



6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R03-OAR-2017-0290; FRL-9975-14-Region 3]**

**Approval and Promulgation of Air Quality Implementation Plans;  
Pennsylvania; Regulatory Amendments Addressing Reasonably Available Control  
Technology Requirements under the 1997 and 2008 8-Hour Ozone National Ambient Air  
Quality Standards**

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

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing rulemaking action on a state implementation plan (SIP) revision submitted by the Commonwealth of Pennsylvania (Pennsylvania or the Commonwealth). This revision consists of regulatory amendments intended to meet certain reasonably available control technology (RACT) requirements under the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS). EPA is proposing to approve most parts of the Pennsylvania SIP revision as meeting RACT requirements under the Clean Air Act (CAA). EPA is also proposing to conditionally approve certain provisions of this SIP revision, based upon Pennsylvania's commitment to submit additional enforceable measures that meet RACT. This action is being taken under the CAA.

**DATES:** Written 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-R03-OAR-2017-0290 at <http://www.regulations.gov>, or via email to [Spielberger.susan@epa.gov](mailto:Spielberger.susan@epa.gov). For comments

submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, 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. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “For Further Information Contact” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Emlyn Vélez-Rosa, (215) 814-2038, or by e-mail at [velez-rosa.emlyn@epa.gov](mailto:velez-rosa.emlyn@epa.gov).

**SUPPLEMENTARY INFORMATION:** On May 16, 2016, the Pennsylvania Department of Environmental Protection (PADEP) submitted a revision to the Pennsylvania SIP consisting of amendments to regulations in 25 Pa. Code Chapters 121 and 129, to meet certain RACT requirements of the CAA for both the 1997 and 2008 8-hour ozone NAAQS.

## **I. Background**

The Pennsylvania May 16, 2016 SIP revision submitted by PADEP includes the Pennsylvania regulations in 25 Pa. Code sections 129.96-129.100 titled “Additional RACT Requirements for Major Sources of NO<sub>x</sub> and VOCs” (the RACT II Rule) and amendments to 25 Pa. Code section 121.1, including related definitions, to be incorporated into the Pennsylvania SIP. These regulatory amendments were adopted by PADEP on April 23, 2016 and effective on the same date upon publication in the Pennsylvania Bulletin. The May 16, 2016 SIP revision was submitted to satisfy certain CAA RACT requirements under both the 1997 and 2008 8-hour ozone NAAQS for specific source categories.

On July 18, 1997 (62 FR 38856), EPA promulgated a standard for ground level ozone based on 8-hour average concentrations (1997 8-hour ozone NAAQS). The 8-hour averaging period replaced the previous 1-hour averaging period, and the level of the NAAQS was changed from 0.12 parts per million (ppm) to 0.08 ppm. On April 30, 2004 (69 FR 23858), EPA designated nonattainment areas under the 1997 8-hour ozone NAAQS. Designations included 16 nonattainment areas in Pennsylvania, with only 2 moderate nonattainment areas, namely Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE (the Philadelphia Area) and Pittsburgh-Beaver Valley (the Pittsburgh Area). The remaining 14 areas in Pennsylvania were designated marginal nonattainment areas. *See* 40 CFR 81.339.

On March 12, 2008 (73 FR 16436), EPA strengthened the 8-hour ozone standards, by revising its level to 0.075 ppm averaged over an 8-hour period (2008 8-hour ozone NAAQS). On May 21, 2012, EPA designated most areas in the country for the 2008 8-hour ozone NAAQS, including 5 marginal nonattainment areas in Pennsylvania: Allentown-Bethlehem-Easton, Lancaster, Reading, the Philadelphia Area, and the Pittsburgh Area. *See* 77 FR 30088 and 40 CFR 81.339.

On March 6, 2015 (80 FR 12264), EPA announced its revocation of the 1997 8-hour ozone NAAQS for all purposes and for all areas in the country, effective on April 6, 2015. EPA also determined that certain nonattainment planning requirements continue to be in effect under the revoked standard for nonattainment areas under the 1997 8-hour ozone NAAQS, including RACT. *See* 80 FR 12296 (March 6, 2015).

#### **A. RACT Requirements for Ozone**

The CAA regulates emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) to prevent photochemical reactions that result in ozone formation. RACT is an important strategy for reducing NO<sub>x</sub> and VOC emissions from major stationary sources within areas not meeting the ozone NAAQS.

Areas designated nonattainment for the ozone NAAQS are subject to the general nonattainment area planning requirements of CAA section 172. Section 172(c)(1) of the CAA provides that SIPs for nonattainment areas must include reasonably available control measures (RACM) for demonstrating attainment of all NAAQS, including emissions reductions from existing sources through adoption of RACT. Further, section 182(b)(2) of the CAA sets forth additional RACT requirements for ozone nonattainment areas classified as moderate or higher nonattainment.

Section 182(b)(2) of the CAA sets forth three distinct requirements regarding RACT for the ozone NAAQS: First, section 182(b)(2)(A) requires states with ozone areas designated moderate or higher to submit a rule (or negative declaration) for each category of VOC sources in the nonattainment area covered by a Control Technique Guideline (CTG) document issued by EPA between November 15, 1990 and the date of attainment for an ozone NAAQS. These rules shall be submitted as SIP revisions within the period set forth by EPA in issuing the relevant CTG

document. Second, section 182(b)(2)(B) requires a rule (or negative declaration) for all VOC sources in the nonattainment area covered by any CTG issued before November 15, 1990. And third, section 182(b)(2)(C) requires a rule or rules for implementing RACT for any other major stationary sources of VOCs located in the nonattainment area.

