



## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 52**

**[EPA-R06-OAR-2020-0165; FRL-12829-02-R6]**

### **Air Plan Approval; Texas; Reasonably Available Control Technology in the Houston-Galveston-Brazoria Ozone Nonattainment Area**

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

**ACTION:** Final rule.

**SUMMARY:** Pursuant to the Federal Clean Air Act (CAA or “the Act”), the Environmental Protection Agency (EPA) is approving revisions to the Texas State Implementation Plan (SIP) concerning volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) Reasonably Available Control Technology (RACT) requirements for the Houston-Galveston-Brazoria (HGB), 2008 8-hour ozone National Air Quality Ambient Air Quality Standards (NAAQS) Serious nonattainment area (NAA). The revisions were submitted to the EPA by the State of Texas (“the State”) on May 13, 2020. EPA is also approving the VOC RACT negative declarations included in the Serious area Attainment Demonstration (AD) SIP revision.

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

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-R06-OAR-2020-0165. All documents in the docket are listed on the <https://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet. Publicly available docket materials are available electronically through <https://www.regulations.gov>.

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**SUPPLEMENTARY INFORMATION:** Throughout this document “we,” “us,” and “our” means the EPA.

## **I. Background**

The background for this action is discussed in detail in (1) our proposed rule published on March 10, 2021 (86 FR 13679) to approve revisions to the Texas SIP for VOC and NO<sub>x</sub> RACT submitted by Texas on May 13, 2020; (2) our July 24, 2025, supplemental proposal (90 FR 34790) for the VOC portion; and (3) our September 5, 2025, supplemental proposal (90 FR 42887) for the NO<sub>x</sub> portion.

In this final action, we are approving the May 13, 2020, revisions to the Texas SIP as meeting the 2008 8-hour ozone Serious classification RACT level control requirements consistent with section 172(c)(1) and 182 of the CAA for the HGB NAA, with the exception of the requirement to implement RACT for sources subject to the 2016 Oil and Natural Gas Industry Control Techniques Guidelines (CTG) because the EPA has already taken final action via a different rulemaking process to approve those SIP revisions.<sup>1</sup> This action also approves the CTG RACT negative declarations made by Texas in its May 13, 2020, SIP revisions for fiberglass boat manufacturing materials, manufacturing of pneumatic rubber tires, flat wood paneling coatings, letterpress printing, and automobile and light-duty truck assembly coatings sectors in the HGB area. Texas stated in its May 13, 2020, submittal that it did not locate any major sources

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<sup>1</sup> The EPA’s approval of the revisions to the Texas SIP concerning RACT requirements for sources covered by the 2016 Oil and Natural Gas Control Techniques Guidelines (CTG) for the DFW and HGB nonattainment areas under the 2008 ozone NAAQS. *See* 88 FR 55379 (August 15, 2023).

subject to the NO<sub>x</sub> Emissions from Cement Manufacturing Alternative Control Techniques (ACT) document.<sup>2</sup>

Following the EPA's March 2021 rulemaking proposing approval of the May 2020 SIP revision, the EPA received comments from Air Alliance Houston, Earthjustice, Sierra Club, Texas Environmental Justice Advocacy Services ("t.e.j.a.s."), and Harris County. The comments are available in the docket for this rulemaking. Our responses to all relevant comments follow this section.

Because of the comments the EPA received on the March 2021 proposal, the EPA provided additional analysis in our Technical Support Documents (TSDs) associated with our July and September 2025 supplemental proposals (referred to as the "supplemental proposals", "supplemental NO<sub>x</sub> TSD", "supplemental VOC TSD", or "supplemental TSDs"). Our supplemental NO<sub>x</sub> TSD analysis in table 1 (pages 5-20) lists Chapter 117 Emissions Specifications for Attainment Demonstration (ESAD) rates for each category of sources in the HGB NAA. We gathered and analyzed relevant information, including comments received during the 2021 comment period, Texas' rulemaking record which contained information on specific control technologies and technical and economic feasibility for the ESAD rates, Texas Register documents which included Texas' response to comments on the rulemaking, and recent documents issued by EPA (such as the 2017 OTC Draft White Paper on Control Technologies, OTC State Regulations from Eight Source Categories, 2019 OTC State Regulations from Eight Source Categories, and 2019 OTC Regulatory and Technical Guideline for Control of Nitrogen Oxides (NO<sub>x</sub>) Emissions from Natural Gas Pipeline Compressor Fuel-Fired Prime Movers). In our 2025 supplemental VOC TSD, the EPA performed an additional evaluation of Texas' VOC RACT which considered relevant information including comparing Texas' CTGs and non-CTG categorical RACT rules to other relevant state rules, and review of EPA's

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<sup>2</sup> See 86 FR 13679, 13682 (March 10, 2021).

RACT/BACT/LAER Clearinghouse (RBLC), NSPS, MACT standards, and NESHAPs, where applicable (see Supplemental VOC TSD, pages 2-50). Consistent with this analysis, we proposed to determine that Texas' EPA-previously-approved Chapter 115 and 117 rules still fulfill the RACT level of control requirements for sources of VOC and NO<sub>x</sub> in the HGB Serious ozone nonattainment area for the purpose of the 2008 ozone NAAQS. The supplemental VOC and NO<sub>x</sub> TSDs that accompanied the supplemental proposals are provided in the docket.<sup>3</sup>

EPA received no substantive technical comments on VOC or NO<sub>x</sub> RACT on the supplemental proposals or supplemental TSDs supporting EPA's proposed approval during the public comment period. Comments were received from Texas (which were mainly corrections and clarifications for the record) and two anonymous commenters.

