

November 22, 2019

Executive Director and OTC Commissioners
Ozone Transport Commission
800 Maine Avenue SW
Suite 200
Washington, DC 20460

RE: Written Comments on the Ozone Transport Commission's Proposed Section 184(c)
Recommendation to the United States Environmental Protection Agency

Dear Executive Director and OTC Commissioners:

The Pennsylvania Department of Environmental Protection (DEP) appreciates the opportunity to submit these comments on the Ozone Transport Commission's (OTC) October 18, 2019, proposed recommendation to the United States Environmental Protection Agency (EPA) under Section 184(c) of the Clean Air Act (CAA) (42 U.S.C. § 7511c(c)) (the "Proposal" or "Proposed Section 184(c) Recommendation"). The Proposal, entitled "OTC Recommendation for Establishing Daily Limits for Coal-Fired EGUs in Pennsylvania to Ensure that Existing Control Technologies are Optimized to Minimize Nitrogen Oxide Emissions Each Day of the Summer Ozone Season,"¹ if approved as final by the OTC, would be transmitted by the OTC to the EPA as a recommendation for additional control measures in the form of daily emission limits for oxides of nitrogen (NO_x) on select Pennsylvania coal-fired electric generating units (EGUs). The OTC asserts in the Proposal that such daily limits are necessary for States downwind of the named sources to attain the 2015 National Ambient Air Quality Standard (NAAQS) for ozone by the 2021 attainment deadline.

Background

The DEP respectfully disagrees with the OTC assertion for the same reasons the DEP expressed to the OTC Commissioners, both informally and through formal testimony presented and submitted to the OTC on August 16, 2019, in response to the May 30, 2019 Section 184(c) petition submitted by Maryland to the OTC.² The Maryland Section 184(c) petition is the basis for this OTR Proposed Section 184(c) Recommendation, and the relief sought within.

The OTC has not prepared a comment and response document for the previously submitted technical information, testimony, and written comments from its first comment period. Therefore, the DEP attaches and incorporates by reference its August 16, 2019 testimony, and the attachments to that testimony, in this comment letter.

¹ The Proposal is available online at <https://otcair.org/upload/whatsnew/184C%20Recommendation&RuleAttachments.pdf>.

² The Maryland Section 184(c) petition, "Petition to the Ozone Transport Commission for Additional Control Measures Pursuant to Section 184(c) of the Clean Air Act," is available at <https://mde.maryland.gov/programs/Air/Documents/184c-Petition.pdf>.

Pennsylvania is a member of the OTC by operation of law under Section 184(a) of the CAA (42 U.S.C. § 7511c(a)), and the DEP has worked with, and will continue to work with other OTC member states to improve air quality throughout the Northeast. The DEP supports the OTC's goal to eliminate significant downwind contribution to nonattainment of the 2008 and 2015 ozone standards. However, the DEP does not support this Proposed Section 184(c) Recommendation, for the reasons set forth below.

Reasoning Against the 184(c) Recommendation

The DEP disagrees with the OTC's methodology to achieve the goal of eliminating significant downwind contribution. For instance, if the OTC believes that it can demonstrate that additional control measures are required for Pennsylvania sources, then the OTC should do so by using appropriate and valid modeling. For its Proposed Section 184(c) Recommendation process, the OTC has not conducted appropriate modeling to support its proposed recommendations.

Appropriate modeling would include evaluation and modeling of ozone precursor emissions from all states covered by the allowance trading program for emissions of NO_x and sulfur dioxide (SO₂) under the EPA's Cross-State Air Pollution Rule (CSAPR),³ not just from Pennsylvania. Broad multistate modeling is necessary to determine the portion of each state's downwind impact.

Because of inappropriate modeling, the OTC Proposal, if implemented, could shift generation to higher emitting NO_x units, which would increase emissions. The OTC did not evaluate or analyze this outcome in the context of the entire CSAPR program. Due to this failure, the OTC's Proposed Section 184(c) Recommendation could require Pennsylvania to over-control emissions related to downwind contribution. This would be unfair to the sources involved and would also violate case law. Specifically, if the EPA were to require additional control measures on a small group of Pennsylvania's coal-fired EGUs without having modeled for all other contributing units in all of the contributing states, the EPA's action would contradict the July 2015 decision of the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) on interstate pollution transport in *EME Homer City Generation, L.P. v. Env'tl. Prot. Agency, et al.*, 795 F.3d 118 (D.C. Cir. 2015). (See Attachment No. 1). In that case, the D. C. Circuit stated the following:

In the prior round of litigation, petitioners disputed EPA's method of calculating emissions budgets for upwind States, and this Court found three main problems with EPA's approach. First, the Rule could lead to over-control of upwind States – that is, emissions reductions beyond those necessary to achieve attainment in downwind States. Second, the Rule could require States to reduce even insignificant contributions to pollution in downwind States. Third, the Rule did not purport to try to assess each upwind State's relative contribution to nonattainment in downwind States. We therefore concluded that EPA's methodology violated the Clean Air Act, and vacated the Transport Rule [CSAPR].