In addition, section 182(f) subjects major stationary sources of NO<sub>x</sub> to the same RACT requirements that are applicable to major stationary sources of VOC. EPA has not issued any CTGs for categories of NO<sub>x</sub> sources, so the requirement in section 182(f) in essence refers to section 182(b)(2)(C). The ozone RACT requirements under section 182(b)(2) are usually referred to as VOC CTG RACT, non-CTG major VOC RACT, and major NO<sub>x</sub> RACT.

Pursuant to section 183(c) of the CAA, EPA must revise and update CTGs and Alternative Control Techniques guidelines (ACTs) as the Administrator determines necessary. EPA's CTGs establish presumptive RACT level control requirements for various source categories. The CTGs usually identify a particular control level which EPA recommends as being RACT. In some cases, EPA has issued ACTs for source categories, which in contrast to the CTGs, only present a range for possible control options but do not identify any particular option as the presumptive norm for what is RACT. States are required to address RACT for the source categories covered by CTGs through adoption of rules as part of the SIP.

Section 184(b)(1)(B) of the CAA applies the RACT requirements in section 182(b)(2) for moderate nonattainment areas to nonattainment areas classified as marginal and to attainment areas located within ozone transport regions established pursuant to section 184 of the CAA. Section 184(a) of the CAA established by law the current Ozone Transport Region (the OTR) comprised of 12 eastern states, including Pennsylvania. The requirement in section 184(b)(1)(B)

is referred to as OTR RACT. A “major source” is defined based on the source’s potential to emit (PTE) of NO<sub>x</sub>, VOC, or both pollutants, and the applicable thresholds differ based on the classification of the nonattainment area in which the source is located. *See* sections 182(c)–(f) and 302 of the CAA.

Since the 1970’s, EPA has consistently defined RACT as the lowest emission limit that a particular source is capable of meeting by the application of the control technology that is reasonably available considering technological and economic feasibility. *See* December 9, 1976 memorandum from Roger Strelow, Assistant Administrator for Air and Waste Management, to Regional Administrators, “Guidance for Determining Acceptability of SIP Regulations in Non-Attainment Areas,” and also 44 FR 53762 (September 17, 1979).

EPA has provided more substantive RACT requirements through final implementation rules for each ozone NAAQS as well as through guidance. In 2004 and 2005, EPA promulgated an implementation rule for the 1997 8-hour ozone NAAQS in two phases (“Phase 1 of the 1997 Ozone Implementation Rule” and “Phase 2 of the 1997 Ozone Implementation Rule”). *See* 69 FR 23951 (April 30, 2004) and 70 FR 71612 (November 29, 2005), respectively. Particularly, the Phase 2 Ozone Implementation Rule addressed RACT statutory requirements under the 1997 8-hour ozone NAAQS. *See* 70 FR 71652.

On March 6, 2015, EPA issued its final rule for implementing the 2008 8-hour ozone NAAQS (“the 2008 Ozone SIP Requirements Rule”). *See* 80 FR 12264. At the same time, EPA revoked

the 1997 8-hour ozone NAAQS, effective on April 6, 2015.<sup>1</sup> The 2008 Ozone SIP Requirements Rule provided comprehensive requirements to transition from the revoked 1997 8-hour ozone NAAQS to the 2008 8-hour ozone NAAQS, as codified in 40 CFR part 51, subpart AA, following revocation. Consistent with previous policy, EPA determined that areas designated nonattainment for both the 1997 and 2008 8-hour ozone NAAQS at the time of revocation, must retain implementation of certain nonattainment area requirements (i.e. anti-backsliding requirements) for the 1997 8-hour ozone NAAQS as specified under section 182 of the CAA, including RACT. *See* 40 CFR 51.1100(o). An area remains subject to the anti-backsliding requirements for a revoked NAAQS until EPA approves a redesignation to attainment for the area for the 2008 8-hour ozone NAAQS. There are no effects on applicable requirements for areas within the OTR, as a result of the revocation of the 1997 8-hour ozone NAAQS. Thus, Pennsylvania, as a state within the OTR, remains subject to RACT requirements for both the 1997 ozone NAAQS and the 2008 ozone NAAQS.

In addressing RACT, the 2008 Ozone SIP Requirements Rule is consistent with existing policy and Phase 2 of the 1997 Ozone Implementation Rule. In the 2008 Ozone SIP Requirements Rule, EPA requires RACT measures to be implemented by January 1, 2017 for areas classified as moderate nonattainment or above and all areas of the OTR. EPA also provided in the 2008 Ozone SIP Requirements Rule that RACT SIPs must contain adopted RACT regulations, certifications where appropriate that existing provisions are RACT, and/or negative declarations stating that there are no sources in the nonattainment area covered by a specific CTG source

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<sup>1</sup> On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit (D.C. Cir. Court) issued an opinion on the 2008 Ozone SIP Requirements Rule. *South Coast Air Quality Mgmt. Dist. v. EPA*, No. 15-1115 (D.C. Cir. Feb. 16, 2018). The D.C. Cir. Court found certain parts reasonable and denied the petition for appeal on those. In particular, the D.C. Cir. Court upheld the use of NO<sub>x</sub> averaging to meet RACT requirements for 2008 ozone NAAQS. However, the Court also found certain other provisions, not relevant to this action, unreasonable. The D. C. Cir. Court vacated the provisions it found unreasonable.

category. In the preamble to the 2008 Ozone SIP Requirements Rule, EPA clarified that states must provide notice and opportunity for public comment on their RACT SIP submissions, even when submitting a certification that the existing provisions remain RACT or a negative declaration. States must submit appropriate supporting information for their RACT submissions, in accordance with the Phase 2 of the 1997 Ozone Implementation Rule. Adequate documentation must support that states have considered control technology that is economically and technologically feasible in determining RACT, based on information that is current as of the time of development of the RACT SIP.

