each affected unit and evidence that these control strategies have been deployed, as appropriate. Once Tennessee receives the system audit report, it will immediately begin a 30-day evaluation period to diagnose the cause of the monitored exceedance, followed by another 30-day period during

[87] The SO_2 Nonattainment Area Guidance explains that "Since SO_2 control measures are by definition based on what is directly and quantifiably necessary to attain the SO_2 NAAQS, it would be unlikely for an area to implement the necessary emission controls yet fail to attain the NAAQS. Therefore, for SO_2 programs, the EPA has explained that 'contingency measures' can mean that the air agency has a comprehensive program to identify sources of violations of the SO_2 NAAQS and to undertake an 'aggressive' follow-up for compliance and enforcement …."

which Tennessee will consult with Eastman to develop and implement operational changes as necessary to prevent future violations of the standard. Examples of changes may include fuel switching to reduce or eliminate the use of sulfur-containing fuels or physical or operational reduction of production capacity. Finally, if a permit modification is deemed necessary by TDEC, Tennessee would issue a final permit within the State's statutory timeframes required by TAPCR 1200-03-09. Any new emission limit required by such a permit would be submitted to the EPA as a SIP revision. If an emission source is found to be noncompliant with a SIP emission limit, the Technical Secretary of Tennessee will determine if additional limits are necessary to meet the requirements of CAA section 172(c)(9).

The EPA is proposing to find that Tennessee's contingency measures in the February 9, 2023, SIP revision satisfy the applicable requirements of CAA section 172(c)(9) because the contingency measures outlined above constitute a comprehensive program to identify sources of violations of the SO_2 NAAQS that includes requirements of follow-up for compliance and enforcement, and therefore, the State will be able to address a failure to make RFP or to attain the NAAQS.

2. Attainment Demonstration

To demonstrate future attainment of the NAAQS by predicting the effect of air emissions on ambient air quality, States may be required, under CAA section 110(a)(2)(K), to include air quality modeling and the associated data in a SIP submittal.

To demonstrate that Tennessee's control strategy will provide for timely attainment of the 2010 1-hour SO_2 NAAQS as expeditiously as practicable, but no later than the April 5, 2027, attainment date, TDEC's attainment demonstration included a modeling analysis, which followed the procedures in the EPA's Guideline on Air Quality Models in 40 CFR Part 51, Appendix W. TDEC included an atmospheric dispersion modeling analysis using AERMOD that accounted for all source-specific SIP revisions for units at Eastman and Primester, as well as modeled PTE of any smaller units at Eastman and nearby sources not within the nonattainment

area that were not included as source-specific SIP revisions. As discussed in more detail in section V.C.1.b of this NPRM and the Sullivan County SO_2 Modeling TSD, the model predicted a maximum three-year average 99th percentile of daily maximum 1-hour average SO_2 concentration for the Sullivan County Nonattainment Area of 74.82 ppb, a value below 75 ppb, that demonstrates the 2010 SO_2 NAAQS will be attained by April 5, 2027. Based on results of the modeling and TDEC's approach, the EPA proposes to find that Tennessee's attainment demonstration satisfies the requirements under CAA section 110(a)(2)(K) by performing appropriate air quality modeling and providing the associated data.

3. The EPA's Proposed Approval of Tennessee's 2023 Sullivan County SO_2 Nonattainment SIP

Based on the EPA's review and evaluation of the information in sections V.A, V.B, and V.C of this NPRM, the EPA is proposing to find that Tennessee's February 9, 2023, second nonattainment SIP for the 2010 SO_2 NAAQS satisfies the applicable requirements of CAA sections 110(a)(2)(D)(i)(I), 110(a)(2)(I), 110(a)(2)(K), and 110(l). As discussed above in section II, the EPA issued an FFA since the Sullivan County Area did not attain the relevant NAAQS within five years of the October 4, 2013, nonattainment designation. Once the CAA sections 191 and 192 deadlines were missed, this triggered a new CAA section 179(d) deadline to submit a nonattainment SIP by April 5, 2023, in lieu of the CAA section 191 and 192 requirements, and established an attainment date of April 5, 2027. The EPA has determined that Tennessee has satisfied the CAA requirements, and thus, has fully addressed the nonattainment plan provisions for the Sullivan County Nonattainment Area.

C. Redesignation Criteria

The five redesignation criteria under CAA section 107(d)(3)(E), identified in section III, above, are discussed in greater detail for the Sullivan County Area in the following paragraphs.

1. Criterion (1) – The Sullivan County Area Has Attained the SO_2 NAAQS

For redesignating a nonattainment area to attainment, the CAA requires the EPA to

determine that the area has attained the applicable NAAQS.[88] There are generally two components needed to support an attainment determination for the 2010 SO_2 NAAQS, which should be considered interdependently. The first component relies on air quality monitoring data. For SO_2, any available monitoring data would need to indicate that all monitors in the affected area are meeting the standard as stated in 40 CFR 50.17 using data analysis procedures specified in 40 CFR part 50, Appendix T. The second component relies on air quality modeling data. If there are no air quality monitors located in the affected area, or there are air quality monitors located in the area but analyses show that none of the monitors are in the area of maximum concentration, then air quality dispersion modeling will generally be needed to estimate SO_2 concentrations in the area. Such dispersion modeling should be conducted to estimate SO_2 concentrations throughout the nonattainment area using actual emissions and meteorological information for the most recent three calendar years.[89]

However, the EPA may also make determinations of attainment based on the modeling for the affected area, eliminating the need for separate actuals-based modeling to support a redesignation request. Furthermore, the EPA's SO_2 Nonattainment Area Guidance states that "An approvable attainment demonstration would be an air quality modeling analysis that demonstrates that the emission limits in the plan will suffice to provide for timely attainment of the affected standard. In cases where the necessary emission limits have not previously been made a part of the SIP, or have not otherwise become federally enforceable, the plan needs to include the necessary enforceable limits in adopted form suitable for incorporation into the SIP in order for it to be approved by the EPA."[90] Thus, a demonstration that the control strategy in the SIP has been fully implemented (compliance records demonstrating that the control measures

[88] *See* CAA section 107(d)(3)(E)(i).
[89] In its June 18, 2025, submission, Tennessee provides an analysis of the existing monitoring network and states that Tennessee believes that the Andrew Johnson site (AQS ID: 47-163-6003) is most representative of the maximum impact in the Area (Section 2.2 of the June 18, 2025, submission). However, the State does not rely on only air quality monitoring to show that the Area has attained. Instead, TDEC provides an air quality modeling analysis—with modeled potential to emit (PTE) in lieu of actual emissions—to both confirm that the Area has attained and to show that the Area will continue to maintain the NAAQS.
[90] *See* SO_2 Nonattainment Area Guidance at p. 9, available in the docket for this action.

have been implemented as required by the approved SIP) would also be relevant for making the determination. As noted above, TDEC provides emissions data to demonstrate compliance with the SO_2 permit limits in its final SIP submission.

a. Monitoring Data

A SO_2 monitoring site is considered as attaining the 2010 1-hour SO_2 NAAQS if it meets the NAAQS as determined in accordance with 40 CFR 50.17 and appendix T of part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. Specifically, to attain the SO_2 NAAQS at each monitoring site, the 3-year average of the annual 99th percentile (fourth highest value) of daily maximum 1-hour average concentrations measured at each monitor within an area must be less than or equal to 75 ppb. The data must be collected and quality-assured in accordance with 40 CFR part 58 and recorded in the EPA Air Quality System (AQS). The monitors should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

Tennessee currently operates four ambient SO_2 monitors in the Area, as shown in Tables 2 and 3, below. As shown in Table 2, the design values at the Ross N. Robinson and Skyland Dr. monitors have generally decreased since 2019, and the design values at the Andrew Johnson School and Happy Hill monitors, which began operation later, have generally decreased since 2021. The quality-assured, complete, and certified 2023–2025 design values are below the 2010 1-hour SO_2 standard of 75 ppb at all four monitoring sites. As shown in Table 3, since 2022, the annual 99th percentile daily maximum 1-hour SO_2 concentration has remained below the standard at all four monitors. The significant decrease in monitored ambient SO_2 concentrations is due to the implementation of the measures at Eastman discussed in section V.A and V.C.3.

