



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2019-0295; EPA-R03-OAR-2025-0267; FRL-12837-01-R3]

Air Plan Approval; Maryland; Reasonably Available Control Technology for Municipal Waste Combustors

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve state implementation plan (SIP) revisions submitted by the State of Maryland. The SIP revisions consist of regulations that implement statewide reasonably available control technology (RACT) requirements by limiting air emissions of oxides of nitrogen (NO_x) from municipal waste combustors (MWCs) in Maryland. This action is being taken under the Clean Air Act (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-2025-0267 at *www.regulations.gov*, or via email to *gordon.mike@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, the EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, 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 www.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Ellen Schmitt, Planning & Implementation Branch (3AD30), Air & Radiation Division, U.S. Environmental Protection Agency, Region III, 1600 John F Kennedy Boulevard, Philadelphia, Pennsylvania 19103. The telephone number is (215) 814-5787. Ms. Schmitt can also be reached via electronic mail at schmitt.ellen@epa.gov.

SUPPLEMENTARY INFORMATION: On July 27, 2018, the Maryland Department of the Environment (MDE) submitted to the EPA a SIP revision (#18-04) which was intended to satisfy certain statewide RACT requirements for sources of NO_x emissions for the 2008 ozone national ambient air quality standards (NAAQS), including those related to MWCs.¹ Following that submittal, MDE adopted updated emission limits as RACT for MWCs for the 2008 and 2015 ozone NAAQS and these updated emission limits were submitted to the EPA as a revision to Maryland's SIP on July 17, 2020 (#20-10).

In this proposed rulemaking, regarding MDE's SIP revision #18-04, the EPA is only proposing approval on the statewide RACT control regulations and definitions that relate to MWCs. SIP revision #18-04 contains additional elements, including Maryland's certification that the State satisfied all required statewide RACT elements for the 2008 ozone NAAQS. The EPA is not proposing to act on those other elements, including the certification, that comprise the remainder of MDE's SIP revision #18-04. The EPA will take separate action on those other portions of the July 27, 2018 SIP submittal at another time. The EPA is proposing to approve all portions of MDE's SIP revision #20-10, submitted to the EPA on July 17, 2020.

I. Background

¹ MWC means an incinerator that burns only municipal solid waste. A large MWC is an existing municipal waste combustor that has a capacity greater than 250 tons per day. Code of Maryland Regulations (COMAR) 26.11.08.01.

A. Ozone NAAQS and RACT Requirements

The CAA requires states to address emissions of NO_x and volatile organic compound(s) (VOC) from certain sources in certain parts of the country to prevent photochemical reactions that result in ozone formation. RACT is an important strategy for reducing NO_x and VOC emissions from major stationary sources. For purposes of implementing the ozone NAAQS, a “major source” is defined based on the source’s potential to emit (PTE) NO_x, VOC, or both pollutants. *See* CAA sections 182, 184, and 302. The applicable thresholds differ based on the classification of the nonattainment area in which the source is located. *See* CAA section 182.

Areas designated nonattainment for the ozone NAAQS are subject to the general nonattainment area planning requirements of CAA section 172.² Section 172(c)(1) of the CAA provides that SIPs for nonattainment areas must include reasonably available control measures (RACT), including emissions reductions from existing sources through adoption of RACT.

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.³ Sections 182(b)(2) and 182(f)(1) of the CAA require states with Moderate or higher (Serious, Severe, or Extreme) ozone nonattainment areas to implement RACT controls for any source covered by a control technique guidelines (CTG) document issued by the EPA and for all major sources of VOC and NO_x emissions located in the area.

Section 184(a) of the CAA established the Ozone Transport Region (OTR) comprised of all or portions of 12 eastern states, including all of Maryland. Section 184(b)(1)(B) of the CAA requires RACT to be implemented on all sources in the OTR that are covered by a CTG. Further,

² Nonattainment areas are areas that do not meet (or that contribute to ambient air quality in a nearby area that does not meet) the NAAQS. Ozone NAAQS nonattainment areas are initially classified by the design value (or level of ozone) at the time the area was designated as nonattainment. www.epa.gov/green-book/ozone-designation-and-classification-information.