In addition, in the 2008 Ozone SIP Requirements Rule, EPA clarified that states can use weighted average NO<sub>x</sub> emissions rates from sources in the nonattainment area for meeting the major NO<sub>x</sub> RACT requirement under the CAA, as consistent with existing policy.<sup>2</sup> EPA also recognized that states may conclude in some cases that sources already addressed by RACT determinations for the 1-hour and/or 1997 8-hour ozone NAAQS may not need to implement additional controls to meet the 2008 ozone NAAQS RACT requirement. *See* 80 FR 12278-12279.

## **B. Applicability of RACT Requirements in Pennsylvania**

As indicated earlier, RACT requirements apply to any ozone nonattainment areas classified as moderate or higher (serious, severe or extreme) under CAA sections 182(b)(2) and 182(f).

Pennsylvania has outstanding ozone RACT requirements for both the 1997 and 2008 8-hour

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<sup>2</sup> EPA's NO<sub>x</sub> RACT guidance "Nitrogen Oxides Supplement to the General Preamble" (57 FR 55625; November 25, 1992) encouraged states to develop RACT programs that are based on "area wide average emission rates." Additional guidance on area-wide RACT provisions is provided by EPA's January 2001 economic incentive program guidance titled "Improving Air Quality with Economic Incentive Programs," available at <http://www.epa.gov/ttn/oarpg/tl/memoranda/eipfin.pdf>. In addition, as mentioned previously, the D.C. Cir. Court recently upheld the use of NO<sub>x</sub> averaging to meet RACT requirements for 2008 ozone NAAQS. *South Coast Air Quality Mgmt. Dist. v. EPA*, No. 15-1115 (D.C. Cir. Feb. 16, 2018).

ozone NAAQS. The entire Commonwealth of Pennsylvania is part of the OTR established under section 184 of the CAA and thus is subject statewide to the RACT requirements of CAA sections 182(b)(2) and 182(f), pursuant to section 184(b).

At the time of revocation of the 1997 8-hour ozone NAAQS (effective April 6, 2015), only two moderate nonattainment areas remained in the Commonwealth of Pennsylvania for this standard, the Philadelphia and the Pittsburgh Areas. As required under EPA's anti-backsliding provisions, these two moderate nonattainment areas continue to be subject to RACT under the 1997 8-hour ozone NAAQS. Given its location in the OTR, the remainder of the Commonwealth is also treated as moderate nonattainment area under the 1997 8-hour ozone NAAQS for any planning requirements under the revoked standard, including RACT. The OTR RACT requirement is also in effect under the 2008 8-hour ozone NAAQS throughout the Commonwealth, since EPA did not designate any nonattainment areas above marginal for this standard in Pennsylvania. Thus, in practice, the same RACT requirements continue to be applicable in Pennsylvania for both the 1997 and 2008 8-hour ozone NAAQS. RACT must be evaluated and satisfied as separate requirements under each applicable standard.

RACT applies to major sources of NO<sub>x</sub> and VOC under each ozone NAAQS or any VOC sources subject to CTG RACT. Which NO<sub>x</sub> and VOC sources in Pennsylvania are considered "major" and must be therefore subject to RACT, is dependent on the location of each source within the Commonwealth. Sources located in nonattainment areas would be subject to the "major source" definitions established under the CAA. In the case of Pennsylvania, sources located in any areas outside of moderate or above nonattainment areas, as part of the OTR, shall be treated as if these areas were moderate.

States were required to make RACT SIP submissions for the 1997 8-hour ozone NAAQS by September 15, 2006. PADEP submitted a SIP revision on September 25, 2006, certifying that a number of previously approved VOC CTG and non-CTG RACT rules continued to satisfy RACT under the 1997 8-hour ozone NAAQS for the remainder of Pennsylvania.<sup>3</sup> PADEP has met its obligations under the 1997 8-hour ozone NAAQS for its CTG and non-CTG VOC sources. *See* 82 FR 31464 (July 7, 2017). RACT control measures addressing all applicable CAA requirements under the 1997 8-hour ozone NAAQS have been implemented and fully approved in the jurisdictions of Allegheny County and Philadelphia County in Pennsylvania. *See* 78 FR 34584 (June 10, 2013) and 81 FR 69687 (October 7, 2016).

For the 2008 8-hour ozone NAAQS, states were required to submit RACT SIP revisions by July 20, 2014. On May 16, 2016, PADEP submitted a SIP revision addressing RACT under both the 1997 and 2008 8-hour ozone NAAQS in Pennsylvania. Specifically, the May 16, 2016 SIP submittal intends to satisfy sections 182(b)(2)(C), 182(f), and 184 of the CAA for both the 1997 and 2008 8-hour ozone NAAQS for Pennsylvania's major NO<sub>x</sub> and VOC non-CTG sources, except ethylene production plants, surface active agents manufacturing, and mobile equipment repair and refinishing.

This notice includes EPA's rationale for proposing rulemaking action on the Pennsylvania May 16, 2016 SIP revision for purposes of meeting these RACT requirements under the CAA. EPA prepared two technical support documents (TSDs) in support of this proposed rulemaking action: "Technical Support Document for the Pennsylvania State Implementation Plan Revision for Certain Reasonably Available Control Technology Requirements under the 1997 and 2008 8-

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<sup>3</sup> The September 15, 2006 SIP submittal initially included Pennsylvania's certification of NO<sub>x</sub> RACT regulations; however, NO<sub>x</sub> RACT portions were withdrawn by PADEP on June 27, 2016.

Hour Ozone National Ambient Air Quality Standards” and “Technical Support Document for the Pennsylvania State Implementation Plan Revision for Certain Reasonably Available Control Technology Requirements under the 1997 and 2008 8-Hour Ozone National Ambient Air Quality Standards- Cost Effective Analyses for Coal Fired Boilers.” For further details on this proposed rulemaking action, please refer to these TSDs, which are included as part of this rulemaking docket and are available online at [www.regulations.gov](http://www.regulations.gov).

