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December 14, 2020

U.S. Environmental Protection Agency
EPA Docket Center
Docket ID No: EPA-HQ-OAR-2020-0272

Submitted via the Federal eRulemaking Portal: https:// www.regulations.gov/

Re: Comments on EPA's Proposed Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS; 85 Fed. Reg. 68,964 (Oct. 30, 2020)

Dear Sir/Madam:

On behalf of the Commonwealth of Kentucky and the Energy and Environment Cabinet, the Division for Air Quality (Division) respectfully submits the following comments in response to EPA's proposed action in the October 30, 2020 Federal Register, soliciting comments on the proposed Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS. After careful review and consideration, the Division finds that the rulemaking is based upon incomplete and inaccurate air quality modeling. Additionally, the Division finds that it is more appropriate to base the proposed rule on measured air quality data and the implementation of local controls to reduce NO_x emissions first before imposing reductions to emissions from other states.

The Division appreciates the opportunity to comment on this proposed rule and requests EPA's consideration of our comments. If you have any questions regarding the comments provided, please contact me at (502) 782-6597 or melissa.duff@ky.gov.

Sincerely,

X Melissa Duff

Melissa Duff, Director
Kentucky Division for Air Quality
Signed by: Melissa Duff

Kentucky Division for Air Quality Comments Regarding EPA's Proposed Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (85 Fed. Reg. 68,964, Oct. 30, 2020); Docket ID No: EPA-HQ-OAR-2020-0272

The Kentucky Division for Air Quality (Division) respectfully submits the following comments on EPA's proposed Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS.

Comments requested in the proposed rule

Comment C-2: The Division is supportive of the use of "3x3" and "no water" approaches for this rulemaking and appreciates EPA's willingness to address previous comments regarding the influence of water on receptors. However, the three downwind monitors that Kentucky is linked to are all located on the coast. Given that there are other monitors, closer to Kentucky, that were not determined to be nonattainment or maintenance monitors in this proposed rule, and are not linked to Kentucky, the Division questions whether or not the "no water" approach was appropriately applied in determining which downwind monitors would have trouble attaining or maintaining the 2008 ozone NAAQS.

Comment C-4: The Division does not support the inclusion of generation shifting into state emission budgets. The decision by an EGU to shift from one particular fuel source to another is generally market-driven and should not have a role in ozone season budgets.

Comment C-21: The Division is generally supportive of the implementation of ozone season budgets for each year in order to incentivize facilities to continue to run the appropriate control equipment necessary to meet the emission reductions for the 2008 Ozone NAAQS. However, the Division is extremely concerned regarding additional measures that may be proposed in future rulemakings to address the good neighbor provisions of the 2015 Ozone NAAQS beyond those proposed in this rule and the resulting impact those future rulemakings may have to its citizens.

Comment C-22: The Division does not support the replacement of 2019 data in the proposed rule with 2020 data in the final rule. States and the regulated entities need regulatory certainty, which is accomplished by finalizing the proposed rule with the 2019 data. If a change is necessary between the proposed rule and the final rule, EPA should revise the proposed rule and follow the public notice and comment process to allow for public participation.[1]

Comment C-23: The Division has generally been supportive of previous NO_x emission trading programs as cost-effective and flexible approaches for addressing states' good neighbor provisions of the Clean Air Act, and supports the use of the proposed trading program (CSAPR NO_x Ozone Season Group 3 Trading Program) to implement the emissions reductions.[2]

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[1] *See* 42 U.S.C. § 7607(d)(1)(B), (d)(3)(A) (requiring EPA to provide, with the notice of proposed rulemaking, the factual data on which the proposed rule is based, specifically when promulgating or revising an implementation plan under 42 U.S.C. § 7410(c)).

[2] *See* Amended Final Brief of Commonwealth of Kentucky, Energy and Environment Cabinet as Amicus Curiae in Support of Affirmance of Respondents, State of New York v. EPA, 964 F.3d 1214 (D.C. Cir. 2020) (No. 19-1231); Corrected Final Brief of Commonwealth of Kentucky, Energy and Environment Cabinet as Amicus Curiae in

Kentucky Division for Air Quality Comments Regarding EPA's Proposed Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (85 Fed. Reg. 68,964, Oct. 30, 2020); Docket ID No: EPA-HQ-OAR-2020-0272

General Comments

I. EPA Used Outdated Inputs and Flawed Modeling

Use of 2016 as the base year for air quality modeling: EPA's selection of 2016 as the basis for inputs necessary for modeling to project 2023 and 2028 emissions and downwind contributions is outdated. The Division understands the extensive work required to develop an appropriate modeling platform. However, given the impact of the rule on both upwind states and downwind receptors, a more current and comprehensive set of inventories should have been used in the modeling. At minimum, the 2017 National Emissions Inventory (NEI) emissions inventory released in April 2020 would have been a reasonable replacement for 2016. The 2017 NEI is a triennial year in which state, local, and tribal agencies are required to report both large and small sources of air emissions, pursuant to the Air Emissions Reporting Rule (AERR).