³ *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.” *See* also 44 FR 53761, 53762 (September 17, 1979).

CAA section 184(b)(2) requires that any source in the OTR with a PTE of at least 50 tons per year (tpy) of VOC “be considered a major stationary source and subject to the requirements which would be applicable to major stationary sources if the area were classified as a Moderate nonattainment area.” As such, RACT applies to all sources of VOC in the OTR with a PTE of at least 50 tpy.

B. Applicability of RACT Requirements in Maryland

Maryland previously has been subject to the RACT requirements stemming from both ozone nonattainment area planning requirements and because of its’ location in the OTR. For both the 1979 1-hour ozone NAAQS and the 1997 8-hour ozone NAAQS, the Baltimore nonattainment area (which includes Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties of Maryland, as well as Baltimore City, Maryland), the Washington D.C. nonattainment area (which includes Calvert, Charles, Frederick, Montgomery, and Prince George’s Counties of Maryland), and the Philadelphia nonattainment area (which includes Cecil County, Maryland) were designated as Moderate or higher.⁴ The remaining Maryland counties were still subject to RACT requirements because they are in the OTR. Since the early 1990s, Maryland implemented numerous RACT controls throughout the State to meet RACT requirements under the 1979 1-hour and the 1997 8-hour ozone standards. Maryland revised and promulgated its RACT regulations and demonstrated that it complied with the 1997 RACT requirements in a SIP revision approved by the EPA on July 13, 2012 (77 FR 41278).

Under CAA section 109(d), the EPA is required to periodically⁵ review and promulgate, as necessary, revisions to the NAAQS to continue to protect human health and the environment. On March 27, 2008 (73 FR 16436), the EPA revised the 8-hour ozone standard to 0.075 parts per million (ppm). On May 21, 2012 (77 FR 30088), the EPA finalized designations for the 2008

⁴ Additionally, Kent and Queen Anne’s Counties in Maryland were designated as Marginal nonattainment and therefore were not subject to RACT requirements due to their nonattainment status.

⁵ The CAA requires the Administrator to complete a review, making revisions as appropriate, “at five-year intervals” and also authorizes review and revision, as appropriate, “more frequently.”

ozone NAAQS, designating as nonattainment three areas that contain portions of Maryland, including the Baltimore Moderate nonattainment area, the Washington D.C. Marginal nonattainment area, and the Philadelphia Marginal nonattainment area. Although the remaining Maryland counties were designated as unclassifiable/attainment for the 2008 ozone NAAQS, they are still part of the OTR and are still required to address RACT requirements.

On October 26, 2015 (80 FR 65292), the EPA revised the 8-hour ozone standard to 0.070 ppm. The EPA finalized the designations for the 2015 ozone NAAQS on June 4, 2018 (83 FR 25776), designating as nonattainment the Baltimore area, the Washington D.C. area, and the Philadelphia area as Marginal. Later, the Washington D.C. area⁶ was reclassified to Moderate and both the Baltimore area⁷ and the Philadelphia area⁸ were reclassified to Moderate, and then to Serious. As with the previous NAAQS and in accordance with CAA section 184(b), the Maryland counties that were designated as attainment/unclassifiable for the 2015 NAAQS are still required to address RACT requirements as they are part of the OTR. Therefore, the entire State of Maryland was required to submit to the EPA SIP revisions that demonstrated how it meets RACT requirements under the 2008 and 2015 ozone NAAQS, including for major stationary sources of NO_x located within the State boundaries. Maryland retained its major source thresholds at 25 tpy for VOC and NO_x sources in the Baltimore, Washington, D.C., and Philadelphia Severe 1-hour ozone nonattainment areas. The State also retained its major source thresholds at 50 tpy for VOC and 100 tpy for NO_x in all remaining Maryland counties, consistent with the CAA requirements for states in the OTR.