## **II. Summary of SIP Revision and EPA’s Evaluation**

The RACT II Rule applies statewide to existing major NO<sub>x</sub> and/or VOC sources in Pennsylvania, except those subject to other Pennsylvania regulations, as specified in 25 Pa. Code 129.96(a)-(b).<sup>4</sup> All but one of the exempted rules listed in section 129.96(a)-(b) have been previously approved by EPA into the SIP to meet RACT requirements under the CAA. The RACT II Rule exempts all VOC source categories for which PADEP had adopted CTG RACT regulations at the time the RACT II Rule was finalized. In addition, regulations exempted under the RACT II Rule also apply to three non-CTG VOC source categories: (1) ethylene production plants, (2) surface active agents manufacturing, and (3) mobile equipment repair and refinishing. The RACT II Rule also exempts 25 Pa. Code sections 129.301-129.310, which has not been approved as RACT, although it is approved into the SIP. This regulation establishes NO<sub>x</sub> control requirements for glass melting furnaces. Any other NO<sub>x</sub> major sources in Pennsylvania are covered by the RACT II Rule.

The RACT II Rule requirements apply to any emissions unit or process at an affected major source having a PTE of 1 ton per year (TPY) or more of NO<sub>x</sub> and/or VOC. In the context of the

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<sup>4</sup> In the context of the RACT II Rule, the terms “major NO<sub>x</sub> emitting facility” and “major VOC emitting facility,” as defined in 25 Pa Code section 121.1, are used to refer to major stationary sources.

rule, existing major sources are those already in existence as of July 20, 2012 or any major sources installed or modified after July 20, 2012, which became a major source before January 1, 2017. The RACT II Rule establishes a general compliance date of January 1, 2017, as provided in paragraphs in 129.97(a) and 129.99(d)(4). EPA recognizes that RACT controls under the 1997 8-hour ozone NAAQS were required to be implemented in Pennsylvania by 2009 and that this requirement is past due; however, EPA believes that the May 16, 2016 SIP revision should sufficiently address the pending RACT obligations under the 1997 8-hour ozone NAAQS by addressing the more stringent RACT level of control under the 2008 8-hour ozone NAAQS. The general compliance date of the RACT II Rule is consistent with EPA's required deadline for states to implement RACT controls under the 2008 8-hour ozone NAAQS. *See* 80 FR 12279.

The RACT II Rule permits an affected major source that needs additional time to install an air pollution control device to meet the requirements under the RACT II Rule to petition PADEP for an alternative compliance schedule. The RACT II Rule also allows an owner or operator of a major source to petition an alternative compliance schedule if it needs additional time to install an air pollution control device on an affected emissions unit in order to comply with the RACT II requirements. These provisions allow the owner or operator in this situation to petition in writing for an alternative compliance schedule, by proposing an interim emission limit, and a later compliance date to implement such control device "as soon as possible but not later than 3 years after the written approval of the petition." EPA believes that the language in the rule allows for Pennsylvania's implementation of RACT controls as expeditiously as practicable.

Section 129.97 of the RACT II Rule establishes NO<sub>x</sub> and VOC emission limits or operational requirements on certain types of emissions units in the affected major sources which

Pennsylvania presumes to meet RACT, thus referred to in the rule as presumptive RACT.

Operating requirements apply to smaller emissions units; namely, combustion units with rated heat input equal to or greater than 20 million British Thermal Units per hour (MMBTU/hr) and less than 50 MMBTU/hr, NO<sub>x</sub> sources with PTE of less than 5 TPY, VOC sources with PTE of less than 2.7 TPY, combustion units with rated heat input of less than 20 MMBTU/hour, and emergency generators operating less than 500 hours in a 12-month rolling period. Presumptive RACT NO<sub>x</sub> limits are provided for combustion units, process heaters, combustion turbines, stationary internal combustion engines, cement kilns, and municipal waste combustors. Presumptive RACT VOC limits are provided for combustion turbines, stationary internal combustion engines, and municipal solid waste landfills.

In evaluating whether controls and emission limitations meet RACT, EPA generally considers controls that have been achieved in practice by other similar existing sources to be technologically and economically feasible. For that reason, to evaluate PADEP's RACT determinations under the RACT II Rule, EPA reviewed NO<sub>x</sub> emissions limits in effect in adjacent OTR states for certain source categories addressed by Pennsylvania's rule.<sup>5</sup> EPA also reviewed and considered guidance documents that have been published to assist states in identifying NO<sub>x</sub> RACT level of controls. EPA finds that the NO<sub>x</sub> presumptive limits in 25 Pa. Code section 129.97 of the RACT II Rule are comparable to NO<sub>x</sub> emission limitations in other states and consistent with EPA's RACT guidance on additional control requirements. EPA finds that the presumptive requirements of the RACT II Rule represent emission limitations achievable through implementation of reasonably available controls. EPA also finds the VOC presumptive limits for combustion turbines and internal combustion engines to be reasonable considering

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<sup>5</sup> EPA evaluated NO<sub>x</sub> emission limits in adjacent OTR states because the OTR states are all subject to the same RACT requirements for the 1997 and 2008 ozone NAAQS under CAA section 184.

feasibility of available controls. For municipal solid waste landfills, the RACT II Rule incorporates by reference as VOC presumptive limits the federal New Source Performance Standards (NSPS) in 40 CFR part 60, subpart Cc (Subpart Cc) and subpart WWW (Subpart WWW). EPA finds that the NSPS standards represent reasonably achievable NO<sub>x</sub> emissions limits based on the operation of reasonably available controls, and thus, meet RACT for this source category.