In this final action, we are responding to comments received on the 2021 proposal, even though those comments are not reflective of EPA's supplemental proposals or the supplemental TSDs. Our additional analysis found in the supplemental proposals and supplemental TSDs was conducted, in part, in response to the adverse comments we received in 2021. We note that we did not receive any adverse comments on the 2025 supplemental proposals or supplemental TSDs. We have also responded to Texas' comments and non-substantive technical comments received on the supplemental proposals and supplemental TSDs; the comments are available in the docket for this action.

## **II. Response to Comments**

We received comments from five entities on the 2021 proposed rulemaking and comments from three entities on the supplemental proposals.

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<sup>3</sup> See EPA-R06-OAR-2012-0100 and EPA-R06-OAR-2017-0055, available through the Regulations.gov website at <https://www.regulations.gov>. In these actions, EPA found that RACT provisions of CAA 172(c)(1) and 182(b)(2) are being met for the HGB Moderate nonattainment area for the purposes of the 2008 NAAQS.

### *A. Disproportionate Impacts of NAAQS Violations to Communities*

*Comment:* Several commenters asserted that unhealthy air impacts residents of the HGB NAA, especially those in environmental justice communities. Commenters urged the EPA to bring relief to communities across the state that suffer a disproportionate impact from violations to federal (CAA) and state regulations.

*Response:* First, the EPA notes that Executive Order 14148, “Initial Rescission of Harmful Executive Orders and Actions” (90 FR 8237, January 28, 2025), revoked certain past Executive Orders that specifically addressed environmental justice concerns, including Executive Order 12898 and Executive Order 14094. Further, under section 110(k)(3) of the CAA, the EPA is required to approve a SIP submission that complies with the provisions of the CAA. The EPA has determined that the RACT SIP submittals at issue in this action do meet all applicable requirements of the CAA, and therefore the EPA is finalizing approval of the relevant SIP revisions. Implementation of RACT is designed to assist with improving air quality in the nonattainment area. To the extent commenters are raising concerns about violations of the CAA and/or state regulations, those concerns are outside the scope of this action which is only evaluating the approvability of the identified RACT SIP revisions.

### *B. Adverse Impacts Associated with Ozone NAAQS Violations*

*Comment:* The EPA received several comments regarding the adverse health impacts of ozone on Houston residents.

*Response:* We agree that excessive ozone pollution is a significant health issue in the HGB area, but we also recognize that significant progress has been made in reducing ozone levels in the area. We recognize that further improvement is necessary in the area to meet the current ozone NAAQS and protect public health. The HGB area was designated as nonattainment for the 1-hour and the 1997 8-hour revoked ozone NAAQS and is now designated as nonattainment for the two current (2008 and 2015) 8-hour

ozone NAAQS.<sup>4</sup> As a result, the State and HGB NAA – including local governments, business and industry – have implemented measures to reduce emissions of NO<sub>x</sub> and VOC that form ozone. A list of permanent and enforceable measures that have been implemented in the HGB NAA under the 1-hour and the 1997 8-hour revoked ozone NAAQS may be found in 40 CFR 52.2270.<sup>5</sup> The HGB NAA was recently reclassified as a Severe nonattainment area for the 2008 ozone NAAQS, and therefore, the State is required to submit SIP revisions and implement controls to satisfy the statutory and regulatory requirements for a Severe area for the 2008 ozone NAAQS.<sup>6</sup> Further, implementation of RACT is designed to assist with improving air quality in the nonattainment area. This action, which is finalizing the EPA’s approval of RACT SIP amendments to fulfill CAA ozone nonattainment plan requirements, demonstrates that the State and the EPA continue to work together to address air quality concerns in the HGB nonattainment area.

*C. EPA’s CTGs and ACTs and Texas’ rules are outdated, EPA provided no RACT analysis to support its approval of HGB RACT, and EPA’s approval is unlawful.*

*Comment:* In 2021, commenters claimed that the EPA’s CTGs and ACTs are outdated as guidance documents for RACT, and that the contents of the Texas rules and the CTG/ACT documents – i.e., the numerical emissions requirements, control efficiency requirements, or work practices – do not reflect current levels of performance. The commenters also claim that many of Texas’ VOC rules, and all of the Texas’ 30 TAC Chapter 117 rules dealing with NO<sub>x</sub> are also outdated.

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<sup>4</sup> For the 1-hour and 1997 and 2008 8-hour ozone standards, the Houston nonattainment area consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties: 56 FR 56694 (November 6, 1991); 69 FR 23858 (April 30, 2004); and 77 FR 30088 (May 21, 2012). For the 2015 8-hour ozone NAAQS, the Houston nonattainment area consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, and Montgomery Counties, 83 FR 25776 (June 4, 2018).

<sup>5</sup> EPA also approved the HGB RACT for the 2008 Moderate ozone NAAQS. *See* 84 FR 18145 (April 30, 2019).

<sup>6</sup> *See* 87 FR 60926 (October 7, 2022).

Commenters further claimed in 2021 that approving Texas' RACT SIP would be unlawful and arbitrary because Texas failed to meet its statutory requirements under the Clean Air Act because it did not evaluate additional measures that could reduce emissions in the HGB area and relied on its existing controls. Commenters claimed that the EPA's 2021 proposal to approve Texas' RACT SIP is unlawful, and contrary to the EPA's own rule on implementing the 2008 ozone NAAQS and case law. The commenters claim that, based on case law and the EPA's statutory authority, the EPA must "adequately explain" its RACT determinations, including explaining decisions that are contradictory to information in the record.

*Response:* As stated in EPA's March 2021 proposal, EPA previously approved Texas' NO<sub>x</sub> and VOC RACT limits and analysis for HGB's Severe area RACT requirements under the 1997 8-hour ozone NAAQS.<sup>7</sup> The EPA acknowledges that over time, control strategies/technologies may result in a change in what represents RACT for a particular category of emissions sources. In response to this concern raised by comments on the March 2021 proposal, the EPA provided additional analysis, explained above, in our 2025 supplemental proposals and supplemental NO<sub>x</sub> and VOC TSDs. As noted above, in 2025, during the public comment period for the supplemental proposals and supplemental TSDs, EPA received no adverse comments on the content or quality of our analysis or conclusions.