C. The EPA Guidance and Requirements

The EPA affirmed RACT requirements through final implementation rules for each ozone NAAQS, as well as through guidance. On March 6, 2015 (80 FR 12264), the EPA issued

⁶ 87 FR 60897 (October 7, 2022).

⁷ See 87 FR 60897 (October 7, 2022) and 89 FR 62663 (August 1, 2024).

⁸ See 87 FR 60897 (October 7, 2022) and 89 FR 61025 (July 30, 2024).

its final rule for implementing the 2008 ozone NAAQS (the 2008 ozone SIP requirements rule⁹). This rule addressed, among other things, control and planning obligations as they apply to nonattainment areas under the 2008 ozone NAAQS, including RACT. In this rule, the EPA specified that states can meet the RACT requirements through the adoption of new or more stringent regulations or controls that represent RACT control levels or through certification that previously adopted RACT controls in their SIP revisions approved by the EPA under a prior ozone NAAQS continue to represent adequate RACT control levels for attainment of the 2008 ozone NAAQS¹⁰. All RACT SIP submittals, including certifications, must be accompanied by appropriate supporting information such as consideration of information received during the public comment period and consideration of new data, if any. Adoption of new RACT regulations can occur when states have new stationary sources not covered by existing RACT regulations, or when new data or technical information indicates that a previously adopted RACT measure does not represent a newly available RACT control level. On December 6, 2018, the EPA published a final implementation rule that outlined the obligations that states in the OTR and states with ozone nonattainment areas needed to address for the 2015 ozone NAAQS (the 2015 ozone SIP requirements rule¹¹), which included retaining general RACT requirements codified for the 2008 ozone NAAQS at 40 Code of Federal Regulations (CFR) 51.1112.

II. Summary of Maryland's SIP Revisions

On July 27, 2018, the EPA received MDE SIP revision #18-04 which included, among other things, MWC NO_x emission limits of 205 parts per million volume (ppmv) 24-hour average.¹² These MWC NO_x emission limits were strengthened in MDE's July 17, 2020 SIP revision #20-10. However, at least a portion of the proposed changes included in SIP revision

⁹ The 2008 implementation rule is codified at 40 CFR part 51 subpart AA. *See also* 80 FR 12279 (March 6, 2015).

¹⁰ *See* 80 FR 12264 at 12279 (March 6, 2015).

¹¹ The 2015 SIP requirements rule is codified at 40 CFR part 51 subpart CC. *See also* 83 FR 62998 (December 6, 2018).

¹² Moreover, the SIP submission includes a requirement that a person may not operate a municipal waste combustor that has a burning capacity of 35 tons or more per day and less than or equal to 250 tons per day that was constructed on or before August 30, 1999, which results in violation of the provisions of 40 CFR part 62 subpart JJJ.

#18-04 provide regulatory elements that are relied upon by SIP revision # 20-10. Therefore, some components of the SIP revision #18-04 need to be approved along with all of SIP revision #20-10 in order to incorporate the most up to date MWC RACT limits into the SIP.

The following definitions from SIP revision #18-04 are being proposed for approval in this action in order to support the proposed approval of SIP revision #20-10: “Continuous emission monitoring,” “Existing municipal waste combustor (existing MWC),” “Incinerator,” “Incinerator operator,” “Malfunction,” “Municipal Solid Waste,” “Municipal waste combustor (MWC),” “Operating day,” “Shutdown,” and “Startup.” Additionally, revisions to sections 26.11.08.02 (Applicability) and 26.11.08.07 (Requirements for Municipal Waste Combustors) in SIP #18-04 are incorporated into this action.¹³ Although MDE’s SIP revision #18-04 includes other requests for EPA action, this action only proposes to take action on, and proposes to approve, the rule, and associated definitions, implementing NO_x RACT requirements for MWCs.¹⁴

SIP revision #20-10 incorporates two rounds of regulatory revisions. The first action, which Maryland adopted on December 6, 2018, repealed the then-existing State NO_x RACT regulations codified at COMAR 26.11.09.08H and also promulgated new NO_x RACT emission limits for large MWCs at COMAR 26.11.08.10.¹⁵ This new regulation, COMAR 26.11.08.10, adopted by Maryland in December 2018, requires that the State’s two large MWCs¹⁶ meet specific 24-hour block average emission rates by May 1, 2019, and NO_x 30-day rolling average emission rates by May 1, 2020, except during periods of startup and shutdown.