EPA further evaluated the NO<sub>x</sub> presumptive requirements in 25 Pa. Code section 129.97 of the RACT II Rule that are applicable to large coal-fired boilers. Sources under these requirements would include utility boilers and large industrial boilers, which are a significant NO<sub>x</sub> emissions sector in Pennsylvania. The RACT II Rule establishes more rigorous requirements for large coal-fired boilers with certain post-combustion controls in place, specifically selective catalytic reduction (SCR), while other coal-fired boilers without these controls in place are the subject of less stringent NO<sub>x</sub> emissions limits based on the boiler type. EPA finds that the presumptive limit of 0.12 pounds of NO<sub>x</sub> per heat input in million British Thermal Unit (lb/MMBTU) is consistent with the operation of SCR presently installed and reasonably represents RACT for coal-fired boilers with this control in place. EPA evaluated economic feasibility of installing and operating additional post-combustion controls on any large coal-fired boilers in Pennsylvania that to date do not have these controls, in order to determine which RACT control level is reasonable as a basis for PADEP's presumptive requirements for this subset of boilers. EPA finds that Pennsylvania's presumptive RACT determination for coal-fired boilers without post-combustion controls is reasonable, as it is based on the economic infeasibility of retrofitting coal-fired boilers in Pennsylvania. Thus, EPA concludes that PADEP has adequately established for coal-fired boilers NO<sub>x</sub> presumptive RACT requirements based on reasonably available controls

that therefore represent RACT. For further details, refer to EPA's "Technical Support Document for the Pennsylvania State Implementation Plan Revision for Certain Reasonably Available Control Technology Requirements under the 1997 and 2008 8-Hour Ozone National Ambient Air Quality Standards- Cost Effective Analyses for Coal Fired Boilers."

Pursuant to 25 Pa. Code section 129.97(g)(4), any combustion unit firing multiple fuels and subject to different presumptive limits for each fuel, must comply with a single NO<sub>x</sub> or VOC emission limit determined on a total heat input fuel weighted basis for any fuel representing 1% or more of the combustion unit's annual fuel combustion on a heat input basis. EPA finds the RACT II Rule's multiple fuel compliance method practicable and adequate for RACT.

Affected major sources subject to the presumptive requirements of 25 Pa. Code section 129.97 that cannot comply with the applicable presumptive NO<sub>x</sub> limits for any given emissions units, may choose one of two alternative compliance options to establish RACT. Such sources may either propose an alternative NO<sub>x</sub> emissions limit based on average NO<sub>x</sub> emissions from multiple sources or else propose a source-specific emission NO<sub>x</sub> or VOC limit.

The NO<sub>x</sub> averaging provisions established in 25 Pa. Code section 129.98 allow the owner or operator of an affected major NO<sub>x</sub> source that is unable to meet a NO<sub>x</sub> presumptive limit for at least one of its emissions unit, to establish an alternative RACT limit by averaging the NO<sub>x</sub> emissions from the non-compliant emissions unit and other emissions units. Participating NO<sub>x</sub> emissions units can be located either within the same facility (facility-wide averaging) or in another facility but within the same nonattainment area (system-wide averaging). As discussed in the following section, EPA finds that 25 Pa. Code section 129.98 is not sufficient to address RACT for sources seeking averaging, without the specific NO<sub>x</sub> averaging provisions for any

affected sources being submitted to EPA for SIP approval. Therefore, EPA is proposing to conditionally approve the provisions in 25 Pa. Code section 129.98. Additional discussion and explanation for this conditional approval is provided in the following section III of this notice.

Under 25 Pa. Code section 129.99, the owner or operator of an affected major NO<sub>x</sub> and/or VOC source that is unable to meet a presumptive requirement under section 129.97, may propose an alternative RACT emissions limit, based on the feasibility evaluation of reasonably available controls for each emissions unit. The resulting limits are typically unique to the affected emissions unit and achievable through the application of specific controls, therefore referred to as source-specific RACT limits. In addition, an affected major source of NO<sub>x</sub> and/or VOC with any emissions unit that is not subject to any presumptive limits or requirements under 25 Pa. Code section 129.97, is required to propose a source-specific RACT limit under 25 Pa. Code section 129.99, similarly based on the evaluation of technologically and economically feasible controls.

Section 129.99 outlines a common procedure for proposing a source-specific RACT limit, whether proposed as an alternative under section 129.99(a) or as required under section 129.99(b)-(c). A written RACT proposal under section 129.99 must be submitted to PADEP or local agency for any affected emissions units with PTE of 5.0 TPY or more of NO<sub>x</sub> and/or 2.7 TPY or more of VOC. Source-specific limits determined to be adequate by PADEP or local agency will be approved into federally enforceable permits and then submitted for EPA's review and approval into the SIP to meet RACT. As discussed in the following section, EPA finds that 25 Pa. Code section 129.99 is not approvable by itself without further information on specific sources and is therefore not approvable as RACT for sources seeking or required to establish an

alternative RACT limit. Therefore, EPA is proposing to conditionally approve the provisions in 25 Pa. Code section 129.99. Additional discussion and explanation for this conditional approval is provided in the section III of this notice.

The RACT II Rule contains certain ancillary provisions to ensure RACT level of control for sources that have been previously subject to RACT or are subject to other federally enforceable requirements. Section 129.97(i) of the RACT II Rule provides that the presumptive requirements in section 129.97 will supersede any RACT requirements of a “RACT permit” issued prior April 23, 2016 under 25 Pa. Code sections 129.91-95, unless the RACT permit contains more stringent requirements. “RACT permits” under 25 Pa. Code sections 129.91-95 were submitted by Pennsylvania as SIP revisions and, if determined to meet RACT, were approved by EPA into the Pennsylvania SIP under 40 CFR 52.2020(d). Section 129.99(k) of the RACT II Rule provides that any source-specific requirements approved under section 129.99 will supersede any similar NO<sub>x</sub> and/or VOC requirements that have been approved into an existing enforceable permit issued for the affected source prior to April 23, 2016, except to the extent the existing permit requirements are more stringent. Subsequent RACT SIP revisions under section 129.99 must include a demonstration consistent with CAA section 110(l) to supersede any previously SIP approved RACT requirements, and such revisions will be evaluated and acted on by EPA separately. EPA finds that the provisions in sections 129.97(i) and 129.99(k) are approvable, as they adequately ensure that additional SIP revisions establishing RACT for major NO<sub>x</sub> and non-CTG VOC sources in Pennsylvania reflect the most stringent level of control for the affected sources.