Table 2: 1-hour SO_2 Three-Year Design Values (ppb) for the Sullivan County Nonattainment Area for 2017–2019 to 2023–2025

Site Name	AQS ID	2017–2019	2018–2020	2019–2021	2020–2022	2021–2023	2022–2024	2023–2025
Ross N. Robinson	47-163-6001	79	63	49	41	38	38	41
Skyland Dr.	47-163-6002	55	38	27	27	27	29	26

Andrew Johnson School	47-163-6003	ND*	ND*	87	71	67	57	57
Happy Hill	47-163-6004	ND*	ND*	53	51	52	49	49

ND*: No data available. The Andrew Johnson School monitor began operation on January 1, 2019, and the Happy Hill monitor began operation on October 10, 2018. As a result, both monitors did not have complete three-year design values until 2019–2021.

Table 3: Annual 99th Percentile Daily Maximum 1-hour SO_2 Monitored Concentrations (ppb) for the Sullivan County Nonattainment Area for 2017-2025

Site Name	AQS ID	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ross N. Robinson	47-163-6001	92	86	59	45	42	36	37	40	45
Skyland Dr.	47-163-6002	78	57	30	27	24	29	28	30	21
Andrew Johnson School	47-163-6003	ND*	ND*	104	73	84	55	61	56	54
Happy Hill	47-163-6004	ND*	ND*	52	46	61	45	51	50	45

ND*: No data available. The Andrew Johnson School monitor began operation on January 1, 2019, and the Happy Hill monitor began operation on October 10, 2018.

Preliminary monitoring data from the Sullivan County SO_2 monitors for 2026 indicates that all four monitors continue to meet the standard.[91] The EPA is proposing to determine that the Sullivan County Area has attained the 2010 1-hour SO_2 NAAQS based on the modeling analysis discussed below, as well as the quality-assured, complete, and certified ambient air monitoring data for the 2023-2025 design value period where monitoring values are below the applicable NAAQS.

Tennessee has committed in its June 18, 2025, SIP revision to continue operation of an ambient SO_2 monitoring network in the Area in accordance with the air monitoring regulations in 40 CFR Part 58 to continue to verify the Area meets the SO_2 NAAQS. Any future changes to the State and Local Air Monitoring Stations network in the Sullivan County Area will be submitted to the EPA for approval in Tennessee's annual ambient air monitoring network plan, as required by 40 CFR 58.10.

b. Modeling Analysis

As discussed above, Tennessee's February 9, 2023, submission contains a modeling analysis to demonstrate that the Area has attained the 2010 SO_2 NAAQS as a result of compliance with the new and existing SO_2 emissions limits for sources at Eastman and

[91] Preliminary 2026 air monitoring data is available at *https://www.epa.gov/outdoor-air-quality-data*.

Primester. This modeling analysis is resubmitted in the June 18, 2025, submission. When the EPA designated the Sullivan County Area as a nonattainment area for the 2010 SO_2 NAAQS, the Agency determined that Eastman was the primary cause of the 2010 SO_2 NAAQS violations in the Sullivan County Area. Details regarding the modeling analysis are summarized in the following paragraphs. A more detailed discussion of TDEC's modeling can be found in the EPA's Sullivan County SO_2 Modeling TSD, which is included in the docket for this NPRM.

TDEC's modeling analysis was developed in accordance with the EPA's Guideline on Air Quality Models (Modeling Guideline)[92] and the Modeling Guidance provided in appendix A of the EPA's SO_2 Nonattainment Area Guidance. The modeling was performed using the EPA's preferred air dispersion modeling system – the American Meteorological Society/ Environmental Protection Agency Regulatory Model (AERMOD) – consisting of the AERMOD (version 22112) air dispersion model[93] and multiple data input preprocessors as described below.

TDEC used regulatory default options in the AERMOD modeling. Based upon an evaluation of the land use within three kilometers of Eastman, more than 50 percent of the land use is classified under urban land use categories rather than rural land use categories. Therefore, urban dispersion coefficients were used in the modeling. Due to the larger amount of heat released from Eastman, although the facility is located in a city with a population of about 50,000, a surrogate population value of 200,000 was calculated by Eastman for use with the urban option in AERMOD as the "effective population." Additional details about the procedures used for the urban option are provided in the EPA's Sullivan County SO_2 Modeling TSD.

AERMET and AERMINUTE are data pre-processors for the EPA's AERMOD air quality dispersion model, generating meteorological observations and wind data information, respectively. AERMET (version 22112) and AERMINUTE (version 15272) were used to

[92] *See* 40 CFR part 51 Appendix W. For additional information on the November 29, 2024, final Appendix W revision rule, *see https://www.epa.gov/scram/2024-appendix-w-final-rule*.
[93] AERMOD version 22112 was the current version available at the time the modeling was performed by TDEC in 2023.

process one year (April 2012 – March 2013) of site-specific meteorological data[94] (wind speed and direction, temperature, and turbulence parameters), collected at a 100-meter tower equipped with a Sound Detection and Ranging (SODAR) wind profiler system specifically installed near Eastman for this modeling analysis. Additional meteorology inputs needed for AERMOD that were not collected at the site-specific meteorology station (*e.g.,* cloud cover data) were obtained from the Bristol/Johnson/Kingsport, Tri-Cities Regional Airport (KTRI) National Weather Service (NWS) automated surface observing system (ASOS) station (WBAN No. 13877), in combination with twice daily upper-air meteorological soundings from the Nashville, Tennessee NWS station (WBAN No. 13897). The Tri-Cities Regional Airport is located approximately 8.5 miles east/southeast of Eastman, and the Nashville Airport is located approximately 200 miles west of Kingsport, but it has mean mixing heights comparable to the Kingsport area. The pre-processor AERSURFACE (version 20060) was used to process 2011 National Land Cover Database (NLCD) data to derive the albedo, Bowen ratio, and surface roughness surface characteristics needed for AERMET.

The pre-processor AERMAP (version 18081) was used to generate terrain inputs for the receptors, based on a digital elevation mapping database from the National Elevation Dataset developed by the U.S. Geological Survey. Model receptors were placed at 50-meter intervals along the fence-line, public access roads, and riverbanks as well as in a 100-meter grid throughout the remainder of the three-km non-attainment area (excluding the area inside the Eastman fence-line because access is controlled by fences, gates, and other restrictions to limit public access and is therefore not considered to be ambient air).

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[94] As discussed in Section 8.4.2.e of the EPA's Guideline on Air Quality Models in 40 CFR Part 51, Appendix W, if at least 1-year of site-specific meteorology data is available, it is preferred for use in air quality modeling analyses. Prior to the data being collected by Eastman in 2012–2013, Eastman and TDEC consulted with the EPA about using a partial year in 2012 and partial year in 2013 to meet the 1-year of site-specific data requirement. The EPA concurred that it was not necessary for the 1-year of data to correspond to a single calendar-year (January-December). The April 2012–March 2013 site-specific data continues to be the best available wind, temperature and turbulence data for the modeling analysis because data for these parameters from the nearby Tri-Cities Regional Airport NWS site is located outside the river valley where Eastman is located, so the parameters measured at the airport are not representative of the conditions at the facility location.