In 2021, EPA received comments that highlighted several specific control technologies for RACT implementation to reduce NO<sub>x</sub> and VOC emissions. Those specific comments are addressed in detail further below. In this general comment, commenters did not present any new technologies or any specific RACT limits for any category of sources.

*D. Reasonably Available Control Measures (RACM)*

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<sup>7</sup> 86 FR 13679, 13681 (March 10, 2021).

*Comment:* In 2021, several comments were received on disapproving or “pulling” Texas’ RACM.

*Response:* EPA did not propose approval of Texas’ RACM in 2021 nor in the 2025 supplemental proposals. RACM is outside the scope of this action.

*E. Texas’ Failure to Attain by the Attainment Date*

In 2021, the EPA received several comments related to Texas’ failure to attain by its attainment date and CAA requirements related to a failure to attain. The comments claim the following:

- Since the state failed to meet its attainment deadlines, additional controls are needed but the state’s submission would keep the same RACT determinations used for the 1997 8-hour ozone NAAQS;
- Texas claims that “additional control measures are not necessary for the area to demonstrate attainment by the attainment date”;
- The CAA does not restrict RACT requirements only for when a state deems them necessary; it mandates RACT when an area fails an attainment deadline, and the technology meets certain criteria;
- To remedy its failure to meet its attainment deadlines, Texas is statutorily required to implement RACT-level controls on existing sources in this nonattainment area.
- Texas has not updated its RACT rules to require more stringent measures to reduce NO<sub>x</sub> and VOC emissions in the HGB NAA;
- When areas fail to meet deadlines, the Act requires enhanced air pollution abatement measures so that the area can meet its next deadline. The HGB area failed to meet a deadline and Texas must implement enhanced control technologies.

*Response:* Comments on failure to attain by the attainment date are beyond the scope of this final action. The fact that the HGB NAA failed to attain the NAAQS is not relevant to the question of whether the RACT SIP revisions at issue here comport with the CAA. In this action, the EPA is approving the Serious area RACT requirements for the HGB NAA under the 2008 standard. The TSDs for the supplemental proposals detail our review of relevant information, including comments submitted to the EPA, to support our determination that the Texas Chapter 115 and 117 rules fulfill RACT level control requirements for the Serious classification.

*F. Concerns Regarding RACT Control Technologies and Determination*

*Comment:* In 2021, several commenters stated Texas proposes no new RACT and did not address control technologies identified in public comment. Commenters request that the EPA require that Texas implement new and better control technologies. Commenters requested that the EPA conduct an independent analysis of RACT in the HGB area.

*Response:* In response to this comment on our 2021 proposed approval, EPA provided additional analysis that is outlined in the 2025 supplemental TSDs for the supplemental proposals. As explained earlier in the background section of this final action, EPA considered relevant information, including comments on control technologies received in the 2021 comment period. We do not address specific technologies in response to this broad and general comment made in 2021 but do respond in detail to 2021 comments with specificity further below.

*Comment:* In response to the EPA's 2021 proposal, commenters claimed that Texas failed to meet the standard outlined by the EPA that would allow the state to use its previous RACT determination. Specifically, commenters claim that the Texas final action failed to respond to comments that they received that outlined how additional controls could result in a large reduction of emissions in the HGB area. Commenters state that

many of the largest sources of NO<sub>x</sub> emissions in the HGB area are associated with electric power generation. Commenters claim that Texas did not conduct any analysis of the largest NO<sub>x</sub> source, W.A. Parish station or consider additional controls for NO<sub>x</sub> and VOC at this source.

*Response:* EPA disagrees with commenters' claim that Texas failed to respond to comments. Texas identified comments submitted by Earthjustice on behalf of Achieving Community Tasks Successfully, Air Alliance Houston, Earthjustice, Sierra Club, and Texas Environmental Justice Advocacy Services (Earthjustice). In its response to comments document,<sup>8</sup> Texas responded to Earthjustice's comments on pages 2, 3, 6, 10-12, 14-17, 19-20, and 22. With respect to the specific comment on W.A. Parish station, the Earthjustice comment is on page 20, and Texas's response is on pages 21-22.

EPA disagrees with commenters 2021 characterization of a state's obligation with respect to a RACT determination. In 2015, EPA published the final SIP Requirements Rule (SRR) for implementing the 2008 8-hour ozone NAAQS (80 FR 12279, March 6, 2015). EPA described in the SRR an approach "allowing in some cases for states to conclude that sources already addressed by RACT determinations for the 1-hour and/or the 1997 ozone NAAQS do not need to implement additional controls to meet the 2008 ozone NAAQS RACT requirement" and noted that "in some cases, a new RACT determination would result in the same or similar control technology under the 1-hour or 1997 standard because fundamental control techniques, as described in the CTGs and ACTs, are still applicable." Importantly, EPA stated that while states should refer to the existing CTGs and ACTs for purposes of informing their RACT requirements, in doing an updated assessment of RACT for the nonattainment the state should also refer to "all relevant information (including recent technical information and information received

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<sup>8</sup> See "TCEQ Response to Comments – HGB 2008 Ozone" in the docket.

during the public comment period) that is available at the time that they are developing their RACT SIPs for the 2008 ozone NAAQS.”