At the time, the EPA’s 2015 SSM policy¹⁷ required that emission limits be in place at all

¹³ Note that both sections were subsequently updated through SIP revision #20-10.

¹⁴ The EPA will take separate action on all other areas of the July 27, 2018 SIP submission.

¹⁵ This original State revision also amended opacity requirements under 26.11.01, added definitions, repealed 26.11.08.08-1 and updated references to 26.11.08.08-2, which was the current emission standards and requirements for Hospital, Medical, and Infectious Waste Incinerators (HMIWIs).

¹⁶ The Montgomery County Resource Recovery Facility and the Wheelabrator Baltimore, Inc..

¹⁷ The EPA’s 2015 SSM SIP Policy; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, (80 FR 33839, June 12, 2015).

times, even during startup and shutdown periods, and so in Maryland's second state-level action, MDE made revisions to ensure that during all hours of large MWC operation, there was an applicable NOx emission standard in place. This second action was adopted by the State of Maryland on May 4, 2020.

Overall, the SIP changes proposed through the MWC portion of SIP revision #18-04 and SIP revision #20-10 establish the following:

- Small MWCs, those with a capacity of at least 35 tons and less than or equal to 250 tons per day, that were constructed on or before August 30, 1999 shall not be in violation of the provisions of 40 CFR part 62 subpart JJJ.¹⁸
- New NOx RACT standards and requirements for large MWCs with a capacity greater than 250 tons per day under COMAR 26.11.08.10.
 - Maryland's two large MWCs shall meet individual NOx 30-day rolling average emission rates by May 1, 2020.
 - The Montgomery County Resource Recovery facility (MCRR) shall meet a NOx 30-day rolling average emission rate of 105 ppmv.
 - The Wheelabrator Baltimore, Inc. facility (Wheelabrator) shall meet a NOx 30-day rolling average emission rate of 145 ppmv.
 - During periods of startup and shutdown the Montgomery County Resource Recovery Facility shall meet a facility wide NOx emission limit of 202 lbs/hr timed average mass loading over a 24-hour period and the Wheelabrator Baltimore, Inc. facility shall meet a facility wide NOx emission limit of 252 lbs/hr timed average mass loading over a 24-hour period. The duration of startup and shutdown procedures for a large MWC are not to exceed three hours per occurrence, and the NOx 24-hour mass emission limits apply during these times.

¹⁸ Includes requirements to install and operate continuous emission monitoring for NOx and emissions limits according to combustion technology (*See* table 3 of subpart JJJ).

- Large MWCs shall continuously monitor NOx emissions with a continuous emission monitoring system (CEMS) and submit quarterly reports to MDE.

These reports will include data, information, and calculations which demonstrate compliance with the NOx RACT emission rates and NOx mass loading emission limits as well as flagged periods of startup and shutdown and exceedance of emission rates and documented actions taken during periods of startup and shutdown in signed, contemporaneous operating logs.