TDEC's modeling analysis is based upon permitted allowable emissions limits for the primary SO_2 emissions sources at Eastman[95] and the other nearby sources that are included in the modeling.[96] Smaller SO_2 emissions sources at Eastman, which will not have emissions limits incorporated into the SIP, were modeled at maximum uncontrolled hourly emissions rates. One batch chemical manufacturing source at Eastman was excluded from the modeling analysis based upon the intermittent nature of its operation. Additional details about this intermittent source are provided in Tennessee's May 20, 2026, supplement to the redesignation request SIP submittal and the EPA's Sullivan County SO_2 Modeling TSD. The allowable emissions limits for the B-83 and B-325 coal-fired boilers, B-248 liquid and solid hazardous waste incinerator, and B-351 Coal Gasification Flares are 30-day average SO_2 emissions limits. The modeling analysis must be based upon the maximum allowable 1-hour SO_2 emissions. Therefore, TDEC used the procedures contained in EPA's SO_2 Nonattainment Area Guidance to determine the short-term 1-hour critical emission value (CEV) for each of these sources based on modeling and then established comparably stringent LTA permit limits. As described in the SO_2 Nonattainment Area Guidance, the CEV is the maximum modeled emission rate that results in attainment and can be used as a reference point for setting the longer term emission rates. Modeling multiple sources of emissions together to determine the worst-case attainment scenario will result in a CEV associated with each source.

As discussed in the LTA TSD, TDEC derived longer term emission limits from modeled CEVs for three sets of emission sources. For the coal-fired boilers (B-83 and B-325), Tennessee established a new single, combined emission limit of 1,248 lb/hr of SO_2 emissions on a 30-day rolling average. TDEC derived this limit from the CEV of 1,600 lb/hr and an adjustment factor of 0.78. An adjustment factor is the ratio that accounts for the variability of the hourly emissions

[95] The primary SO_2 emissions sources at Eastman are B-83 and B-325 Coal-Fired Boilers, B-253 Natural Gas Boilers, B-248 Solid and Liquid hazardous waste incinerators, B-334 Incinerator for Acid Gas Removal and Sulfur Recovery Plan, B-351 Coal Gasification Flares, B-55 Organic Acids and Anhydrides Manufacturing Vents, and Primester B-441 Vent C Cellulose. The emissions limits that will be incorporated in the SIP are provided in Table 4-4 of TDEC's June 18, 2025, submission.

[96] The nearby sources include Primester, Domtar, and Cardinal Glass.

for a source. For the hazardous waste incinerators (B-248-1 and B-248-2), Tennessee established separate CEVs for each of the incinerators at 20 lb/hr and 10 lb/hr, respectively. After determining the CEVs for each incinerator, Tennessee followed the SO_2 Nonattainment Area Guidance to establish comparably stringent 30-day rolling average emission limits for each incinerator at 15.2 lb/hr (adjustment factor of 0.76) and 2.0 lb/hr (adjustment factor of 0.2), respectively. For the Coal Gasification Flares (B-351-5), Tennessee established a longer term emission limit of 14.6 lb/hr on a 30-day rolling average. This emission limit was derived from the CEV of 16.28 lb/hr of SO_2 emissions. Additional details about the process for determining the CEVs and 30-day average permit limits are contained in the EPA's Sullivan County SO_2 Modeling TSD and LTA TSD.

The Building Profile Input Program for Plume Rise Model Enhancements (BPIPPRM) (version 04274) preprocessor was used to generate direction-specific building downwash parameters for input into AERMOD. The stack heights used in the modeling meet the Good Engineering Practice stack height criteria specified in 40 CFR 51.118. Twenty-four buildings/structures were processed for the four primary boiler stacks at Eastman (B-83 Boilers B-18-22, B-83 Boilers B-23-24, B-325, and B-253). TDEC's modeling also evaluated the potential building downwash effects from these same twenty-four buildings/structures for smaller emissions sources at Eastman, and the Primster, Domtar and Cardinal Glass facilities. The BPIPPRM results indicated that these buildings influenced modeled concentrations for a total of 31 modeled Eastman sources and the Primester source. Building downwash was not found to influence concentrations from the other nearby sources included in the modeling analysis (Domtar and Cardinal Glass) because of their distance from the nonattainment area (1 km and 23 km, respectively).

TDEC evaluated other large sources of SO_2 emissions within 50 km of the nonattainment area and determined that three additional facilities – Primester, Domtar, and Cardinal Glass – could potentially impact modeled SO_2 concentrations in the nonattainment area based upon the

magnitude of their emissions and/or their distance from the nonattainment area. Primester has a relatively small amount of SO_2 emissions (1.1 tons/year) but is located in the nonattainment area and adjacent to Eastman. Domtar (6.95 tons/year in 2022) and Cardinal Glass (421.58 tons/year in 2022) are located outside the nonattainment area.

To account for SO_2 impacts from other emissions sources not directly included in the AERMOD modeling analysis, TDEC used background SO_2 concentrations obtained from monitoring data collected at the Mammoth Cave National Park ambient SO_2 monitor near Bowling Green, Kentucky (AQS ID: 21-061-0501). TDEC used data from 2019-2021 to calculate hourly varying "season-by-hour-of-day" background concentrations for input into AERMOD.[97] Additional details about the process for determining the background concentrations are included in the EPA's Sullivan County SO_2 Modeling TSD. The Mammoth Cave monitor is approximately 320 km from Eastman, and TDEC determined that it is representative of the Area based upon the similarity of terrain and mix of sources similar to those in the Sullivan County Area.

Table 4 shows that the maximum modeled 99th percentile daily 1-hour SO_2 concentration using the one year of representative site-specific meteorological data (April 2012 – March 2013) is less than or equal to the 2010 SO_2 NAAQS of 75 ppb based on the 1-hour CEV emission rates for the sources with LTA limits and permitted allowable or maximum uncontrolled emissions for the other sources included in the modeling.

Table 4: Maximum Modeled 99th Percentile Daily Maximum 1-hour SO_2 Impacts in the Sullivan County Area

Averaging time	Maximum predicted impact	Background	Total	SO_2 NAAQS
1-hour	74.82 ppb	Included in the modeling	74.82 ppb	75 ppb

The final modeling resulted in a highest predicted 99th percentile daily maximum 1-hour

[97] The 2019–2021 data was the most-recent three-year dataset available at the time the modeling was performed by TDEC in 2023.

concentration of 74.82 ppb with no modeled violations of the 2010 SO_2 NAAQS in ambient air locations in the Sullivan County Area. Additional details about the modeling are provided in the EPA's Sullivan County SO_2 Modeling TSD. Additionally, the modeled demonstration described above is consistent with CAA requirements, the EPA's Modeling Guideline at 40 CFR part 51, Appendix W, and the SO_2 Nonattainment Area Guidance. Therefore, the EPA proposes to determine that the air quality modeling and related information contained in TDEC's February 9, 2023, and June 18, 2025, submission demonstrates that the Sullivan County Area has attained the 2010 SO_2 NAAQS as a result of compliance with the permit limits at Eastman and Primester.

2. Criterion (2) – EPA Has Fully Approved the Applicable Implementation Plan Under CAA Section 110(k); and Criterion (5) – Tennessee Has Met All Applicable Requirements Under Title I of the CAA Section 110 and Part D.