As stated earlier, our 2025 supplemental proposals and supplementals TSDs detail our analysis of the ESAD rates. Specifically with respect to the W.A. Parish station, table 1, pages 17-18 of our supplemental NO<sub>x</sub> TSD, identified the relevant information considered by EPA in support of our approval, including ESAD rates, combustion control technologies, flue gas controls, and other state RACT rules for similar categories of sources. We have also responded in more detail to specific technical comments on W.A. Parish that the EPA received in 2021 elsewhere in this final action. In 2025, no comment was received on our supplemental proposals and supplemental NO<sub>x</sub> TSD for the W.A. Parish station.

*Comment:* In 2021, Commenters claim that a RACT determination is unlawful and arbitrary when other states have RACT requirements that are more stringent.

*Response:* The EPA disagrees with this general claim expressed by commenters in 2021. RACT is defined as “the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility”<sup>9</sup> Technological and economic feasibility can be affected by many factors including, but not necessarily limited to, geographic location of the source, industry/source specific considerations, and operational considerations. There are many variables that can result in variations in RACT determinations in different nonattainment areas, and for different sources, or groups of sources. Just because RACT has been determined to be one thing for certain sources in a certain state, that does not automatically mean that RACT is always the same for similar sources in all states. The EPA has reviewed Texas’ SIP submissions and rulemaking records for their analysis and RACT determination. In the EPA’s 2025

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<sup>9</sup> 44 FR 53762 (September 17, 1979)

supplemental proposal actions, we provided a summary of our evaluation and we received no comment on our supplemental proposals or TSDs related to the stringency of RACT in other state rules.

*Comment:* In 2021, commenters quote language from a decision issued by the United States Court of Appeals for the District of Columbia Circuit and assert that RACT determinations must be made and implemented quickly, even with “potentially expensive technology or expensive process changes to reduce pollution”<sup>10</sup>.

*Response:* The CAA case cited by the commenters is not on point for this action. The cited case briefly mentions “reasonably available control technology” (when listing statutory language provided in the CAA), but the case does not address the EPA’s review and approval of a state’s RACT SIP submittal. The EPA agrees in general with the concepts that the state “must reach attainment as expeditiously as possible”, that the EPA “may extend the attainment date to the extent [it] determines appropriate”<sup>11</sup>, and that implementing control technology to meet CAA requirements may be potentially expensive. This final action does not conflict with the caselaw cited by commenters, nor does this caselaw speak directly to the issue of whether the RACT SIP revisions at issue in this action ought to be approved.

#### *G. Control Technologies*

*Comment:* In 2021, commenters suggested a RACT framework that could: “(a) identify the NO<sub>x</sub> rates for each such large source; (b) identify the current NO<sub>x</sub> controls if any (such as: low NO<sub>x</sub> burners, ultra-low NO<sub>x</sub> burners, flue gas recirculation (FGR), over-fire air, SNCR, or SCR, etc.) that each source has; (c) identify, based on (a) and (b), the additional NO<sub>x</sub> reductions that can be obtained if additional or higher/better types of

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<sup>10</sup> See *Miss. Comm’n on Env’tl. Quality v. EPA*, 790 F.3d 138, 146 (D.C. Cir. 2015).

<sup>11</sup> *Id.*

technically feasible NO<sub>x</sub> controls could be applied; (d) determine cost-effectiveness of the additional controls.”

*Response:* The EPA does not consider the source-specific review methodology presented by commenters as necessary to fulfilling RACT requirements when a state is not submitting source-specific RACT in a SIP revision. The EPA’s obligation under CAA sections 110(k)(2) and (3) is to evaluate and act on the SIP revisions submitted by the state. In this instance, Texas did not submit source-specific RACT determinations akin to what the commenter is suggesting. States have discretion in terms of how they wish to fulfill their RACT obligations. The EPA’s role here is to evaluate and act on the SIP revisions submitted by the state. Our 2025 supplemental NO<sub>x</sub> TSD, table 1, pages 16-20 confirmed that Texas considered the same technologies as identified by the commenters for the Chapter 117 ESAD rates. In 2025, EPA did not receive any comments on technologies that Texas should have considered.

*Comment:* In 2021, commenters state that Texas provides little explanation as to why it rejected commenters’ RACT recommendations. Commenters stated the W.A. Parish plant coal-burning units burn more efficiently than the gas-burning units. Commenters speculate that maintenance on the installed controls is the cause.

*Response:* This 2021 comment did not make a RACT-specific recommendation. Our 2025 supplemental NO<sub>x</sub> TSD, table 1, page 17, details our analysis of the ESAD rates for gas-fired and coal-fired utility boilers. The ESAD rates for the gas-fired utility boilers category of sources are lower than the ESAD rates for the coal-fired utility boilers category of sources. The 2025 supplemental TSD details EPA’s review in support of its approval of the ESAD rates for both of these categories of sources as fulfilling RACT requirements (see Table 1, page 17). The EPA’s obligation under CAA sections 110(k)(2) and (3) is to evaluate and act on the SIP revisions submitted by the state. In this instance, Texas did not submit source-specific RACT determinations for W.A. Parish. States have

discretion in terms of how they wish to fulfill their RACT obligations. The EPA's role here is to evaluate and act on the SIP revisions submitted by the state.

In 2025, EPA did not receive a comment on the supplemental proposal or supplemental NO<sub>x</sub> TSD on ESAD rates for gas-fired or coal-fired utility boiler units.

*Comment:* In 2021, commenters identified several available control technologies and claimed that Texas did not adequately analyze them. For boilers and furnaces, commenters identify ultra-low NO<sub>x</sub> burners, flue gas recirculation, selective non-catalytic reduction, and selective catalytic reduction. For turbines, commenters identify dry low NO<sub>x</sub> combustors followed by SCR. Commenters also state that Texas did not address maintenance and efficiency of installed controls, including available NO<sub>x</sub> reductions at the W.A. Parish power plant.