³ States required to reduce downwind contributions of NO_x, SO₂ or both by the CSAPR are Alabama, Arkansas, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia and Wisconsin.

Most important for present purposes is the first issue, over-control. The Supreme Court “agree[d] with the Court of Appeals to this extent”: The Transport Rule violates the statute [CAA] when it “requires an upwind State to reduce emissions by more than the amount necessary to achieve attainment in *every* downwind State to which it is linked.” *Id.*⁴

The DEP believes the basis for the Court’s decision on CSAPR in *EME Homer City Generation, L.P.*, should apply to the OTC’s Proposed Section 184(c) Recommendation process regarding transported emissions and downwind impacts. The OTC fails to consider emissions transported from other upwind states and their impacts on downwind nonattainment areas. Moreover, the OTC does not demonstrate that the NO_x emissions from the group of Pennsylvania coal-fired EGUs identified in the Proposal contributes beyond Pennsylvania’s fair share of the emissions or result in significant contribution to downwind nonattainment areas. The Proposed Section 184(c) Recommendation could require reductions beyond Pennsylvania’s share of downwind contribution. As such, the Proposed Section 184(c) Recommendation would violate the CAA in the same ways that the Supreme Court and D.C. Circuit Court of Appeals determined CSAPR did.

The DEP’s supporting arguments and information for its opposition to the OTC’s Proposed Section 184(c) Recommendation include:

- The OTC has not properly addressed the modeling and technical information provided in testimony, and by written comment, from its first comment period. Hence, the OTC has largely ignored technical information and modeling that did not support the need for additional control measures. The OTC has not provided a comment and response document to substantiate its Proposed Section 184(c) Recommendation, from which the public may evaluate the OTC’s analyses of, and responses to, the testimony and written comments it received.
- The OTC did not address modeling provided by commentators showing future compliance by the downwind states with the ozone standards. Additionally, the OTC has not provided its own modeling for public review.
- The OTC has not provided any independent multistate modeling that includes all CSAPR states. For the Proposal to be meaningful, the results of multistate modeling would need to show that “additional” NO_x emission reductions from Pennsylvania sources are necessary to address Pennsylvania’s portion of the multistate downwind contribution to the asserted ozone NAAQS exceedances. Maryland’s Section 184(c) petition does not provide multistate CSAPR-wide modeling to support the reductions sought.
- The EPA has already determined that Pennsylvania has adequately reduced its portion of downwind contribution through cost-effective reductions made under the Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (CSAPR Update Rule)⁵ for these EGUs at issue. Furthermore, the EPA denied Section 126 petitions from four OTC states for the same reductions requested from Pennsylvania units under the OTC’s Proposal. The denials of the Section 126 petitions (Attachments 2 through 4) are:

⁴ *EME Homer City Generation, L.P.*, above, 795 F.3d at 126.

⁵ See 81 FR 74504 (October 26, 2016).

- EPA final action on Maryland's and Delaware's Section 126 petitions. (83 FR 50444; October 5, 2018)
- EPA final action on Connecticut's Section 126 petition. (83 FR 16064; April 13, 2018)
- EPA final action on New York's Section 126 petition. (84 FR 56058; October 23, 2019)
- The fleetwide average NO_x emissions for the units identified in the OTC Proposed Section 184(c) Recommendation, on each of Maryland's ozone exceedance days, are lower than the OTC's proposed daily requirements. The proposed daily rates are based upon New Jersey, Maryland or Delaware regulations. Transported pollutants do not distinguish between the fleet average daily emission rates or the average of the daily individual unit rates when the resulting overall daily average emissions are the same. The OTC's daily unit rates, as proposed, achieve and require no actual daily NO_x reductions. See the Daily NO_x Comparisons provided in Attachment 5.
- The cost impact of the OTC's Proposed Section 184(c) Recommendation may actually increase emissions. This is due to a potential to affect the dispatch order of generators in the electric market. The OTC did not evaluate or determine whether the Proposal would result in leakage of generation from cleaner Pennsylvania coal-fired EGUs to higher NO_x-emitting units. A list of the higher emitting units in Ohio, West Virginia, and the member OTC states is provided in Attachment 6.
- Pennsylvania's fleet average emission rates are below the individual unit daily rates proposed by the OTC. The OTC did not evaluate the impact of its proposed rates on the CSAPR Update Rule. Given these two circumstances, the daily rates, if imposed on Pennsylvania coal-fired EGUs, could result in emission increases within the Ozone Transport Region (OTR).⁶ The OTC failed to properly model and analyze potential impacts of its proposed recommendations across all CSAPR units. Shifting generation and cost impacts could result in worse air quality throughout the entire OTR. The DEP argues that the OTC's failure to model and analyze effects of its Proposal for all units in the CSAPR program is a fatal flaw of the Proposal. This makes the Proposal, if submitted to EPA as a recommendation under Section 184(c), non-approvable. In support of the DEP's position suggesting that the OTC does not know whether generation will shift to higher emitting units elsewhere in the CSAPR-covered states if its Proposed Section 184(c) Recommendation is implemented, the DEP attaches to this letter a list of high-emitting units in OTR states that would potentially benefit from OTC's Proposal. The high-emitting units are listed in Attachment 6.
- The OTC's Proposal fails to appropriately apportion contribution responsibility. Ozone transport issues in the OTR are not limited to a single state. Seeking daily NO_x emission reductions from a small group of units in Western Pennsylvania is not appropriate in many instances. (See Attachments 7-1 to 7-6: Back Trajectories for NY and NJ.) As an example, July 2, 2018, was one of the worst ozone days in the 2018 ozone season and monitors in New York and New Jersey displayed exceedances of the ozone standard. However, the back