For redesignating a nonattainment area to attainment, the CAA requires the EPA to determine that the State has met all applicable requirements under section 110 and part D of title I of the CAA in accordance with CAA section 107(d)(3)(E)(v) and that the State has a fully approved SIP under CAA section 110(k) for the area in accordance with CAA section 107(d)(3)(E)(ii). As discussed further in the following subsections of this NPRM, the EPA has already approved SIP revisions addressing certain applicable requirements under CAA section 110 and part D and is proposing to approve other revisions addressing the remaining applicable requirements for the Sullivan County Area.[98,99] In today's proposed action, the EPA is proposing to approve these outstanding elements and is proposing to find that, if the Agency finalizes approval of the outstanding CAA part D elements, the June 18, 2025, redesignation request satisfies CAA sections 107(d)(3)(E)(ii) and (v).

a. General SIP Requirements

[98] The remaining applicable elements are sections 172(c)(1) (RACM/RACT), 172(c)(2) (RFP), 172(c)(4) (identification and quantification requirements), 172(c)(6) (requirement to include other control measures as may be necessary or appropriate to provide for attainment of such standard by the applicable attainment date), and 172(c)(9) (contingency measures).

[99] The EPA may rely on prior SIP approvals in approving a redesignation request, *see Wall* v. *EPA,* 265 F.3d 426 (6th Cir. 2001), plus any additional measures that may need to be approved in conjunction with a redesignation action.

General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: submission of a SIP that has been adopted by the State after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements (PSD); provisions for the implementation of part D requirements (NNSR); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

CAA section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a State from significantly contributing to air quality problems in another State. To implement this provision, the EPA has required certain States to establish programs to address the interstate transport of air pollutants. CAA section 110(a)(2)(D) requirements for a State are not linked with a particular nonattainment area's designation and classification in that State. The transport SIP submission requirements, where applicable, continue to apply to a State regardless of the designation of any one area in the State. As a result, the EPA maintains that the CAA's interstate transport requirements should be construed to be applicable for purposes of redesignation.

In addition, the other CAA section 110(a)(2) elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status are not applicable requirements for purpose of redesignation. The area will still be subject to these requirements after the area is redesignated. CAA section 110 and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with the EPA's existing policy on applicability (*i.e.,* for redesignations) of conformity and oxygenated fuels requirements, as well as with CAA section 184 ozone transport requirements.[100] However, the EPA has approved

[100] *See* 61 FR 53174 (Oct. 10, 1996), 62 FR 24826 (May 7, 1997), 61 FR 20458 (May 7, 1996), and 60 FR 62748 (Dec. 7, 1995); *s*ee *also* 65 FR 37890 (June 19, 2000) and 66 FR 50399 (Oct. 19, 2001).

Tennessee's SIP revisions related to the CAA section 110 requirements for the 2010 SO_2 NAAQS, including the interstate transport elements at CAA section 110(a)(2)(D)(i)(I).[101]

b. Title I, Part D, Applicable SIP Requirements

As discussed in section V.B. of this NPRM, the EPA is proposing to fully approve Tennessee's February 9, 2023, second SO_2 nonattainment SIP submission under CAA section 110(k) as satisfying all the applicable requirements of title 1 under CAA sections 110(a)(2)(D)(i)(I), 110(a)(2)(I), 110(a)(2)(K), 110(l), 172, and 179.

3. Criterion (3) – The Air Quality Improvement in the Sullivan County Area is Due to Permanent and Enforceable Emission Reductions.

As discussed above, the CAA requires the EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, applicable Federal air pollution control regulations, and other permanent and enforceable reductions[102] to redesignate a nonattainment area to attainment. As discussed in section V.A of this NPRM, the EPA proposes to determine that the reduction in monitored SO_2 concentrations and the modeled attainment in the Sullivan County Area are due to emission reductions resulting from compliance with the control measures at Eastman that are identified for incorporation into the SIP and those that are already incorporated into the SIP as of December 11, 2025. The EPA is proposing to approve the measures from TDEC's February 9, 2023, second nonattainment plan and June 18, 2025, redesignation request, as supplemented on January 27, 2026, and May 20, 2026, as discussed in section V.A of this NPRM. Tennessee's June 18, 2025, submission also identifies SIP-approved State measures, some of which implement Federal requirements, that have been implemented to date. Those measures specifically regulate coal-fired boilers and hazardous waste incinerators.

The control measures identified for incorporation into the SIP have resulted in significant

[101] The EPA approved Tennessee's section 110 infrastructure SIP with respect to the 2010 1-hour SO_2 NAAQS. *See* 81 FR 85410 (Nov. 28, 2016), 83 FR 48237 (Sept. 24, 2018), and 88 FR 53800 (Aug. 9, 2023).
[102] *See* CAA section 107(d)(3)(E)(iii).

reductions in SO_2 emissions at several Eastman emission sources. Tennessee's June 18, 2025, submission assesses the SO_2 emission reductions achieved in the Area resulting from implementation and compliance with control measures. The submission shows that the improvement in air quality is attributed to the control measures that the EPA is proposing to make permanent and enforceable in the SIP and those that are already incorporated into the SIP as of December 11, 2025. Table 5, below, shows the change in actual SO_2 emissions for Eastman's coal-fired boilers at Powerhouses B-253, B-83, and B-325 between 2011 and 2022[103] based on the implementation of the control measures discussed in section V.A. The largest point sources of SO_2 in the Sullivan County Area are from Eastman's coal-fired boilers which cumulatively account for over 99 percent of the SO_2 emissions in the Area. Overall, SO_2 emissions from Eastman's coal-fired boilers decreased by 84.8 percent between 2011 and 2022.

Table 5: Eastman Actual Emissions From Coal-Fired Boilers and Hazardous Waste Incinerators

Source Type	Description	SO_2 Emissions (tons)			Total Emissions Reduced (tons) [2011–2022]	Percent Change [2011–2022]
		2011	2017	2022		
Coal-Fired Boiler	B-83, Boilers B-18 through B-24	5,686	4,447	2,227	3,459	-60.83%
	B-253, Boilers B-25 through B-29	14,897	4,779	7.34	14,890	-99.95%
	B-325, Boilers B-30 through B-31	1,276	1,340	1,100	176	-13.79%
	Totals	**21,859**	**10,566**	**3,334**	**18,524**	**-84.75%**
Hazardous Waste Incinerators *	B-248-1	20	40	3.44	16.56	-82.80%
	B-248-2	20	20	0.46	19.54	-97.70%
	Totals	**40**	**60**	**3.90**	**36.10**	**-90.25%**

* According to TDEC, the decrease in emissions from Eastman's incinerators were primarily the result of the sale of Eastman's adhesive resins business (the source of sulfur-containing waste in the incinerator feed) in 2022, and the

[103] *See* Table 4-1 in Tennessee's June 18, 2025, submission. The 2011 actual emissions represent the base year inventory for the Eastman coal-fired boilers before Sullivan County was designated nonattainment for the SO_2 NAAQS. Calendar year 2011 represents one of three calendar years for 2009 through 2011 that informed the EPA's SO_2 nonattainment designations in 2013. As discussed above, the EPA approved the 2011 base year inventory for the Area pursuant to CAA section 172(c)(3). Calendar year 2017 accounts for the level of SO_2 emissions at Eastman coal-fired units that reflect the partial implementation of the Area's control strategy with the completion of repowering three of five B-253 to natural gas. Calendar year 2022 emissions represent full implementation of the Area's control strategy (*i.e.,* complete repowering of all five B-253 boilers to natural gas and the installation of DSI for B-83 boilers and 23 and 24).

emissions limits will ensure that SO_2 emissions from the incinerators do not interfere with the attainment or maintenance of the SO_2 NAAQS in the future.