No projection of 2021 Ozone Design Values: Using the 2016 modeling platform, EPA chose to project emissions and ozone design values for 2023 and 2028. However, 2021 is the next attainment year for 2008 Ozone NAAQS nonattainment areas. It would have been more appropriate to model for 2021 and 2024, given that those are the attainment years for areas designated nonattainment for the 2008 NAAQS.

Use of Linear Interpolation to Determine 2021 Ozone Design Values: The development of ozone in the atmosphere is a complex chemical process, dependent on sunlight and precursor emissions of NO_x and volatile organic compounds (VOC). Photochemical modeling for future ozone concentrations is also complicated. In the proposed rule, EPA chose to apply linear interpolation between the 2016 and 2023 values to determine 2021 average and maximum ozone design values. The Division does not agree with this method for determining the 2021 values. EPA should have modeled for 2021 and 2024 values if those are the next attainment dates.

Inaccurate List of Retired Sources for Kentucky: EPA's emissions inventory used in its modeling accounts for most of the Kentucky units that have retired through 2020. However, additional units are scheduled for retirement in 2021. With these additional retirements, Kentucky's contributions to the downwind monitors would likely be below the 1% threshold and no additional reductions would be necessary. This was demonstrated in the 2008 Ozone CSAPR Update SIP revision that EPA approved in June 2018.

II. Downwind States Bear Primary Responsibility to Control Local Sources

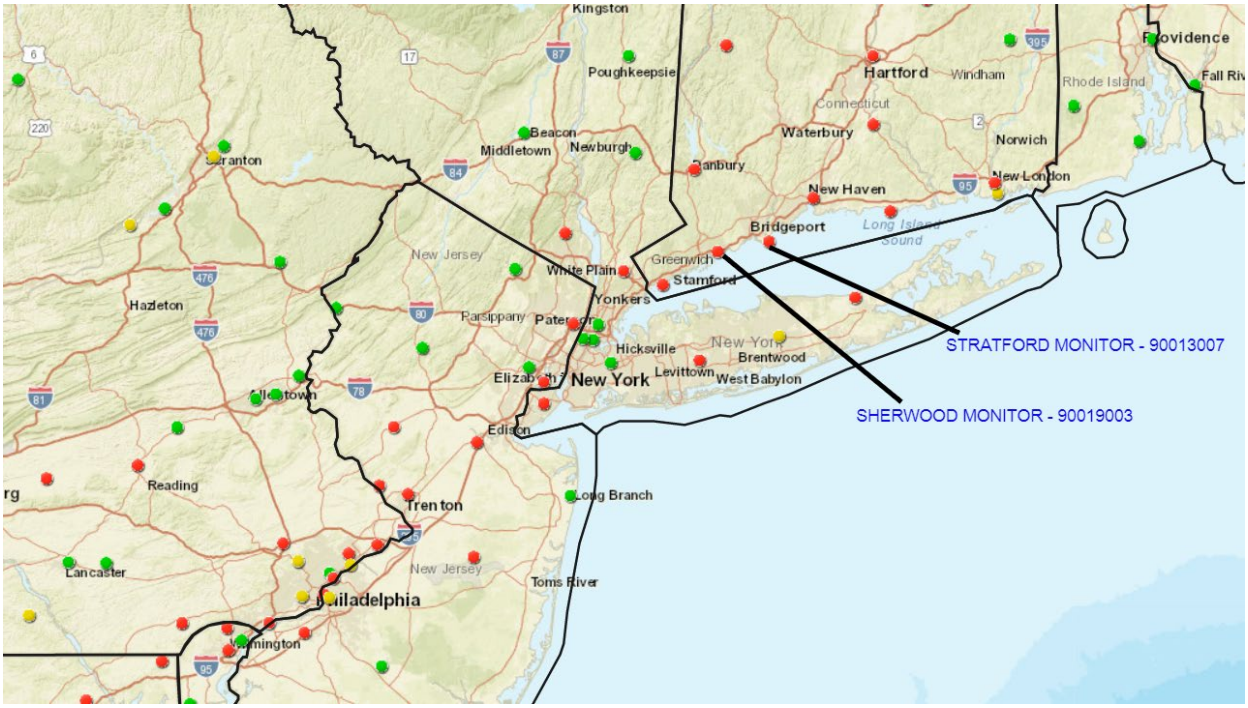
Influence of Mobile Source NO_x Emissions on Downwind Receptors: As noted in Kentucky's 2015 Ozone Infrastructure SIP, the Westport and Stratford monitors are part of the New York-Northern New Jersey-Long Island, NY-NJ-CT Nonattainment Area (New York Metro).

Support of Affirmance of Respondents, State of New York v. EPA, 781 Fed. App'x. 4 (D.C. Cir. 2019) (No. 19-1019).

National Emissions Inventory data for 2014 shows that the on-road source sector contributed 42.3% of the total NO_x emissions in the New York-Northern New Jersey-Long Island, NY-NJ-CT Nonattainment Area, compared to 11% from the point sector. Additionally, both monitors are located along Interstate 95 (I-95); the Westport monitor is 0.31 miles south of I-95 and the Stratford monitor is 2.8 miles southeast of I-95. Although this information was included in the 2015 Ozone Infrastructure SIP, it is still applicable to the 2008 Ozone NAAQS.