*Response:* The 2021 comment broadly categorizes “boilers, furnaces, and heaters”, but Texas regulates eight categories of boilers, six categories of furnaces, two categories of turbines, and one category of heaters. Our 2025 supplemental NO<sub>x</sub> TSD, table 1 page 5-19, contains our analysis and review for all of the different types of sources identified by the 2021 commenters. Page 4 of the 2025 supplemental NO<sub>x</sub> TSD broadly identifies Texas' “Tier I” as combustion modifications (low NO<sub>x</sub> burners, dry low NO<sub>x</sub> burners (DLN), mid kiln firing), “Tier II” (flue gas) controls (i.e., Selective Non-catalytic Reduction (SNCR), Selective Catalytic Reduction (SCR, NO<sub>x</sub> oxidation scrubbers), and “Tier III” controls as a combination of Tier I and Tier II controls. The EPA's 2025 supplemental NO<sub>x</sub> TSD confirmed that, for the Chapter 117 ESAD rates, Texas considered the same technologies as identified by the commenters. We did not receive any technology specific comments on our 2025 supplemental proposals or supplemental NO<sub>x</sub> TSD for these categories of sources.

*Comment:* In 2021, commenters state that table F-4 (the last column) in appendix F of Texas' submittal shows the NO<sub>x</sub> RACT rules that apply to each source per Texas

and the rules in §§ 117.300 through 117.356 apply to almost every one of these sources. Section 117.305 addresses the NO<sub>x</sub> emissions from gas-fired combustion equipment, such as boilers and heaters burning natural gas, expressed in lb/MMBtu of heat input to such devices. Commenters claim that the requirements of § 117.305 for gas-fired combustion equipment are outdated and are not consistent with current RACT. Thus, EPA's approval of § 117.305 in its current form is improper because it does not represent current RACT.

*Response:* The EPA agrees that table F-4 lists the Chapter 117 rules applicable to NO<sub>x</sub> major sources and that list includes section 117.305. However, § 117.305(g) states that the section no longer applies after the appropriate compliance date(s) for emission specifications for attainment demonstration (referred to as ESAD rates) The ESAD rates are listed in § 117.310. 30 TAC § 117.9020(2)(F) requires compliance by March 31, 2005. Therefore, § 117.305 rates no longer apply. Our 2025 supplemental proposals and supplemental TSDs detail our review of relevant information, including comments submitted to EPA, to support its determination that ESAD rates fulfill RACT requirements. We received no comments on our 2025 supplemental proposals or supplemental NO<sub>x</sub> TSD for these categories of sources.

*Comment:* In 2021, Commenters claim that W.A. Parish coal units, each equipped with SCR, has had a deterioration in the SCR performance, as reflected in the higher NO<sub>x</sub> rates for the recent years as compared to the NO<sub>x</sub> rates in the years immediately after SCR installation. Commenters further claim that replacing catalyst and obtaining post-SCR NO<sub>x</sub> levels that are similar to original performance is RACM and RACT.

*Response:* Our 2025 supplemental NO<sub>x</sub> TSD (table 1, page 17) details our review of the category of sources that include gas-fired and coal-fired utility boilers. The ESAD rates for the coal-fired utility boilers category of sources has not changed over time.

The EPA's obligation under CAA sections 110(k)(2) and (3) is to evaluate and act on the SIP revisions submitted by the state. In this instance, Texas did not submit source-specific RACT determinations for W.A. Parish. States have discretion in terms of how they wish to fulfill their RACT obligations. The EPA's role here is to evaluate and act on the SIP revisions submitted by the state.

Commenters did not present any information or analysis to support their claim that replacing the catalyst on coal-fired utility boilers equipped is RACT for this category of sources. Our 2025 supplemental NO<sub>x</sub> TSD (see pages 17-18) details EPA's review in support of its approval of the ESAD rates for this category of sources as fulfilling RACT requirements. We received no comments on our 2025 supplemental proposals or supplemental NO<sub>x</sub> TSD for these categories of sources.

*Comment:* In 2021, commenters claim that Texas' HGB SIP RACM and RACT analyses do not address NO<sub>x</sub> sources. Commenters claim that a RACM/RACT analysis must: (a) identify the NO<sub>x</sub> rates for each such large source; (b) identify the current NO<sub>x</sub> controls if any (such as: low NO<sub>x</sub> burners, ultra-low NO<sub>x</sub> burners, flue gas recirculation (FGR), over-fire air, SNCR, or SCR, etc.) that each such source has; (c) identify, based on (a) and (b), the additional NO<sub>x</sub> reductions that can be obtained if additional or higher/better types of technically feasible NO<sub>x</sub> controls could be applied; (d) determine cost-effectiveness of the additional controls. Typical (i.e., installed in such units at refineries) NO<sub>x</sub> controls for boilers, furnaces, and heaters would be a combination of ultra-low NO<sub>x</sub> burners/FGR/SNCR or ultra-low NO<sub>x</sub> burners/SCR. Similarly, controls for turbines would typically be dry low NO<sub>x</sub> combustors followed by SCR.

*Response:* The EPA does not consider the source-specific review methodology presented by commenters as necessary to fulfilling the requirements of RACT when a state is not submitting a source-specific RACT analysis in a SIP revision. The EPA's obligation under CAA sections 110(k)(2) and (3) is to evaluate and act on the SIP

revisions submitted by the state. In this instance, Texas did not submit source-specific RACT determinations akin to what the commenter is suggesting. States have discretion in terms of how they wish to fulfill their RACT obligations. The EPA's role here is to evaluate and act on the SIP revisions submitted by the state. As detailed in our 2025 supplemental NO<sub>x</sub> TSD, the EPA's review confirmed that Texas considered the same technologies identified by the commenters for the Chapter 117 ESAD rates. Commenters did not suggest any RACT limits lower than Chapter 117 ESAD rates for any category of sources.

