![Connecticut Department of Energy & Environmental Protection logo]

Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127   www.ct.gov/deep   Affirmative Action/Equal Opportunity Employer

March 29, 2018

Ms. Melissa Duff
Assistant Director
Kentucky Energy and Environment Cabinet
Division for Air Quality
300 Sower Boulevard
Frankfort, KY, 40601

Via email to Lauren.Hedge@ky.gov

Subject: Comments on Kentucky's Proposed State Implementation Plan Revision regarding the 2008 Ozone Standard Section CAA 110(a)(2)(D)(i)(I)

Dear Ms. Duff:

The Connecticut Department of Energy and Environmental Protection (CT DEEP) appreciates the opportunity to comment on Kentucky's proposed Good Neighbor State Implementation Plan (SIP) for the 2008 ozone national ambient air quality standard (NAAQS). Kentucky's efforts to date to reduce emissions is a critical step towards meeting Kentucky's obligations. However, CT DEEP disagrees that the proposed SIP is a complete remedy and urges Kentucky to consider additional emission reductions to fully satisfy its obligations under Clean Air Act (CAA) section 110(a)(2)(D)(i)(I).

Kentucky relies on EPA's CSAPR Update modeling for 2017 and 2023, as well as modeling conducted by Alpine Geophysics for 2023, to conclude that it is in full compliance with the CAA Good Neighbor requirements for the 2008 NAAQS. Both CT DEEP and the Ozone Transport Commission have previously expressed strong concerns[1] that EPA's modeling platform, which was also used by Alpine Geophysics,[2] produces overly optimistic projections of future year ozone levels. As shown in Table 1 (attached), actual measured 2017 ozone design values are considerably higher than modeled projections by 5 to 10 ppb at all Connecticut monitoring sites, confirming this concern. Table 1 also shows that ozone contributions from Kentucky sources exceed the one percent significance threshold at two violating Connecticut monitors after scaling contributions relative to the 2017 measured air quality levels. Kentucky's proposed SIP does not address this critical under prediction by the model of current measured ozone levels, which undermines Kentucky's conclusion that it has fully met its Good Neighbor obligations to Connecticut.

Kentucky's proposed SIP also relies on modeling projections that indicate all areas outside California will achieve attainment with the 2008 NAAQS by 2023. We note that some Connecticut monitors are projected to only barely comply by this late date (see Table 7-1 in Appendix B of the proposed SIP). Notwithstanding Connecticut's concerns about model under prediction of future year ozone levels, Kentucky's reliance on the 2023 modeling should be accompanied by enforceable regulations that ensure the lower 2023 emissions are achieved. For example, emissions from electric generating units (EGUs) are assumed in the modeling to decrease between 2017 and 2023, both annually and seasonally. Kentucky's

---

[1] https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0500-0342,
https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0500-0025

[2] Although Kentucky's SIP narrative briefly mentions that adjustments were made to emission inventories, no details are provided. The Alpine Geophysics document included as Appendix B to the TSD indicates in several places that the modeling they conducted did not make any adjustments to EPA's emission inventories. The associated modeling results are identical to those produced by EPA's modeling. Therefore, the Alpine Geophysics modeling also likely under predicts future year ozone levels and does not provide any additional useful information beyond that provided previously by EPA.

2017 actual ozone season emissions (i.e., 20,023 tons) were less than EPA CSAPR Update budget level for the state (21,115 tons[3]). The 2023 modeling assumes ozone season EGU emissions will be even lower (16,954 tons). The projected level of 2023 emissions must be made federally enforceable, especially given the narrow margin by which the EPA/Alpine modeling projects Connecticut monitors will reach compliance in 2023.

Connecticut also challenges the arbitrary selection of using a 2023 timeline for determining Good Neighbor compliance with the 2008 ozone NAAQS. Connecticut was originally designated marginal with compliance expected by the end of the 2014 ozone season. Connecticut's nonattainment areas were last reclassified to moderate, and are currently faced with another reclassification to serious with an attainment deadline of 2020. Connecticut has not met attainment due to overwhelming transport from upwind areas including Kentucky. The arbitrary selection of 2023 only perpetuates the unjust economic and health burdens on Connecticut's citizens suffer due to the failure of Kentucky and other upwind states to fully meet their Good Neighbor obligations in a timely manner.

Connecticut's concerns regarding emissions from Kentucky's sources are buttressed by the recent CAA section 126 petition submitted to the EPA by New York.[4] New York's petition requests EPA to take action regarding stationary sources in nine upwind states, including Kentucky, that continue to interfere with attainment in the NY-NJ-CT nonattainment area for the 2008 ozone standard.

We encourage Kentucky to take proactive steps to adopt additional measures to fully meet its Good Neighbor obligations for the 2008 ozone NAAQS. The Ozone Transport Commission (OTC) recently adopted a statement identifying minimum control strategies that should be in all good neighbor SIPs.[5] Kentucky should ensure all these strategies are included in its SIP, as well as the other points noted in the OTC statement. Additionally, Connecticut believes targeting emissions reductions strategies on high emitting days can be especially effective for achieving maximum air quality benefit and urges Kentucky to adopt such targeted strategies. Together these focused strategies can target the emissions that most effect downwind air quality exceedances.

Connecticut appreciates Kentucky's efforts to date and urges Kentucky to take the final steps to fulfill the Good Neighbor obligations. We look forward to a cleaner future together.

Sincerely,

Richard A. Pirolli, Director
Air Planning and Standards Division

RAP:KK:jad

---

[3] See: https://www.epa.gov/sites/production/files/2016-11/documents/budgets_ozoneseasonnox.pdf.
[4] See: http://www.dec.ny.gov/press/112981.html.
[5] https://otcair.org/upload/Documents/Formal%20Actions/GoodNeighSIPResolu_Final.pdf

Table 1. EPA Modeled 2017 Air Quality and KY Contributions Scaled to Measured Values

Monitor	State	County	2017 Modeled Average DV (ppb)	KY Contribution to Modeled Value (%)	Monitored 2017 DV (ppb)	Scaled KY Impact (ppb)
Greenwich	Connecticut	Fairfield	74.1	0.5%	79	0.43
Danbury	Connecticut	Fairfield	71.6	1.0%	77	0.80
Stratford	Connecticut	Fairfield	75.5	0.6%	83	0.48
Westport	Connecticut	Fairfield	76.5	0.6%	83	0.49
East Hartford	Connecticut	Hartford	65.1	1.5%	72	1.11
Cornwall	Connecticut	Litchfield	61.4	0.8%	72	0.562866
Middletown	Connecticut	Middlesex	69.5	1.3%	79	1.00
New Haven	Connecticut	New Haven	66.8	0.6%	77	0.43
Madison	Connecticut	New Haven	76.2	0.6%	82	0.47
Groton	Connecticut	New London	70.8	0.4%	76	0.30
Stafford	Connecticut	Tolland	65.7	0.8%	71	0.56