25 Pa. Code section 129.100 of the RACT II Rule establishes compliance demonstration and

recordkeeping requirements for affected sources. Specific monitoring and testing requirements are established for sources complying with presumptive RACT requirements under section 129.97. Recordkeeping requirements are established under section 129.100(d) for any affected sources under the RACT II Rule.

Additional compliance demonstration requirements for NO<sub>x</sub> averaging or source-specific RACT alternative limits will be established by PADEP or the local permitting agency on a source-specific basis, in accordance with sections 129.98 and 129.99, respectively, and consistent with section 129.100. In the case of sources complying with 129.99, such additional compliance demonstration requirements will be submitted to EPA for approval into the SIP, along with the source-specific limits. Because section 129.98 does not contain any similar requirement to submit NO<sub>x</sub> averaging provisions for approval into the SIP, EPA finds that the RACT II Rule does not sufficiently establish compliance demonstration requirements for sources choosing to comply with NO<sub>x</sub> averaging under section 129.98, without submitting those additional compliance demonstration requirements to EPA for approval in the SIP. EPA is proposing conditional approval of the NO<sub>x</sub> averaging provisions in section 129.98, which will address the lack of specific compliance demonstration requirements for sources seeking to comply with these provisions. Additional discussion and explanation for this conditional approval is provided in the section III of this notice.

Any definitions related to the RACT II Rule are codified in 25 Pa. Code section 121.1. The May 16, 2016 SIP revision included amendments to *existing* definitions: “CEMS—continuous emissions monitoring system,” “major NO<sub>x</sub> emitting facility,” “major VOC emitting facility,” “stationary internal combustion engine or stationary reciprocating internal combustion engine;”

and included *new* definitions for “process heater,” “refinery gas,” “regenerative cycle combustion cycle combustion turbine,” “simple cycle combustion turbine,” and “stationary combustion turbine.” The definitional changes in 25 Pa. Code section 121.1 are consistent with requirements in the RACT II Rule and are thus approvable under CAA section 110.

EPA finds that the presumptive requirements of 25 Pa. Code section 129.97 represent RACT for the NO<sub>x</sub> and VOC source categories affected by these provisions. EPA also finds that the applicability requirements of 25 Pa. Code section 129.96, the compliance demonstration requirements of 25 Pa. Code section 129.100, and the definitions in 25 Pa. Code section 121.1 are necessary to implement the RACT requirements of section 129.97. Thus, EPA finds that these particular provisions of the RACT II Rule are approvable in accordance with requirements in CAA sections 110, 172, 182, and 184 as meeting RACT for the affected major sources of non-CTG VOC and major sources of NO<sub>x</sub> under both the 1997 and 2008 8-hour ozone NAAQS. As discussed in the following section, EPA is also proposing conditional approval of 25 Pa. Code sections 129.98 and 129.99.

Additional details of Pennsylvania’s SIP submission and EPA’s reasoning for proposing approval of this SIP revision can be found in the “Technical Support Document for the Pennsylvania State Implementation Plan Revision for Certain Reasonably Available Control Technology Requirements under the 1997 and 2008 8-Hour Ozone National Ambient Air Quality Standards,” prepared for this rulemaking action and available online at [www.regulations.gov](http://www.regulations.gov) for this rulemaking.

### **III. Rationale for Proposing Conditional Approval of Certain Provisions**

EPA identified deficiencies in 25 Pa. Code sections 129.98 and 129.99, respectively, that prevent

full approval of the RACT II Rule SIP revision. The NO<sub>x</sub> averaging provisions in 25 Pa. Code section 129.98 are deficient because they do not clearly specify how to properly establish an alternative RACT limit and do not require the submission of averaging NO<sub>x</sub> limits to EPA for SIP approval as RACT. EPA finds that the NO<sub>x</sub> averaging provisions, particularly as provided in section 129.98(e), are too vague to establish an adequate alternative RACT limit, without a specific determination for each source and specific inclusion into the Pennsylvania SIP of all permit conditions relevant to implementation of the NO<sub>x</sub> alternative limit for each affected source. Although section 129.98 (e) intended to define the alternative NO<sub>x</sub> RACT emission limit under a NO<sub>x</sub> averaging plan, the equation provided only stipulates that the cumulative actual NO<sub>x</sub> emissions from the emission units included in the averaging plan must be no greater than the cumulative allowable NO<sub>x</sub> emissions for those emissions units. Section 129.98(e) also specifies that the alternative NO<sub>x</sub> limit must be based on the application of the relevant presumptive NO<sub>x</sub> limit (as an emissions rate) under 25 Pa. Code section 129.97 or a more stringent limit and must be expressed as NO<sub>x</sub> mass emissions; and it requires compliance with the alternative NO<sub>x</sub> limit determined on a 30-day rolling basis. Neither 25 Pa. Code section 129.98(e) nor any other provision in section 129.98 establish how to properly compute the alternative NO<sub>x</sub> limit, such that an affected source can consistently establish an alternative limit and the resulting limit is practically and federally enforceable to meet RACT and in accordance with CAA section 110(a)(2)(A).