⁶ The OTR was also established by operation of law under Section 184 of the CAA. The member states are Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and the Consolidated Metropolitan Statistical Area that includes the District of Columbia.

trajectories showed no linkage to Pennsylvania's coal-fired EGUs and clearly demonstrated that no additional control measures were needed from Pennsylvania's coal-fired EGUs on that day. Pennsylvania's NO_x emissions did not contribute to New York's or New Jersey's poor air quality. In this instance, the OTC's proposed daily limits would unquestionably represent over-control.

- In 2018, Pennsylvania emitted roughly 4500 tons of NO_x below its CSAPR Update Rule budget limit. Therefore, Pennsylvania has already reduced its NO_x emissions beyond those the EPA has determined to be necessary to eliminate its portion of contribution to the downwind states needed for 2015 NAAQS compliance by the downwind states by 2023. Pennsylvania's reductions have already been realized under the CSAPR program. Unless the OTC remodels the entire CSAPR program, considering all of Pennsylvania's NO_x reductions as of 2018, there is no basis for the OTC to request that the EPA impose additional control measures on a small group of Pennsylvania coal-fired EGUs. Imposing additional requirements would likely require Pennsylvania to make NO_x emission reductions beyond its portion of NO_x emission reductions required for OTC member states to attain the 2015 ozone NAAQS. As noted above, the D.C. Circuit has ruled that EPA cannot require upwind states to reduce emissions beyond their portion of the contribution needed for a linked downwind state to reach attainment. (See Attachment No. 1).
- Lastly, the CAA requires States to re-evaluate Reasonably Available Control Technology (RACT) for major sources of NO_x under the 2015 ozone standard by August 2020. DEP has commenced its evaluation of RACT for the 2015 standard and will determine RACT emission limits for major source categories of NO_x in Pennsylvania based on the technological and economic feasibility of additional NO_x reductions. With this, daily emission limits are under review. The NO_x emission limits for coal-fired EGUs will be properly based upon evaluation of the technological capabilities of the units and cost-effective reductions that can be achieved with the units' controls. In addition, the RACT requirements promulgated for major sources of NO_x under the 2015 ozone standard will be implemented in Pennsylvania long before the implementation of the requested measures in the OTC even if EPA concurs with the petition.

Nonattainment transport issues need to be addressed in the context of multistate contributors. The DEP cannot support the OTC's use of the 184(c) petition process to force NO_x emission reductions on a small group of units in a single state beyond that state's portion of its downwind contribution. The ozone transport issue is larger and more complex than the OTC is treating it in the OTC's Proposed Section 184(c) Recommendation. Rather than have the OTC submit its Proposal to the EPA, the DEP encourages multistate collaboration among OTR member states along with the EPA to properly evaluate the ozone transport issue in the Northeast Corridor of the United States.

Conclusion

The DEP believes the Proposed Section 184(c) Recommendation is contrary to significant judicial decisions on ozone transport and downwind contributions and fails to properly evaluate the impacts of the proposed control requirements. In addition, the OTC has not appropriately taken into consideration the public comments from its comment period held on Maryland's Section 184(c) petition to the OTC. That comment period ended on August 18, 2019. Furthermore, the OTC's Proposed Section 184(c) Recommendation is contrary to EPA's denial of four states'

November 22, 2019

Section 126 petitions and potentially undermines the existing CSAPR rules. Moreover, the Proposal could result in increased emissions and diminished air quality within the OTR.

For all the reasons above, the DEP does not support the OTC's Proposal to recommend additional NO_x control measures from Pennsylvania's coal-fired EGUs. The DEP, as part of these written comments, includes its August 18, 2018 testimony and corresponding attachments. The DEP trusts that OTC will consider, and reconsider, Pennsylvania's valid concerns and new information provided in this comment letter.

The DEP looks forward to continuing to participate and work with OTC member states and the EPA on the shared goal to reduce air pollution in the Northeast. Unfortunately, the Proposed Section 184(c) Recommendation would not improve air quality. For all of the reasons set forth in the DEP's August 16, 2019 testimony, and in this letter, the DEP does not support the Proposed Section 184(c) Recommendation. The DEP recommends that the OTC not submit the Proposal to the EPA.

Should you have questions or need additional information, please contact Krishnan Ramamurthy, Deputy Secretary, Office of Waste, Air, Radiation and Remediation by email at kramamurth@pa.gov or by telephone at 717.782.2725.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick McDonnell", written in a cursive style.

Patrick McDonnell
Secretary