#### *H. Other Comments*

The EPA received several comments that were not relevant to this action. Consistent with CAA section 110, a SIP is designed to address the relevant NAAQS pollutant and its precursors. Under section 110(k)(3) of the CAA, the EPA is required to approve a SIP submission that complies with the provisions of the CAA. As such, the EPA is required to review the state's RACT SIP revision to determine if it meets the RACT requirements of the CAA. RACT requirements apply to NO<sub>x</sub> and VOC, which are ozone precursors.

*Comment:* Commenters claim that the EPA's review does not adequately address the potential for increased carbon dioxide (CO<sub>2</sub>) and other greenhouse gas (GHG) emissions and the Texas analysis provided does not appear to include an evaluation of the potential GHG impacts, and an overall environmental impact must also consider the economic costs associated with increased CO<sub>2</sub> emissions.

*Response:* Emissions and impacts associated with CO<sub>2</sub> and other GHG emissions are outside of the scope of this action.

*Comment:* Residents are impacted by the release of particulate matter from chemical manufacturing and industry and should be protected under national guidance.

*Response:* Particulate matter standards are outside of the scope of this action which is limited to ozone RACT.

*Comment:* Several comments requested better enforcement of the National Ambient Air Quality Standard.

*Response:* Comments regarding general enforcement of the CAA are outside of the scope of this action. Implementation of RACT is designed to assist with improving air quality in the nonattainment area. To the extent commenters are raising concerns about violations of the CAA and/or state regulations, those concerns are outside the scope of this action which is only evaluating the approvability of the identified RACT SIP revisions.

*Comment:* Commenters requested that the EPA implement better protective National Ambient Air Quality standards. Commenters also stated the standard must be lowered as it is not protective yet.

*Response:* Reviewing and determining NAAQS standards are outside the scope of this action, which is limited to review and approval of RACT SIP revisions from Texas. The EPA's process for reviewing and possibly revising the ozone NAAQS is different from this action.

*Comment:* The EPA has also issued a finding of failure to meet Sulfur Dioxide (SO<sub>2</sub>) national standards.

*Response:* SO<sub>2</sub> standards are outside of the scope of this ozone action. RACT requirements for SO<sub>2</sub> standards are separately addressed in other SIP revisions that address requirements related to areas designated nonattainment under the SO<sub>2</sub> standards.

*Comment:* Commenters expressed concerns regarding Texas' ability to achieve compliance with so many industrial facilities in the HGB area. Commenters assert that the ability to achieve compliance is regarded as nearly impossible due to the discounting of enforcement penalties. Commenters identified a need for a revision to achieve

compliance based on the multiple major disasters experienced by the Houston Ship Channel communities. When an evaluation is done on the enforcement calculation, this calculation demonstrates more of a focus on harm from minor sources of emissions.

*Response:* Commenters did not make a RACT-specific recommendation. General enforcement and penalties on specific industrial sources are outside the scope of this action.

*Comment:* Commentors assert that the Texas SIP for RACT should be “pulled” to see enforcement of the NAAQS.

*Response:* Under section 110(k)(3) of the CAA, the EPA is required to approve a SIP submission that complies with the provisions of the CAA. The EPA has determined that the RACT SIP revisions at issue here comport with the CAA and are therefore approvable.

*Comment:* Commenter says that the State needs pressure to make a SIP revision. A revision that could potentially offer better monitoring, accurate information and afford the ability to prevent harmful exposures to health.

*Response:* Under section 110(k)(3) of the CAA, the EPA is required to approve a SIP submission that complies with the provisions of the CAA. The EPA has determined that the RACT SIP revisions at issue here comport with the CAA and are therefore approvable. Increased monitoring requirements outside of RACT are outside the scope of this action.

*Comment:* Commenter expressed its wish that the State develop a public participation plan for SIP revisions tailored to Limited English Proficient (LEP) persons.

*Response:* This is beyond the scope of this action.

#### *I. Comments Received from Texas*

We received comment letters from Texas in support of our actions. Texas also requested specific corrections to the supplemental VOC and NO<sub>x</sub> TSDs.

## Requested Corrections in VOC TSD

### *Comments:*

- In the Stage 1 Vapor Control Systems (1975) table on page 2 of the supplemental VOC TSD, Texas requested EPA remove floating roof tank from the Texas Requirement Summary. While a floating roof tank may be an equivalent control under § 115.223, this control option is not specifically mentioned in §§ 115.221-115.229.
- In the Tank Truck Gasoline Loading Terminals (1977) table on page 11, Texas requested EPA remove floating roof tank from the Texas Requirement Summary. While a floating roof tank may meet the 90% control requirement at § 115.212 or be considered an equivalent control under § 115.213 or § 115.223, it is not specifically mentioned in §§ 115.211-115.219 or §§ 115.221-115.229.
- In the Surface Coating of Metal Furniture (1977) and Metal Furniture Coatings (2007) table on page 13, Texas requested EPA add §§115.450–115.459 to the Texas Requirement Summary. Texas implemented the 1977 CTG in §§115.420–115.429 and the 2007 CTG in §§ 115.450-115.459. EPA’s stated range of 2.3 to 5.1 pound per gallon (lb/gal) applies to § 115.453. The correct limit in § 115.421(2) is 3.0 lb/gal. In the Bulk Gasoline Plants (1977) table on page 16, Texas requested EPA remove floating roof tank from the Texas Requirement Summary. While a floating roof tank may meet the 90% control requirement at § 115.212(a)(5) or be considered an equivalent control under § 115.213, it is not specifically mentioned in §§ 115.211-115.219.
- In the Surface Coating of Miscellaneous Metal Parts and Products (1978) and Control Techniques for Miscellaneous Metal Parts Coatings (2008) table on page 2, Texas requested EPA add §§115.450–115.459 to the Texas Requirement

Summary. Texas implemented the 1978 CTG in §§ 115.420-115.429 and the 2008 CTG in §§ 115.450-115.459.