4. Criterion (4) – The Sullivan County Area Has a Fully Approved Maintenance Plan Pursuant to CAA Section 175A.

For redesignating a nonattainment area to attainment, the CAA requires the EPA to determine that the area has a fully approved maintenance plan pursuant to CAA section 175A.[104] In conjunction with its request to redesignate the Sullivan County Area to attainment for the 2010 1-hour SO_2 NAAQS, Tennessee submitted a SIP revision to provide for the maintenance of the 2010 SO_2 standard for at least 10 years after the effective date of redesignation to attainment. The EPA proposes to find that this maintenance plan meets the requirements for approval under CAA section 175A for the reasons discussed below.

CAA section 175A sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Pursuant to CAA section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the Administrator approves a redesignation 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 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures as the EPA deems necessary to assure prompt correction of any future 2010 1-hour SO_2 violations. The Calcagni Memorandum[105] provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory; maintenance demonstration; monitoring plan; verification of continued attainment; and a contingency plan. As discussed more fully below, the EPA proposes to find that

[104] *See* CAA section 107(d)(3)(E)(iv).
[105] "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (hereinafter referred to as the "Calcagni Memorandum"), available at *https://www.epa.gov/ground-level-ozone-pollution/procedures-processing-requests-redesignate-areas-attainment*.

Tennessee's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Tennessee SIP.

a. Attainment Emissions Inventory

As discussed in section V.C.1 of this NPRM, the Sullivan County Area demonstrated attainment of the 2010 1-hour SO_2 standard based on a combination of air quality monitoring and dispersion modeling.

Currently, the Area has an attaining design value for the 2010 SO_2 standard based on quality-assured monitoring data for the three-year period from 2023-2025.[106] Tennessee selected 2022 as the base year (*i.e.,* attainment emissions inventory year), which is one of the years in a three-year design value where Sullivan County monitored attainment of the SO_2 standard.[107] The attainment inventory identifies a level of emissions in the Area that is sufficient to attain the 2010 SO_2 NAAQS. Consistent with CAA section 175A, Tennessee selected 2037 as the projected or future maintenance year. Tennessee relied on several emission data sources to develop the 2022 base year including the 2016v1[108] and 2016v2[109] Emissions Modeling Platforms (EMP); the 2017 and 2020 National Emissions Inventories (NEI);[110] and the EPA's Motor Vehicle Emissions Simulator (MOVES) model (version 3.0.3).[111]

Tennessee developed the 2022 attainment inventory by first generating a baseline emissions inventory for the Area starting with the actual emissions submitted annually to the

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[106] Final air quality design values for all criteria pollutants, including SO_2, are available at *https://www.epa.gov/air-trends/air-quality-design-values.* These design values are calculated in accordance with 40 CFR part 50.
[107] All Eastman boiler add-on controls (*i.e.,* repowering of B-253 Boilers 25 through 29 from coal to natural gas operation and installation of dry sorbent injection on B-83 Boilers 23 and 24) and new combined boiler SO_2 emission limit were implemented by 2022. Overall, boiler emissions decreased by 84.7% between 2011 and 2022 as a result of Eastman's control strategy. Following implementation of the control strategy, no exceedances of the NAAQS were measured at the four ambient air monitors in the Area for the first time in 2022. *See* Table 4 above and section 4.0 of TDEC's 2015 redesignation SIP submission.
[108] The 2016v1 inventory is available online at *https://www.epa.gov/air-emissions-modeling/2016v1-platform*. The CSV file containing the area source inventory (2016fh_proj_from_2014NEIv2_NONPOINT_final_20180119_08aug2019_nf_v1.csv) is available at *https://gaftp.epa.gov/Air/emismod/2016/v1/2016emissions/2016fh_inventory_nonpoint_27sep2019.zip*.
[109] The 2016v2 inventory is available online at *https://www.epa.gov/air-emissions-modeling/2016v2-platform*. The CSV file containing the area source inventory (MYR_nonpt_constant_2017NEI_NONPOINT_20200415_28sep2020_v1.csv) is available at *https://gaftp.epa.gov/Air/emismod/2016/v2/2016emissions/2016fj_nonpoint_inventoryt_15sep2021.zip*.
[110] *See https://www.epa.gov/air-emissions-modeling/2022v1-emissions-modeling-platform.*
[111] *See https://www.epa.gov/moves/moves3-update-log#MOVES3.0.3*.

NEI for 2022. With the exception of the point source category, TDEC apportioned the Area's county-level attainment and future year emissions in the Sullivan County Area using the 9.3 percentage ratio derived from the 2010 Census Bureau Population data for the entire Sullivan County to the estimated population of the Area.[112] Table 6, below, summarizes the 2022 attainment and 2037 projected emission inventory for the Area which is composed of five source categories: point, area (or non-point), on-road mobile, non-road mobile, and locomotive/rail emissions.[113] TDEC used emission data sets and information used by the EPA to develop the 2016v1 and 2016v2 emissions inventories to project attainment year emissions for 2022. For most source classification codes, Tennessee calculated a growth factor as the difference between 2026 and 2016 emissions, based on the equation below:

Growth Factor = (2026 emissions - 2016 emissions) / 10.

For each year between 2017 and 2022, TDEC calculated emissions for all source categories except point sources by adding the growth factor to the base year (2016) and to each subsequent year. For on-road and non-road sources, Tennessee obtained 2022 and 2037 mobile source emissions by interpolation for 2022 and extrapolation for 2037 of the existing data assuming a constant rate of year-over-year change (*i.e.,* assuming emissions decrease by a constant percentage of the previous year's emissions rather than a constant tonnage).[114] A summary of Tennessee's 2022 attainment and 2037 projected emission inventory for all five source categories is provided in Table 6, below. A comprehensive description of how Tennessee developed these inventories is discussed in the State's June 18, 2025, submission with supporting documentation located in Attachments A, B, C, and D.

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[112] Tennessee derived the percentage by using a population-weighted allocation of emissions of the entire county compared to the nonattainment area. *See* Figure B-1 and Table B-4 in Tennessee's June 18, 2025, submission.
[113] The non-road category in this inventory excludes locomotive and rail emissions; thus, Tennessee provided these emissions as a separate source category. *See* Table 5-9 in Tennessee's June 18, 2025, submission.
[114] This method assumes that the rate of change for SO_2 emissions is logarithmic rather than linear, so mobile source emissions approach a minimum value over time without reaching zero. *See* Figure 5-3 in Tennessee's June 18, 2025, submission. Using the 2017 base year as an initial condition and 2027 as a checkpoint, the year-over-year change was numerically determined so that the projected 2027 emissions matched the value of the 2027 MOVES output. Using a year-over-year change of 13.25%, mobile source emissions for each year between 2018 and 2037 were determined in accordance with Equation 5-1 in Tennessee's June 18, 2025, submission.

Table 6: Summary of 2022 and 2037 Emissions Inventories by Source Category

Source Category	2022 SO_2 Emissions (tons)	Projected 2037 SO_2 Emissions (tons)
Point	3,368.1	7,338.1
Area	4.22	3.42
On-road Mobile	0.84	0.10
Non-road Mobile (Excluding Locomotive/Rail)	0.089	0.036
Locomotive/Rail	0.0039	0.0069
Total Emissions	**3,373**	**7,342**[115]

i. Point Source Emissions: For point source emissions, Tennessee relied on the annual emissions submitted to NEI for 2022. There are only two point sources located in the Sullivan County Area – Eastman and Primester. Eastman is the largest point source, and the 2022 actual emissions for the facility are summarized in Attachment A of Tennessee's June 18, 2025, submission. Eastman's coal-fired boilers were responsible for nearly all SO_2 emissions from the facility (approximately 98–99 percent), as indicated in Table 5-1 of Tennessee's June 18, 2025, submission. Eastman's SO_2 emissions have declined substantially following implementation of the control strategy based on the completion of coal-fired to natural gas conversion of all five B-253 boilers (Boilers 25–29), the installation of a permanent DSI controls at Boilers B-23 and B-24 of Eastman's oldest coal-fired B-83 powerhouse, and a combined 30-day rolling SO_2 emission limit for Eastman's B-83 and B-325 powerhouses. *See* section V.A.3 of this NPRM. The other SO_2 point source in the Area, Primester, operates a cellulose acetate manufacturing process southwest of Eastman. This facility includes one SO_2 emission source, the Cellulose Scrap Recovery Process, which is controlled by a wet scrubber. Primester is not subject to the annual or triennial air emissions reporting requirements pursuant to 40 CFR part 51, subpart A.