The lack of specificity in 25 Pa. Code section 129.98 allows certain unbounded discretion in determining an alternative NO<sub>x</sub> RACT limit, which correspondingly results in our inability to determine if such limit would be adequate for RACT for any major source required to meet RACT. Also, this uncertainty prevents consistent implementation of the NO<sub>x</sub> averaging

provisions and ultimately prevents the adequate enforceability of these provisions as a practical matter. 25 Pa. Code Section 129.98 fails to provide, on its face, a generic mechanism to establish a presumptive alternative NO<sub>x</sub> limit.

Further, EPA has long interpreted the RACT requirement of the CAA to mean states must adopt and submit regulations that include emission limitations<sup>6</sup> as applicable to the subject sources. In other words, a state would not fully meet the RACT requirement until it established emissions limitations applicable to the appropriate sets of sources. Hence, the NO<sub>x</sub> averaging provisions in section 129.98, even if sufficiently specific, would not be adequate to fully meet RACT in the absence of the submitted RACT emissions limitations for approval into the SIP.<sup>7</sup> Consequently, NO<sub>x</sub> averaging alternative limits would need to be established on a source-specific basis, and would need to be submitted to EPA for approval into the SIP.<sup>8</sup>

With respect to 25 Pa. Code section 129.99 for source-specific RACT, EPA finds that the generic process to subsequently establish source-specific RACT emissions limits is deficient, because it lacks a date certain by which Pennsylvania must submit the relevant source-specific RACT SIP revisions to EPA to meet RACT requirements for the 1997 and 2008 ozone NAAQS. According to EPA's longstanding policy, such "generic rule" or process cannot fully satisfy RACT, in the absence of the submitted emission limitations.<sup>9</sup> Thus, EPA cannot fully approve 25 Pa. Code section 129.99 of the RACT II Rule without the submission of all source-specific RACT limits

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<sup>6</sup> The use of the term emissions limitation is not meant to exclude the use of work practice standards or other operation and maintenance requirements that might be determined to be RACT.

<sup>7</sup> EPA's November 7, 1996 Memorandum "Approval Option for Generic RACT Rules Submitted to Meet the non-CTG VOC RACT Requirements and Certain NO<sub>x</sub> RACT Requirements."

<sup>8</sup> However, as mentioned previously, the D.C. Cir. Court recently upheld the use of NO<sub>x</sub> averaging to meet RACT requirements for 2008 ozone NAAQS. *South Coast Air Quality Mgmt. Dist. v. EPA*, No. 15-1115 (D.C. Cir. Feb. 16, 2018).

<sup>9</sup> EPA's November 7, 1996 Memorandum "Approval Option for Generic RACT Rules Submitted to Meet the non-CTG VOC RACT Requirements and Certain NO<sub>x</sub> RACT Requirements."

established under these provisions.

Further, EPA finds that the RACT II Rule does not specify compliance demonstration requirements for sources choosing to meet RACT by complying with NO<sub>x</sub> averaging under section 129.98. Section 129.100 only establishes recordkeeping requirements for sources complying with NO<sub>x</sub> averaging under section 129.98. Section 129.98 requires each source included in the NO<sub>x</sub> emissions averaging plan to provide methods for demonstrating compliance and recordkeeping and reporting requirements; however, those requirements are not required to be included into the SIP. Because these additional compliance demonstration requirements would need to be determined on a source-specific basis consistent with the limits and affected sources under a NO<sub>x</sub> averaging plan, EPA requires the submission of such requirements for approval into the SIP, in order for the alternative NO<sub>x</sub> limits under section 129.98 to be practically and federally enforceable, pursuant to CAA section 110(a)(2)(A).

On September 26, 2017, PADEP submitted a supplemental document to EPA that included PADEP's specific commitments to address the deficiencies in 25 Pa. Code sections 129.98 and 129.99. PADEP committed to submit to EPA, within 12 months of EPA's final rulemaking action, additional SIP revisions that include the portions of enforceable permits containing the terms and conditions relevant for compliance with section 129.98, which would include the alternative NO<sub>x</sub> limits as averaging plans and relevant compliance demonstration requirements. PADEP also committed to submit within 12 months of EPA's final rulemaking action, additional source-specific RACT SIP revisions containing source-specific RACT limits approved by PADEP under 25 Pa. Code section 129.99. A copy of PADEP's September 22, 2017 documentation containing these commitments is available in the docket for this rulemaking and

online at [www.regulations.gov](http://www.regulations.gov).

EPA finds Pennsylvania's commitments adequately address the deficiencies noted in this rulemaking action for 25 Pa. Code sections 129.98 and 129.99 and are a sufficient basis for EPA to propose conditional approval of these provisions as meeting RACT for sources seeking a NOx averaging plan or source-specific RACT. Under section 110(k)(4) of the CAA, EPA may conditionally approve a plan based on a commitment from the state to adopt specific enforceable measures within 1 year from the date of approval. If the state fails to adopt and submit the specified measures by the end of 1 year (from the final conditional approval), or fails to submit anything at all, EPA will revert its conditional approval to a disapproval, triggering additional obligations under sections 179 and 110(c) of the CAA.

In this event, EPA will send a letter to the state finding that it had failed to meet its commitment and that the SIP submittal is disapproved. Subsequently, a disapproval notice will be published in the **Federal Register**, and appropriate language will be inserted in the Code of Federal Regulations. EPA's disapproval, effective as of the date of the letter to the state, will trigger a "clock" to impose sanctions under section 179(a) and for EPA to issue a federal implementation plan (FIP) under section 110(c)(1). For plan submittals required under Part D, such as ozone RACT, section 179(a) allows for up to 18 months for the state to correct the deficiency that is the subject of a finding or disapproval before EPA is required to impose sanctions. Further, section 110(c)(1) provides for up to 2 years for the state to correct the deficiency, or else additional sanctions apply at this time, and for EPA to approve a new submittal before being obligated to promulgate a FIP. Similarly, if EPA receives a submittal addressing the commitment but determines that the submittal is incomplete, EPA will send a letter to the state making such a

finding. As with the failure to submit, the sanctions and FIP clocks will begin as of the date of the finding letter.

