

Questions related to the Planned Redesignation Request & Maintenance Plan for the Washington DC-MD-VA 2015 Ozone NAAQS Nonattainment Area

Based on EPA's published data for the period 2021 through 2023, the ozone design value for the Washington, DC-MD-VA 2015 ozone NAAQS nonattainment area is 0.071 ppm. However, EPA indicated that they intend to grant an Exceptional Events Waiver to the District for the McMillan monitor's ozone data for June 29, 2023, in a letter (dt. July 17, 2024). This action brings down the design value for the above period to 0.070 ppm and the region attains the 2015 ozone NAAQS.

As the region has attained the above NAAQS, the Washington region is currently planning to submit a Redesignation Request & Maintenance Plan. In this respect, we have a few questions related to the requirements for redesignation of the area to attainment and related milestone year and emissions inventories for which we need your response.

Questions related to Redesignation Requirements

Following are the questions along with the related parts of the Clean Air Act Section 107 (d) (3) (E), which outlines various requirements for redesignation of a nonattainment area to attainment.

"The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless –

- (i) the Administrator has fully approved the applicable implementation plan for the area under section 110(k);

Question – Does the submittal of the Washington region's Redesignation Request & Maintenance Plan for the 2008 ozone NAAQS in 2018 and the subsequent approval by EPA (May 15, 2019 – MD & VA; August 15, 2019 - DC) satisfy this requirement or do the following requirements also need to be submitted and approved by EPA first before the redesignation request can be submitted?

- *The below requirements must be submitted and approved by the EPA before the area can be redesignated to attainment, except where noted. If all SIP elements are submitted, but have not yet been approved by the EPA, the redesignation request may still be submitted, but the area would not meet the requirements for redesignation to attainment until all applicable SIP requirements are approved into the SIP.*

(Please note that the District, Maryland, and Virginia submitted, and EPA approved the base year 2017 emissions inventory (approved in 2022) and emission statement (approved in 1994/95) as part of the 2015 ozone NAAQS implementation.)

District

*Infrastructure SIP requirements - Section 110 (a)(2)(D)(i)-II Prong 3: Interstate Transport PSD
Maintenance Plan requirements – Moderate Nonattainment NSR rule, Emission Statement
Regulations (182(a)(3)(B)), RACT*

OTR requirements – RACT

- *The section 110(a)(2)(D)(i) requirements, where applicable, continue to apply to a state regardless of the designation (or redesignation) of any one*

particular area within the state. Thus, these requirements are not applicable requirements for purposes of redesignation.

- The District has an approved NSR rule that meets Moderate requirements (86 FR 42733).
- The District has an approved Emission Statement (CAA 182(a)(3)(B)) for the 2015 8-hour ozone NAAQS (86 FR 44614).
- Approved RACT is still required to redesignate the area to attainment. Major VOC and CTG RACT and Major NOx RACT have been submitted to the EPA but have not yet been acted on by the EPA. The District has not submitted Alternative NOx RACT.

Maryland

Maintenance Plan requirements – Moderate Nonattainment NSR rule, Emission Statement Regulations (182(a)(3)(B)), RACT, I/M Basic, Emission Inventories 182(a)(1) (submitted in 2020, but not listed on SIP status website)

OTR requirements – RACT

- Maryland has an approved NSR rule that meets Moderate requirements (87 FR 12631).
- Maryland has an approved Emission Statement (CAA 182(a)(3)(B)) for the 2015 8-hour ozone NAAQS (86 FR 49925).
- Approved RACT is still required to redesignate the area to attainment. This SIP revision has been submitted but has not yet been acted on by the EPA.
- Approved I/M Basic is still required to redesignate the area to attainment. This SIP revision has been submitted but has not yet been acted on by the EPA.
- Maryland has an approved base year emissions inventory (CAA 182(a)(1)) for the 2015 8-hour ozone NAAQS (87 FR 21752).

Virginia

Maintenance Plan requirements – I/M Basic, Moderate Nonattainment NSR rule, RACT Infrastructure SIP requirements - Section 110 (a)(2)D(i)-I Prong 1: Interstate Transport Significant Contribution, Section 110 (a)(2)D(i)-I Prong 2: Interstate Transport Interfere with Maintenance

OTR requirements – RACT

- Approved I/M Basic is still required to redesignate the area to attainment. This SIP revision has not been submitted to the EPA.
- Moderate nonattainment NSR rule has not been submitted to the EPA.
- Approved RACT is still required to redesignate the area to attainment. This SIP revision has not been submitted to the EPA.
- The section 110(a)(2)(D)(i) requirements, where applicable, continue to apply to a state regardless of the designation (or redesignation) of any one particular area within the state. Thus, these requirements are not applicable requirements for purposes of redesignation.

Questions related to Milestone Years & Emissions Inventories

- (i) Base Year – The base year for the 2015 ozone NAAQS is 2017. A comprehensive emissions inventory submitted to EPA for the base year 2017 was approved in 2022.

Question 1 – Would we need to update the onroad and nonroad portions of the 2017 BY inventory using MOVES4.0.1 (currently approved model) or do those emissions inventories developed and submitted using MOVES2014b (EPA approved model at that time) meet the requirements for the 2017 BY emission inventories for the proposed Redesignation Request & Maintenance Plan for the 2015 ozone NAAQS?

MOVES5 was released in November 2024. Please see section 2.2 of the attached MOVES5 Policy Guidance for EPA's policy regarding SIPs that have already been submitted or approved using older MOVES models. The approved 2017 base year emissions inventory for the Washington, DC area (87 FR 21752) satisfies the CAA 172(c)(3) SIP requirement for redesignation.