[115] The point source inventory, which comprises the vast majority of the SO_2 emissions for the Area, includes potential to emit rather than projected actual emissions in 2037 for Eastman and Primester, the Area's point sources. The State is relying on air quality modeling to demonstrate ongoing maintenance. *See* section V.B.4.b – Maintenance Demonstration below for a detailed explanation why the Area's 2037 total projected SO_2 emissions is greater than the 2022 attainment year inventory. *See also* section 5.2.1.1 in Tennessee's June 18, 2025, submission.

Thus, actual emissions from this source were assumed to be equivalent to the emission limit of 0.25 lb/hr (1.1 tons/year) that EPA is proposing to incorporate into the SIP.

In Tennessee's June 18, 2025, submission, TDEC also assessed historical actual SO_2 emissions for large SO_2 emitting sources at Eastman. For the 2011 first base year inventory from Tennessee's May 11, 2017, nonattainment SIP, TDEC reported 21,859 tons of actual SO_2 emissions for the Area from emission units B-253, B-83, and B-325, during which time no enforceable control measures were installed or operational and the Area was not attaining the SO_2 NAAQS. The 2017 second base year inventory from Tennessee's February 9, 2023, attainment demonstration reflected the partial natural gas conversion at B-253 for Boilers B-30 and B-31 from 2014 to 2017 resulting in incremental emission reductions when comparing the years 2011 and 2017. Table 7, below, provides the historic emissions data (*i.e.,* actuals and percentage of allowable emissions). This table shows historic emission rates from the base year (2011) used to determine the original design value for designation (that the EPA approved in 2021), an interim year (2017) that reflects partial implementation of the control strategy to repower all five of Eastman's B-253 boilers from coal to natural gas operation (by the end of 2017, Eastman had implemented this strategy at three of the boilers), and a final year (2022) showing full implementation of the control strategy to repower all five B-253 boilers from coal to natural gas operation and install dry sorbent injection on B-83 boilers 23 and 24.

Table 7: Historic SO_2 Emissions for Eastman

Unit	2011 Annual Actual SO_2 Emissions (tons)	2017 Annual Actual SO_2 Emissions (tons)	2022 Annual Actual SO_2 Emissions (tons)	Percent Change, 2011 – 2022
B-253-1	14,897	4,779	7.37	99.95%
B-83-1	5,686	4,447	2,227	60.83%
B-325-1	1,276	1,340	1,100	13.79%
Totals	**21,859**	**10,566**	**3,334**	**84.75%**

To estimate point source emissions for 2037, the vast majority of which would be from Eastman, TDEC conservatively estimated allowable emissions and projected growth at the plant in terms of potential to emit — not projected actual emissions.

ii. Area Source Emissions: TDEC projected area source attainment year emissions for 2022 using emission data sets and information the EPA used to develop the 2016v1 and 2016v2 EMP. For most source classification codes, Tennessee calculated a growth factor as the difference between 2026 and 2016 emissions. For each year between 2017 and 2022, TDEC calculated future year emissions by adding the growth factor to the base year (2016) and to each subsequent year. TDEC used the final 2022 emissions for the attainment year emission inventory. TDEC apportioned county-level emissions to the Area using the 9.3 percent ratio of the 2010 census population data for the entire Sullivan County to the Area population. TDEC projected 4.22 tons of SO_2 emissions for the year 2022 and 3.42 tons of SO_2 emissions for the year 2037 attributable to area sources.

iii. On-Road Emissions: TDEC estimated on-road mobile source SO_2 emissions sources in the Sullivan County Area using locally gathered information on vehicle population and miles driven in the Area, as well as several other inputs, combined with MOVES modeling. On-road mobile sources include emissions from motorized vehicles that are normally operated on public roadways such as passenger cars, motorcycles, minivans, sport-utility vehicles, light-duty trucks, heavy-duty trucks, and buses. Tennessee obtained 2022 and 2037 mobile source emissions by interpolation for 2022 and extrapolation for 2037 of the existing data assuming a constant rate of year-over-year change (*i.e.,* assuming emissions decrease by a constant percentage of the previous year's emissions rather than a constant tonnage).[116] On-road mobile source emissions are included in Attachment C of Tennessee's June 18, 2025, submission. TDEC projected 0.84 tons of SO_2 emissions for the year 2022 and 0.10 tons of SO_2 emissions for the year 2037 attributable to on-road mobile sources.

[116] *See supra* Footnote 116.

iv. Non-Road Emissions (Excluding Locomotive and Rail Emissions): TDEC projected nonroad mobile sources (excluding locomotive and rail emissions) for 2022 and 2037. Tennessee's non-road source category included emissions from aircraft, commercial marine, and rail. For the year 2022, TDEC used emission data sets and information the EPA used to develop the 2016v1[117] and 2016v2[118] EMP emission inventories. For each source classification code, Tennessee obtained 2022 and 2037 mobile source emissions by interpolation (for 2022) and extrapolation (for 2037) of the existing data by assuming a constant rate of year-over-year change (*i.e.,* by assuming emissions increase or decrease by a constant percentage of the previous year's emissions rather than a constant tonnage).[119] TDEC projected 0.089 tons of SO_2 emissions for the year 2022 and 0.036 tons of SO_2 emissions for the year 2037 attributable to non-road mobile sources (excluding locomotive and rail emissions).

v. Locomotive & Rail Emissions: TDEC projected locomotive and rail SO_2 emissions for 2022 and 2037. Base-year emissions from locomotives were taken from the EPA's 2020 NEI, and locomotive emissions were counted as point, non-point, and non-road mobile sources. The 2020 NEI for Tennessee indicates that railyard emissions were reported as non-point emissions (SCC 2285002006, Line Haul Locomotives: Class I Operations) and as non-road mobile source emissions (SCC 2285002015, Railway Maintenance). The 2020 locomotive emissions were projected to 2022 and 2037 from the 2020 base year by assuming a 50 percent increase in emissions per decade. The 50 percent adjustment was based on a review of other non-road categories and determining the highest calculated emissions increase for all non-road categories

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[117] The 2016v1 inventory is available online at *https://www.epa.gov/air-emissions-modeling/2016v1-platform*. The CSV file containing the nonroad inventory (2016version1_nonroad_from_MOVES2014b_forAQ_aggSCC_03sep2019_nf_v3.csv) is available at *https://gaftp.epa.gov/Air/emismod/2016/v1/2016emissions/2016fh_inventory_nonroad_27sep2019_contents.txt*.

[118] The 2016v2 inventory is available online at *https://www.epa.gov/air-emissions-modeling/2016v2-platform*.The CSV file containing the nonroad inventory (2016fj_v2platform_nonroad_from_MOVES_aggSCC_27apr2021_nf_v1.csv) is available at *https://gaftp.epa.gov/Air/emismod/2016/v2/2016emissions/2016fj_nonroad_inventory_27may2021.zip*.