- In the Graphic Arts–Rotogravure and Flexography table on page 26, Texas requested EPA correct the Texas Requirement Summary. Texas rules contain a requirement for 90% control of captured vapors and capture requirements for various printing processes ranging from 60% to 75%.
- In the Petroleum Liquid Storage in External Floating Roof Tanks (1978) table on page 28, Texas requested EPA correct the Texas Requirement Summary. Texas rules in §§ 115.110-115.119 require various combinations of a submerged fill pipe, floating roof, floating roof with seals, and/or a vapor control system based on the vapor pressure of the liquid stored and the size of the tank.
- In the Aerospace (1997) table on page 41, Texas requested EPA correct the Texas Requirement Summary. Texas rules in §§ 115.420-115.429 require VOC content limits ranging from 60 to 1230 grams per liter. The cleaning solvents used must be over 80% water by volume or have a composite vapor pressure less than or equal to 45 millimeters of mercury at 20 degrees Celsius.
- In the Industrial Cleaning Solvents (2006) table on page 42, Texas requested EPA remove §§ 115.420-115.429 from the Texas Requirement Summary. Texas rules implementing the 2006 CTG are in §§ 115.460-115.469. While §§ 115.420-115.429 have some cleaning solvent regulations, these are associated with recommendations from the various surface coating and cleaning CTGs implemented in Chapter 115, Subchapter E, Divisions 1 and 2, not the 2006 CTG.

*Response:* We provide a final VOC TSD that reflects these corrections to the supplemental VOC TSD, which can be found in the docket for this action.

*Comment:* Texas requested that EPA update the TSD, Documents Reviewed section of Table 1, to reflect the following:

- On page 5 of the NO<sub>x</sub> TSD, the current NO<sub>x</sub> concentration limit in 30 TAC §117.310(a)(2) was part of the Texas Register document published on January 3, 2003 (28 Texas Register (TexReg) 242).
- On page 7, the current NO<sub>x</sub> emission specification in 30 TAC § 117.310(a)(5) was part of the Texas Register document published on January 3, 2003 (28 TexReg 242).
- On pages 10 and 11 of the TSD, Texas requests EPA correct the Documentation section of the table to include Texas' proposal rulemaking that was published in the Texas Register on June 21, 2002 (27 *TexReg* 5454).
- On page 11, the current NO<sub>x</sub> emission specification in 30 TAC § 117.310(a)(10) was part of the Texas Register document published on January 3, 2003 (28 TexReg 242).
- On pages 13 and 14, include Texas' proposal and adoption rulemakings that were published in the Texas Register on June 21, 2002 (27 TexReg 5454), and on January 3, 2003 (28 *TexReg* 242), respectively. These Texas Register document, in conjunction with the other documents cited by EPA, explain why the 30 TAC § 117.310(a)(13) NO<sub>x</sub> emission specification for lightweight aggregate kilns changed to its current value.
- On page 16 and 17 for the utility boilers, auxiliary steam boilers, and stationary gas turbines (including duct burners used in turbine exhaust ducts) that are subject to the requirements in 30 TAC §117.1210(a)(1)-(3), include the document published in the Texas Register on June 21, 2002 (27 TexReg 5454), and on January 3, 2003 (28 TexReg 242), since these document, in conjunction with the

other documents cited by EPA, help to explain how Texas arrived at the current NO<sub>x</sub> emission specifications in 30 TAC §117.1210(a).

*Response:* EPA appreciates the additional information. We are including it in the docket for this action.

*Comment:* On pages 9 and 10 of the TSD, Texas requests EPA correct the Documents Reviewed section of the table to reflect that the current NO<sub>x</sub> emission specification in 30 TAC §117.310(a)(8) was part of the Texas Register document published on June 8, 2007 (32 TexReg 3206). This document states that selective catalytic reduction (SCR) may be necessary for process heaters with a maximum rated capacity equal to or greater than 40 million British thermal units per hour (MMBtu/hr), and owners or operators of gas-fired process heaters with maximum rated capacities less than 40 MMBtu/hr may be required to install low-NO<sub>x</sub> burners or make other combustion modifications.

*Response:* EPA did review 32 TexReg 3206 and it was inadvertently omitted from the table. EPA has provided a corrected TSD that reflects the review of 32 TexReg 3206, SCR for units with equal to 40 MMBtu/hr or greater, and low NO<sub>x</sub> burners or other combustion modifications for units with capacities less 40 MMBtu/hr.

*Comment:* On pages 10 and 11 of the TSD, the June 15, 2001 Texas Register document (26 TexReg 4400), provides Texas' explanation for the rule provision option of the lower of 11.0 grams per horsepower-hour (g/hp-hr) or the emission rate established by testing, monitoring, manufacturer's guarantee, or manufacturer's other data. This same document also provides the discussion for the reason to include the rule provision compliance option, which at the time was to ensure that an inadvertent windfall was not created for existing diesel engines that emitted less than 11.0 g/hp-hr. As EPA noted, the discussion is also provided in Texas' Rule Project No. 2002-038-117-AI.

*Response:* EPA has provided a final TSD that reflects the correction to include “or the emission rate established by testing, monitoring, manufacturer’s guarantee, or manufacturer’s other data”.

*Comment:* On page 11 of the TSD, Texas requests EPA correct the last paragraph of the Evaluation section of the table to reflect that in the June 8, 2007, Texas Register document (32 TexReg 3206), Texas stated it expected NSCR to be the primary control technology for gas-fired rich-burn engines. Texas further stated it expected combustion modifications, exhaust gas recirculation kits combined with Non-Selective Catalytic Reduction (NSCR), or SCR to be necessary to meet the NO<sub>x</sub> specifications for gas-fired lean-burn engines in 30 TAC §117.310(a)(9).