Question 2 - MOVES5 is expected to be published in winter 2024/2025. Installation and testing of MOVES5 will take significant time and effort. Additionally, MOVES5 is expected to include benefits from newly promulgated onroad standards that should provide ozone precursor reductions in the interim and outyears (2032 and 2038, respectively). If we need to update the onroad and nonroad portions of the 2017 BY inventory, can we also develop the 2032 and 2038 interim and outyear emissions inventories using the current version of MOVES (MOVES4.0.1) rather than using MOVES5 which is likely to be publicly available at that time? Since MOVES4.0.1 emission estimates are expected to be somewhat higher than MOVES5 estimates, use of MOVES4.0.1 in the maintenance demonstration for years 2032 and 2038 should be conservative/more stringent.

MOVES5 was released in November 2024. Please see section 2.1 of the attached MOVES5 Policy Guidance regarding the use of MOVES5 in SIP development, excerpts below:

MOVES5 should be used in ozone, CO, PM, and NO2 SIP development as expeditiously as possible, as there is no grace period for the use of MOVES5 in SIPs.

States should use the latest version of MOVES that is available at the time that a SIP is developed. All states other than California should use MOVES5 for SIPs that will be submitted in the future so that they are based on the most accurate estimates of emissions possible. States that have adopted California regulations under CAA section 177 should use MOVES5 when modeling any such regulations that have been issued a waiver by EPA.

However, EPA recognizes the time and level of effort involved in SIP development, so in cases where state and local agencies have already completed significant work on a SIP with MOVES4 (e.g., attainment modeling has already been completed with MOVES4), they may continue to rely on this earlier version. In addition, due to the fact that EPA is releasing multiple versions of MOVES in a short timeframe, MOVES3 may have already been used in SIP development. In areas where state and local agencies

have already completed significant work on a SIP with MOVES3, MOVES3 may continue to be used in SIP development.

- (ii) Attainment Year – The EPA memorandum titled “Procedures for Processing Requests to Redesignate Areas to Attainment,” by John Calcagni, Director, Air Quality Management Division, September 4, 1992, provides the guidance for the selection of the attainment year. Section 5a (Attainment Inventory), pages 8-9 of this memorandum says that the attainment year emission inventory should include the emissions during the period associated with the monitoring data showing attainment. It also says that “For ozone nonattainment areas the inventory should be based on actual typical summer day emissions of ozone precursors (volatile organic compounds and nitrogen oxides) during the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas to reconcile milestones.”

Question – The Washington area is considering using the year 2022 as an attainment year for the proposed redesignation request and maintenance plan. It seems to meet the first requirement outlined in the above memorandum. It is in the middle of the three-year period (2021-2023) of the air quality data, which shows attainment. However, it is not a periodic emissions inventory year. The more recent periodic inventory was submitted for 2020, which does not seem to be a typical inventory given the pandemic induced emissions decline. The next periodic inventory year is 2023, but that won't be published until March 2026. EPA is currently in the advanced stage in the development of the 2022 modeling inventory. Therefore, using 2022 as the attainment year inventory seems most appropriate. Are you OK with 2022 being used as an attainment year?

- *A non-periodic inventory year may be used as long as it is one of the 3 years that monitored attainment, so a 2022 attainment year is acceptable. It would be helpful to note in the inventory discussion section that development of the inventory was started before the release of the 2023 NEI.*

- (iii) Interim & Maintenance Year – The maintenance of the attainment status in the future needs to be demonstrated by showing that future emissions of ozone precursors will not exceed the level of the attainment inventory over the 10-year period following EPA's approval of the redesignation request. For this purpose, a future maintenance year and an interim year (between attainment year and maintenance year) needs to be identified.

Question – Is 2032 acceptable as the interim year and 2038 as the maintenance year? There are several reasons why the area prefers to use 2032 and 2038 as the interim and the maintenance year respectively. First, the CAA requires that the maintenance be demonstrated over the 10-year period following EPA's approval of the Redesignation Request & Maintenance Plan and EPA has 18 months to decide on the plan since its submission. Therefore, the maintenance year must be at least 12 years apart from the year of the expected submission. For this reason, 2038 seems a good choice for the maintenance year as it is about 12 years apart from the expected late 2026 timeframe of the submission. Second, the year 2032 lies close to the middle of 2022 and 2038. Third, 2032 and 2038 are part of the 2022 emissions modeling platform. Therefore, parts of the

inventories required for those two years will be available from EPA and this will help the region develop the plan relatively quickly.

- Yes, this is acceptable. We recommend that it is noted that those years were developed with the 2022 EMP and were the most accessible to use.

Question related to Emission Reduction Credits for retired power plants

Morgantown, Chalk Point and Dickerson power plants shut down and are considering applying for Emission Reduction Credits (ERCs). How are ERCs accounted for in the Redesignation Request & Maintenance Plan emissions inventory? Are they added in as line items there?

- If the shutdowns were accounted for in the modeling platform when the emissions projections were done, then it would not need to be a separate line item, just a discussion point. If the shutdowns were not accounted for in the emissions projections, then they would need to be zeroed out from the projection inventories.

Please let us know any additional information we should consider as we develop the Redesignation Request & Maintenance Plan.

- The EPA appreciates the opportunity for early engagement on this Redesignation Request and Maintenance Plan and encourages MD, VA, and DC to share any draft materials with the EPA for review.