[119] This method assumes that the rate of change is logarithmic rather than linear, so mobile source emissions approach a minimum value over time without reaching zero. Using the 2016 base year as an initial condition and 2026 as a checkpoint, the year-over-year change was numerically determined so that the projected 2026 emissions matched the EPA's 2026 inventory.

(45 percent for several types of compressed natural gas-burning equipment). TDEC projected 0.0039 tons of SO_2 emissions for the year 2022 and 0.0069 tons of SO_2 emissions for the year 2037 attributable to locomotive and rail sources.

b. Maintenance Demonstration

Maintenance of the 2010 1-hour SO_2 standard is demonstrated either by showing that future emissions will not exceed the level of the attainment emissions inventory year or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. As discussed in the SO_2 Nonattainment Area Guidance, an EPA-approved demonstration of attainment that relies on air quality dispersion modeling using maximum allowable emissions during the 10-year maintenance period, such as Tennessee's modeling, can generally be expected to demonstrate that the standard will be maintained for the requisite 10 years and beyond without regard to any changes in operations of the pertinent sources that do not involve increases in maximum allowable emissions.[120]

Tennessee elected to demonstrate maintenance of the 2010 standard through 2037 based on the same air dispersion modeling used to show that the Area has attained 2010 1-hour SO_2 standard in accordance with CAA section 107(d)(3)(E)(i).[121] This modeling demonstrates continued maintenance through 2037 because it accounts for expected growth at Eastman during the 10-year maintenance period (*i.e.,* the construction and startup of three new natural gas-fired boilers and the methanolysis plant) and conservatively assumes that the remaining coal-fired boilers (B-83 and B-325 powerhouses) continuously operate at their maximum allowable hourly emission rate for the entire year.[122] These boilers are instead included at their PTE in the 2037 inventory and in the modeling demonstration as if they will continue operating throughout the

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[120] *See* SO_2 Nonattainment Area Guidance at p.67.

[121] Tennessee's June 18, 2025, submission includes inventories for 2022 and 2037. Although the 2037 inventory is higher than the 2022 inventory, the 2037 inventory reflects attainment because the 2037 point source inventory is based on emissions used in the attainment modeling. As discussed in section V.C.4.a. above, the 2022 attainment inventory is based on actual SO_2 emissions from the EPA's 2022 NEI for point sources. *See* section V.B.4.a above for a summary of TDEC's development of both inventories.

[122] The EPA also notes that TDEC conservatively included boilers, which have since shutdown, in the modeling demonstration. *See* 90 FR 57367 (Dec. 11, 2025).

maintenance period to conservatively account for their continued operation through 2028. The EPA is proposing to find that the Sullivan County Area will continue to maintain the 2010 1-hour SO_2 standard through year 2037 because the relevant sources are required to comply with permit limits that are either already incorporated in the SIP or through this NPRM are being proposed for incorporation into the SIP, and for which air quality modeling shows the Area will maintain the standard.

c. Monitoring Network

Tennessee operates four SO_2 monitors in the Sullivan County Area: Ross N. Robinson (AQS: 47-163-6001), Skyland Drive (AQS: 47-163-6002), Andrew Johnson Elementary School (AQS: 47-163-6003), and Happy Hill (AQS: 47-163-6004). *See* Table 3 in section V.C.1.a above. Tennessee has committed to continue operation of an ambient SO_2 monitoring network in the Area in accordance with the air monitoring regulations in 40 CFR part 58. Should changes to the existing network become necessary in the future, including a petition to discontinue the operation of any monitor, TDEC will consult with the EPA prior to any modifications to ensure the necessary regulatory steps and guidelines are met. If the EPA approves a petition to discontinue the use of one or more monitors, Tennessee commits to resume monitoring at any point should additional monitoring be required pursuant to 40 CFR part 58, appendix D, section 4.4. The EPA approved Tennessee's most recent 2025 ambient air monitoring network plan on October 10, 2025.[123]

d. Verification of Continued Attainment

Tennessee, through TDEC, has the legal authority to enforce and implement all measures necessary to attain and maintain the NAAQS pursuant to the Tennessee Air Quality Act (TCA 68-201) and TAPCR 1200-03 and 0400-30.[124] Tennessee also has the authority to implement the

[123] A copy of the EPA's letter approving the 2025 Tennessee ambient air monitoring network plan can be found in the docket for this NPRM.

[124] On June 11, 2025, the Board signed Board Order 25-012 finding that the Sullivan County Area attained the 2010 SO_2 NAAQS and approving the June 18, 2025, submission to the EPA seeking redesignation of the Area. *See* Attachment N in the June 18, 2025, submission.

specific control measures required to maintain the NAAQS pursuant to the requirements established in all relevant enforceable permits, including any supplemental updates, identified in section V.A. These control measures and associated MRR established in the permits, will ensure continued maintenance of the 2010 SO_2 NAAQS. Tennessee's maintenance plan provides that TDEC will track the continued attainment and maintenance of the NAAQS through air quality monitoring as required by 40 CFR part 58 and through the implementation and enforcement of the SIP and its control measures.

e. Contingency Plan

CAA section 175A requires that a maintenance plan includes such contingency measures as the EPA deems necessary to assure that the State will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan identifies the contingency measures to be adopted, a schedule and a procedure for adoption and implementation, and a time limit for action by a State. In cases where attainment revolves around compliance of a single source or a small set of sources with emissions limits shown to provide for attainment, the EPA interprets "contingency measures" to mean that the State agency has a comprehensive program to identify sources of violations of the SO_2 NAAQS and to undertake aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreement pending the adoption of revised SIPs.[125] A State also identifies specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must 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 CAA section 175A(d). The contingency plan included in the maintenance plan contains triggers to determine when contingency measures are needed and

[125] *See* SO_2 Nonattainment Area Guidance at p.69 and *General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990 57 FR 13498 (Apr. 16, 1992)*. TDEC has an active compliance and enforcement program to address violations and will continue to operate this program to identify sources of violations of the SO_2 NAAQS and to undertake an aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreements pending the adoption of revised SIPs. TDEC commits to adopt and expeditiously implement necessary corrective actions in the event of a violation.

what kind of measures should be used.

Tennessee's maintenance plan provides a primary trigger and contingency measures upon activation of that trigger. This language provides that upon notification by the Tennessee Technical Secretary to the permittee that a reference monitor in the Area has registered four validated ambient SO_2 concentrations in excess of the 2010 1-hour SO_2 NAAQS for any calendar year[126] during any maintenance period approved pursuant to CAA section 175A (a) and (b), the permittee shall undertake a full system audit of all emissions units subject to control under this plan. The permittee must submit a written system audit report within 30 days of the notification. The system audit report must detail the operating parameters of all emissions units, including smaller modeled emission units, for four 10-day periods up to and including the date upon which the reference monitor registered each exceedance, together with recommended provisional SO_2 emission control strategies for each affected unit and evidence that these control strategies have been deployed, as appropriate.

Upon consultation with the Technical Secretary, the permittee shall develop and implement operational changes as necessary to prevent future monitored violations of the standard. These changes may include fuel switching, physical or operational reduction of production capacity, or other changes as appropriate. If a permit modification is deemed necessary, any changes to existing permit conditions shall follow the applicable procedures of TAPCR 1200-03-09. If an emission source is found to be noncompliant with a SIP emission limit, the Technical Secretary will, in addition to conducting enforcement proceedings to bring the source into compliance with its SIP limit, determine whether additional limits must be added to the SIP in accordance with CAA section 175A.[127]

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[126] Tennessee's May 20, 2026, supplement modifies the contingency measure primary trigger language in section 6.0 of the redesignation SIP narrative (and Condition G4 of SIP operating permit No. 082237 (Amendment #1)) adding the phrase "any calendar year" before the phrase "during the maintenance period" to clarify that Eastman is required to conduct a full system audit should a monitor in the maintenance area record four exceedances in any calendar year within the maintenance period. *See* Tennessee's May 20, 2026, SIP supplement narrative including Attachments A and B, which is included in the docket for this NPRM.