*Response:* EPA broadly summarized the information from 32 TexReg 3206 for the gas-fired engines overall. In response to this comment, EPA has provided a final TSD that reflects the correction to add “exhaust gas recirculation kits with” to the last paragraph of the TSD.

*Comment:* On pages 11 and 12 of the TSD, regarding the first paragraph of the Evaluation section of the table, Texas requests EPA clarify that Texas’ statements concerning the anticipated need for combustion modifications such as dry low-NO<sub>x</sub> burners or water or steam injection to achieve the NO<sub>x</sub> emission specification of 0.15 pounds per million British thermal units (lb/MMBtu) heat input were for stationary gas turbines and duct burners used in turbine exhaust ducts were related to minor sources of NO<sub>x</sub> in the HGB area.

*Response:* EPA has provided a final TSD that includes this correction for stationary gas turbines related to minor sources of NO<sub>x</sub>.

*Comment:* On page 12 of the TSD, regarding the last paragraph of the Evaluation section of the table, Texas requests EPA clarify that Texas stated that compliance with the emission specification of 0.032 lb/MMBtu for stationary gas turbines and duct

burners used in turbine exhaust ducts may require the installation of SCR. Texas further stated the emission specifications for all stationary gas turbines less than 10 megawatts and duct burners used in associated turbine exhaust ducts were expected to be achievable through combustion modifications such as water or steam injection or other modifications.

*Response:* EPA has provided a final TSD that reflects the correction to include the clarifications requested.

*Comment:* On page 14 of the TSD, Texas requests EPA update the Documents Reviewed section of the table to include the Texas Register document published on January 12, 2001 (26 TexReg 524), since the relevant information pertains to both the heat-treating furnaces in §117.310(a)(14)(A) and the reheat furnaces 30 TAC §117.310(a)(14)(B).

*Response:* 26 TexReg 524 was reviewed by EPA and inadvertently omitted from the table. The final TSD reflects the correction to include this reference.

### **III. Final Action**

The EPA is approving the SIP revision submitted by Texas on May 13, 2020, concerning NO<sub>x</sub> and VOC RACT requirements for the HGB 2008 ozone NAAQS. EPA is finalizing the determination that Texas' rules continue to fulfill NO<sub>x</sub> and VOC RACT requirements for the HGB nonattainment area for the 2008 8-hour ozone NAAQS under the Serious classification. The EPA is also approving the VOC RACT negative declarations made by Texas for fiberglass boat manufacturing materials, manufacturing of pneumatic rubber tires, flat wood paneling coatings, letterpress printing, and automobile and light-duty truck assembly coatings sectors.

### **IV. 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. 42 U.S.C.

7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993);
- Is not subject to Executive Order 14192 (90 FR 9065, February 6, 2025) because SIP actions are exempt from review under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

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

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

#### **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: March 10, 2026.

**Walter Mason**  
*Regional Administrator, Region 6.*

For the reasons stated in the preamble, the EPA amends CFR part 52 as follows:

**PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS**

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

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

**Subpart SS – Texas**

2. In § 52.2270 , the second table in paragraph (e) titled “EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP” is amended by adding the entries: “VOC RACT negative declarations for fiberglass boat manufacturing materials, manufacturing of pneumatic rubber tires, flat wood paneling coatings, letterpress printing, and automobile and light-duty truck assembly coatings sectors”, “Houston-Galveston-Brazoria 2008 eight-hour ozone serious nonattainment NO<sub>x</sub> RACT demonstration” and “Houston-Galveston-Brazoria 2008 eight-hour ozone serious nonattainment VOC RACT demonstration” at the end of the table to read as follows:

**§52.2270 Identification of plan.**

\* \* \* \* \*

(e) \* \* \*

**EPA APPROVED NONREGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE TEXAS SIP**

Name of SIP provision	Applicable geographic or nonattainment area	State submittal/effective date	EPA approval date	Comments
* * * * *	* * * * *	* * * * *	* * * * *	* * * * *

VOC RACT negative declarations for fiberglass boat manufacturing materials, manufacturing of pneumatic rubber tires, flat wood paneling coatings, letterpress printing, and automobile and light-duty truck assembly coatings sectors	Houston-Galveston-Brazoria, TX 2008 8-hour ozone NAAQS nonattainment area	5/13/2020	<b>[INSERT DATE OF PUBLICATION IN THE <i>FEDERAL REGISTER</i>], 91 FR [INSERT <i>FEDERAL REGISTER</i> PAGE WHERE THE DOCUMENT BEGINS]</b>	For the HGB Serious classification
Houston-Galveston-Brazoria 2008 eight-hour ozone serious nonattainment NOx RACT demonstration	Houston-Galveston-Brazoria, TX 2008 8-hour ozone NAAQS nonattainment area	5/13/2020	<b>[INSERT DATE OF PUBLICATION IN THE <i>FEDERAL REGISTER</i>], 91 FR [INSERT <i>FEDERAL REGISTER</i> PAGE WHERE THE DOCUMENT BEGINS]</b>	
Houston-Galveston-Brazoria 2008 eight-hour ozone serious nonattainment VOC RACT demonstration	Houston, Galveston, Brazoria, TX 2008 8-hour ozone NAAQS nonattainment area	5/13/2020	<b>[INSERT DATE OF PUBLICATION IN THE <i>FEDERAL REGISTER</i>], 91 FR [INSERT <i>FEDERAL REGISTER</i> PAGE WHERE THE DOCUMENT BEGINS]</b>	

<sup>1</sup> As revised 9/26/01.

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