Figure 1 shows the locations of the Westport and Stratford monitors along with other monitors in the area. Monitors in close proximity to I-95are red, indicating that they are violating the 2015 ozone standard, and monitors that are further away from I-95 are green, indicating that they are attaining the standard. It is evident that the heavy traffic on I-95 significantly impacts the ozone measurements at monitors that are located along the corridor.

Figure 1: Violating Monitors along I-95 Corridor[3]



EPA should address mobile source NO_x emissions as it relates to ozone nonattainment and interference with maintenance at monitors.

Influence of Local NO_x Emissions on Downwind Receptors: High electric demand days (HEDD) occur on the hottest days in summer due to the increased demand of electricity, primarily from air conditioning. Additional, local peaking units operate in order to meet the demand, which results in the increase in NO_x emissions. HEDD coincide with days that have the

[3] EPA Ozone Mapping Tool – Official Design Values

highest monitored ozone levels. The New York Department of Environmental Conservation (NYDEC) found that peaking units used on HEDD have been identified as a significant contributor of NO_x emissions, especially those units that were installed prior to 1987. NYDEC performed an emissions analysis on peaking units and found that they can contribute 4.8 parts per billion (ppb) of ozone on high ozone days.[4] The reduction of NO_x emissions from these units would have a significant impact on ozone levels in this region.

The impact of emissions from local sources on monitors in the area that are not attaining the standard is significant. Therefore, the implementation of local controls within the New York Metro area would have the greatest impact on the violating monitors. Notably, under the Clean Air Act, each state has the "primary responsibility" to ensure the air quality within their own state before looking to other states' good neighbor obligations.[5] Since 2008, Kentucky has decreased NO_x emissions by 126,195 tons. Despite this significant emissions decrease, the Westport and Stratford monitor ozone design values have not improved. The Westport monitor increased from 0.080 ppm to 0.083 ppm between the 2008-2010 and 2014-2016 design value periods. The Stratford monitor increased from 0.076 ppm to 0.081 ppm during the same time.

The Division expects emissions to continue to decline with the implementation of planned shutdowns and conversions to natural gas at its EGUs. Based on the measured ozone values at the Connecticut monitors and the significant NO_x reductions already made by Kentucky EGUs, the Division does not agree with the modeled results indicating a linkage to the three Connecticut monitors for the 2021 attainment year or any following year.

Additional Reductions Unnecessary for Kentucky EGUs

The Division disagrees with EPA's determination that additional NO_x reductions at Kentucky emissions sources are necessary in the Revised CSAPR Update. The amount of NO_x reductions proposed for Kentucky sources constitute overcontrol by EPA in light of the small contribution amount to the three Connecticut downwind monitors. Given that ozone is a regional pollution issue, and the majority of the contribution to the three monitors are from states much closer than Kentucky, a small reduction by nearby regional sources would prove to be a much more meaningful and long term reduction in contribution to the monitors that then reductions from Kentucky sources.

[4] "Background, High Electric Demand Day (HEDD) Initiative," New York Department of Environmental Conservation. http://midwestozonegroup.com/files/New_York_Peakers.pptx
[5] 42 U.S.C. § 7407(a).

EPA's IPM Model Fails to Consider CSAPR Group 2 State Budgets

The revised IPM v6 model, used in this rulemaking, does not account for existing CSAPR Update Group 2 NO_x budgets. Based on EPA's modeling, two of the largest contributing states will exceed their emissions budgets. This risks overcontrol and will subject upwind states, such as Kentucky, to controls more stringent than necessary.

EPA's determination that its approval of Kentucky's 2008 Ozone Transport SIP Revision was in error

EPA's proposed action to disapprove Kentucky's 2008 Ozone Transport SIP Revision, originally approved by EPA in June 2018, is in error. The Division also disagrees with EPA's characterization of Kentucky's 2008 Ozone CSAPR Update SIP revision. Specifically, EPA states:

> "Therefore, in light of the remand of Kentucky's CSAPR Update FIP in Wisconsin and vacatur of the CSAPR Close-Out in New York, EPA is proposing to determine in this action that its approval of Kentucky's SIP as fully resolving the state's 2008 ozone NAAQS good neighbor obligations was in error." (85 FR 68978)

The *Wisconsin* and *New York* decisions issued by the D.C. Circuit do not specifically state that Kentucky's approved 2008 Ozone CSAPR Update SIP revision or its CSAPR Update FIP is remanded or vacated.[6,7] Kentucky provided a SIP revision using the EPA air quality modeling for 2023, as EPA requested, and determined that all linked downwind monitors would attain the standard by 2023. In its approval of the SIP revision, EPA determined that the CSAPR Update FIP was a full remedy for Kentucky's obligations under the "good neighbor" provisions of the 2008 Ozone NAAQS and no other reductions were required by Kentucky.

[6] *Wisconsin v. EPA*, 938 F.3d 303 (D.C. Cir. 2019)
[7] *New York v. EPA*, 964 F.3d 1214 (D.C. Cir. 2020)