[127] Tennessee's May 20, 2026, supplement modifies the contingency measure primary trigger language in section 6.0 of the redesignation SIP narrative (and Condition G4 of SIP operating permit No. 082237 (Amendment #1))

In addition to the primary trigger described above, Tennessee has a comprehensive program to identify sources of violations of the SO_2 NAAQS and will undertake an aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreements pending the adoption of revised SIPs.[128]

A trigger-level response will consist of a study to determine whether emissions from sources within the nonattainment area (or nearby sources located outside of the nonattainment area, as appropriate) are increasing or indicate a trend toward higher SO_2 concentrations. The study would evaluate whether the trend, if any, is likely to continue and any control measures necessary to reverse the trend, taking into consideration ease and timing for implementation, as well as economic and social considerations. If new control measures are already promulgated and scheduled to be implemented at the Federal or State level, and if those measures are determined to be sufficient to address any increase in peak SO_2 concentrations, additional local measures may be unnecessary. Tennessee will submit to the EPA an analysis to assess whether the proposed measures are adequate to reverse the increase in SO_2 concentrations and to maintain the NAAQS within the Area. If additional controls are necessary, Tennessee will implement the appropriate contingency measures needed to assure future attainment of the SO_2 NAAQS. Contingency measures would be adopted and implemented as expeditiously as possible, but no later than 24 months after the triggering event. The proposed schedule for these actions would be as follows:

- Six months to identify appropriate contingency measures, including identification of emission sources and appropriate control technologies;
- Between three and six months to initiate a stakeholder process; and
- Between nine and twelve months to implement the contingency measures. This step

replacing "172(c)(9)" with "175(A)" for the maintenance plan citation in the SIP narrative and Condition G4 of permit No. 082237 (Amendment #1). *See* Tennessee's May 20, 2026, SIP supplement narrative including Attachments A and B, which is in the docket for this NPRM.

[128] *See* Section 6.0 Maintenance Plan Requirements in the June 18, 2025, submission.

would include the time required to draft rules or SIP amendments, complete the rulemaking process, and submit the final plans to the EPA.

If a longer schedule is required to implement specific contingency measures, then, upon selection of the appropriate measures, Tennessee will notify the EPA of the proposed schedule and will provide sufficient information to the EPA to demonstrate that the proposed measures are a prompt correction of the triggering event. The selection of emission control measures will be based on cost-effectiveness, emission reduction potential, economic and social considerations, or other factors that the State deems to be appropriate. Selected emission control measures will be subject to public review, and Tennessee will seek public input prior to selecting new emission control measures.

D. Public Notice and Anti-Backsliding

CAA section 110(l) requires that each SIP revision submitted by a State must be adopted by a State after reasonable notice and public hearing. To meet this requirement, on November 9, 2022, Tennessee notified the public and provided an opportunity for public comment and hearing on its proposed SO_2 SIP revision for a nonattainment plan and attainment demonstration for the Sullivan County Area. The public comment period closed December 14, 2022. Tennessee also held a public hearing on December 15, 2022. Tennessee received several comments on the proposed SIP revision that it responded to. Tennessee submitted its SO_2 SIP revision for a nonattainment plan and attainment demonstration for the Sullivan County Area to the EPA on February 9, 2023, which included the comments received and Tennessee's responses. Additionally, on February 13, 2025, Tennessee notified the public and provided an opportunity for public comment and hearing on its proposed redesignation request and accompanying maintenance plan SIP revision. The public comment period closed March 20, 2025. Tennessee also held a public hearing on March 20, 2025. Tennessee received several comments on the proposed SIP revision that it responded to. On June 18, 2025, Tennessee submitted a request to the EPA to redesignate the Sullivan County Area from nonattainment to attainment, with an

accompanying SIP revision consisting of a maintenance plan for the Sullivan County Area, which Tennessee supplemented on January 27, 2026, and May 20, 2026. Tennessee's submission included the comments received and Tennessee's responses. As such, the EPA proposes to find that Tennessee has met this requirement of CAA section 110(l) with its February 9, 2023, and June 18, 2025, SIP revisions.

Further, under CAA section 110(l), the EPA may not approve a SIP if it would interfere with any applicable requirement concerning NAAQS attainment, reasonable further progress toward attainment, or any other applicable requirement of the CAA. This requirement is often referred to the "anti-backsliding" provision of the CAA. As demonstrated in sections V.A.–C., Tennessee's February 9, 2023, and June 18, 2025, SIP Revisions are not relaxations of any existing requirements and are expected to preserve or improve the ambient air quality in the Sullivan County Area as it existed when the area was designated as nonattainment on October 4, 2013. Thus, the EPA proposes to find that Tennessee's February 9, 2023, and June 18, 2025, SIP Revisions meet the anti-backsliding provisions of CAA sections 110(l).

VI. Incorporation By Reference

In this document, the 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, and as discussed in Sections II and III of this preamble, the EPA is proposing to incorporate by reference the following permit conditions for Eastman: Conditions G2, G3, G4, S2-1 (including Appendix 2), S2-2, S3-1(B) along with S3-1 Compliance Method A (including Appendix 3), S3-2, S3-3, S4-1, and S4-2 from SIP operating permit No. 082237 (Amendment #1) (State effective May 13, 2026); the entirety of SIP operating permit No. 083740, including appendix 1 (State effective January 14, 2026);[129] Condition 6 from Permit Number 966859F (State effective June 5, 2013); and the following permit condition for Primester: Condition E5-1 from Permit Number

[129] SIP operating permit No. 083740 includes Conditions G2, G3, G4, S5-1, S5-2, S6-1, and S6-2 and Appendix 1, which are requested to be incorporated into the SIP.

574994 (State effective January 1, 2020). These permit conditions contain SO_2 emission limits, control measures, and compliance parameters for SO_2-emitting sources at Eastman and Primester.[130] The EPA has made, and will continue to make, these documents generally available through *www.regulations.gov* and at the EPA Region 4 Office (please contact the person identified in the **"For Further Information Contact"** section of this preamble for more information).

VII. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations.[131] Thus, in reviewing SIP submissions, the EPA's role is to approve State choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions merely propose to approve State law as meeting Federal requirements and do not impose additional requirements beyond those imposed by State law. Furthermore, 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. For these reasons, 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);
- Are not Executive Order 14192 (90 FR 9065, February 6, 2025) regulatory actions because these actions are not significant under Executive Order 12866;
- Do not impose an information collection burden under the provisions of the Paperwork

[130] As noted previously, Tennessee relies on additional emission limits included in the 2023 second nonattainment SIP that meet CAA section 172(c)(1) and 172(c)(6) requirements but which were previously approved into Tennessee's SIP. *See* Table 1a of this NPRM and 90 FR 57367 (Dec. 11, 2025).
[131] *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a).

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 (Pub. L. 104-4);
- Do not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because these actions approves a State program;
- Are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- 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.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the 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.[132]

[132] *See* 65 FR 67249, November 9, 2000.

List of Subjects in 40 CFR Part 52

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

List of Subjects in 40 CFR Part 81

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

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

Dated: October 22, 2026.

Kevin McOmber,
Regional Administrator,
Region 4.

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