III. The EPA's Evaluation of the Submittals

MDE's revisions to their state MWC regulations were made through three separate state-level revisions which were submitted to the EPA through two SIP submittals, one on July 27, 2018 (SIP revision #18-04), and another on July 17, 2020 (SIP revision #20-10). In addition to revising the NOx emission limits for MWCs in Maryland and setting these limits as RACT, the July 17, 2020, SIP submission also addresses previous aspects of the regulation that allowed for non-continuous limits during startup and shutdown, in accordance with the EPA's 2015 SSM Policy. Overall, encompassing all three revisions submitted by MDE to the EPA, the State is requesting to adopt into its SIP, NOx emission limits for large MWCs as well as additional NOx emission rates for MWCs in warm-up mode so that all operating hours have a NOx standard in place.¹⁹

The amendments to COMAR 26.11.08.10 contain regulations that required Wheelabrator to meet a NOx 24-hour block average emission rate of 150 ppmv and for MCRR to meet a NOx 24-hour block average emission rate of 140 ppmv. The NOx 24-hour block average emission rate of 150 ppmv is consistent with RACT rates in Connecticut, New Jersey, New York, and Massachusetts. Table 1, in this document provides a look at the NOx limits MWCs in certain OTR states. Additionally, to further ensure consistent long-term operation of NOx control technologies, Maryland required the large MWCs to meet new, individual NOx 30-day rolling

¹⁹ Maryland is also requesting to adopt into its SIP the requirements for small MWCS under COMAR 26.11.08.07.

average emission rates by May 1, 2020.²⁰

Table 1. State NOx Limits for Municipal Waste Combustors

State	NOx Limits ppmvd at 7% Oxygen	Averaging Period	Rule Citation
Connecticut	146 (processed-municipal solid waste combustor)	24-hour average	22a-174-38 (SIP approved for the 2008 and 2015 ozone NAAQS, 87 FR 38284, June 28, 2022)
	150 (mass burn waterfall combustor)		
	177 (mass burn refractory combustor)		
New Jersey	150	calendar day	N.J.A.C. 7:27-19.12 (SIP approved for the 2008 ozone NAAQS, 83 FR 50506, October 9, 2018)
New York	150 (mass burn waterfall)	24-hour average	219-10.2 (SIP approved for the 2008 and 2015 ozone NAAQS, 88 FR 77208, November 9, 2024)
	170 (rotary combustor)		
	150 (mass burn waterfall)	annual	
	150 (rotary combustor)		
Massachusetts	150 (mass burn waterfall)	24-hour average	310 CMR 7.08 (SIP approved for the 2008 and 2015 ozone NAAQS, 85 FR 65236, October 15, 2020)
	146 (refuse-derived fuel stoker)		

Maryland’s third revision to the State’s MWC regulation created a mass-based emission limit for warm-up periods, which ends when startup begins.^{21, 22} For further details regarding the analysis and changes Maryland completed to the startup, shutdown, and warm-up periods of the large MWC regulation, refer to the technical support document (TSD) that accompanies this proposed rulemaking. The TSD can be found under www.regulations.gov for Docket ID No. EPA-R03-OAR-2025-0267.

V. Proposed Action

The EPA's review of Maryland’s July 17, 2020, SIP revision #20-10 and the relevant portions of the State’s July 27, 2018, SIP revision #18-04 indicates that the revisions to COMAR 26.11.08 will assist the State with NOx reductions. The EPA is proposing to approve the

²⁰ Wheelabrator’s NOx 30-day rolling average emission rate is 145 ppmv and MCRR’s is 105 ppmv.

²¹ Startup is when municipal waste is being fed into the combustor. Startup and shutdown are limited to three hours in duration.

²² See pages 356-362 of MDE’s July 17, 2020 SIP submittal, #20-10, Part 2 of 2.

Maryland SIP revisions as meeting the CAA's major source NO_x RACT requirement for municipal waste combustors for both the 2008 ozone NAAQS and the 2015 ozone NAAQS. The EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action.

VI. Incorporation by Reference

In this document, the EPA is proposing to include in final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the COMAR regulations described in section II of this document. The EPA made, and will continue to make, these materials generally available through *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).

VII. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Clean Air 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 Clean Air Act. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Is not an Executive Order 14192 (90 FR 9065, February 6, 2025) regulatory action because this action is not significant 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 Clean Air Act.

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

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.

Amy Van Blarcom-Lackey,
Regional Administrator,
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