In addition, where the state does make a complete submittal by the end of the 1-year period, EPA will have to evaluate that submittal to determine if it may be approved and take final action on the submittal within 12 months after the date EPA determines the submittal is complete. If the submittal does not adequately address the deficiencies that were the subject of the conditional approval, and is therefore not approvable, EPA will go through notice-and-comment rulemaking to disapprove the submittal. The 18-month clock for sanctions and the 2-year clock for a FIP start as of the date of final disapproval. If EPA determines that the rule is approvable, EPA will propose approval of the rule. In either instance, whether EPA finally approves or disapproves the rule, the conditional approval remains in effect until EPA takes its final action.

By conditionally approving 25 Pa. Code sections 129.98 and 129.99, EPA would ensure that adequate RACT limits are established in addition to or as alternative to the presumptive RACT requirements of 25 Pa. Code section 129.97. Additional compliance demonstration requirements would also be approved into the SIP for sources complying with either 25 Pa. Code section 129.98 or 129.99, which would ensure adequate federal and practical enforceability of any additional RACT limits under the RACT II Rule for compliance with CAA section 110(a)(2)(A). In addition, with EPA's conditional approval of these requirements, EPA would set a specific schedule for producing enforceable RACT measures, resulting in more timely implementation of RACT controls in Pennsylvania than would otherwise occur if EPA was to disapprove these provisions and require a federal plan for control.

Conditional approval of 25 Pa. Code sections 129.98 and 129.99 should not result in the

approved portions of the RACT II Rule being any more stringent than anticipated or intended by Pennsylvania. 25 Pa. Code 129.99 requires source-specific RACT to receive EPA approval and required sources complying with these requirements to submit an alternative proposal to PADEP by a date certain which has already passed. In addition, compliance with 25 Pa. Code sections 129.98 and 129.99 is intended in most cases as an alternative option for affected sources that are unable to comply with the established presumptive RACT emissions requirements under section 129.97. The presumptive RACT requirements in section 129.97 remain applicable unless and until a source receives approval of an alternative RACT limit (under 25 Pa. Code sections 129.98 and 129.99) and EPA approves such alternative RACT limits into the Pennsylvania SIP. Further, PADEP's September 22, 2017 commitments confirm PADEP's intention to submit alternative RACT limits under 25 Pa. Code sections 129.98 and 129.99 to EPA for SIP approval. The submission of any alternative RACT requirement approved by Pennsylvania as a SIP revision will not supplant the presumptive RACT requirements for purposes of Federal enforceability unless and until the alternative is fully approved by EPA into the SIP.

In conclusion, EPA is proposing conditional approval under CAA section 110(k)(4) only of 25 Pa. Code sections 129.98 and 129.99 of the RACT II Rule for the reasons provided above. EPA is also proposing full approval under CAA 110 of the rest of the RACT II Rule included for incorporation in the Pennsylvania SIP through PADEP's May 16, 2016 SIP submittal, as EPA finds that the remainder of the RACT II Rule meets the intended RACT requirements under sections 172, 182, 184 and 110 of the CAA for the 1997 and 2008 ozone NAAQS.

#### **IV. Proposed Action**

EPA's review of the Pennsylvania May 16, 2016 SIP submittal indicates that certain portions of

the submittal are adequate to meet RACT requirements under the CAA for both the 1997 and 2008 8-hour ozone NAAQS. EPA is proposing to fully approve into the SIP the provisions in 25 Pa. Code sections 129.96-129.97, and 129.100 of the RACT II Rule and relevant definitions in 25 Pa. Code section 121.1, adopted by Pennsylvania on April 23, 2016, as meeting RACT for the 1997 and 2008 ozone NAAQS. These provisions are adequate to meet the ozone-specific RACT requirements of sections 172, 182(b)(2)(C), 182(f), and 184 of the CAA for both the 1997 and 2008 8-hour ozone NAAQS for specific NO<sub>x</sub> and VOC sources in Pennsylvania, and in accordance with section 110.

In addition, EPA is proposing to conditionally approve 25 Pa. Code sections 129.98 and 129.99, as these provisions provide alternative RACT requirements which require further PADEP and EPA action in order to meet RACT requirements under the CAA. The provisions of 25 Pa. Code sections 129.98 and 129.99 will become fully approvable, if PADEP submits to EPA, within 12 months of EPA's final action, additional SIP revisions that include any alternative NO<sub>x</sub> averaging limits and source-specific RACT limits adopted under sections 129.98 and 129.99, respectively, as well as any relevant compliance demonstration requirements. Once EPA has determined that PADEP has satisfied this condition, EPA shall remove the conditional nature of its approval and, at that time, the provisions in 25 Pa. Code sections 129.98 and 129.99 will receive a full approval status. Should PADEP fail to meet this condition, the final conditional approval of 25 Pa. Code sections 129.98 and 129.99 will convert to a disapproval. EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action.

#### **IV. Incorporation by Reference**

In this proposed rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the regulatory provisions of 25 Pa. Code sections 129.96-129.100 of the RACT II Rule and related amendments of 25 Pa Code section 121.1, as adopted by Pennsylvania on April 23, 2016. EPA has made, and will continue to make, these materials generally available through <http://www.regulations.gov> and at the EPA Region III Office (please contact the person identified in the “For Further Information Contact” section of this preamble for more information).

## **V. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA’s role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed 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) and 13563 (76 FR 3821, January 21, 2011);
- is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted 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 (Public Law 104-4);
- does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- 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; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule, concerning Pennsylvania's 1997 and 2008 8-hour ozone reasonably available control technology for certain major NOx and VOC sources, does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

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

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

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

Dated: February 23, 2018.

Cosmo Servidio,  
Regional Administrator,  
Region III.

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