



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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October 21, 2005

Gina McCarthy
Commissioner

U.S. Environmental Protection Agency
Air Docket
Mail Code 6102T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Attention: Docket #OAR 2004-0076

Re: **Connecticut Department of Environmental Protection Comments on Rulemaking on Section 126 Petition from North Carolina To Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program; Proposed Rule, 70 Fed. Reg. 49708, (August 24, 2005)**

Dear Docket Administrator:

The Connecticut Department of Environmental Protection (CTDEP) appreciates the opportunity to comment on the U.S. Environmental Protection Agency's (EPA's) above referenced proposed Clean Air Interstate Rule Federal Implementation Plan (CAIR FIP). Connecticut is uniquely situated downwind from the major northeast metropolis and is making significant strides in controlling air pollution within our borders. As you know, Connecticut cannot ensure our citizens breathe clean air without significant assistance from EPA. Unfortunately, the findings and proposed actions associated with this rulemaking are inadequate for us to protect public health and the environment. Our specific concerns with the proposal are outlined in detail below.

In this rulemaking, EPA concludes that the proposed CAIR FIP will adequately address the Section 110(a)(2)(D) provisions of the Clean Air Act (CAA) prohibiting emissions in one state from having a significant impact on nonattainment in a downwind state. EPA proposes in the same rulemaking to deny a petition by North Carolina under Section 126 of the CAA. These actions are integrally connected since petitions under Section 126 are a means for downwind states to enforce the provisions of CAA Section 110(a)(2)(D). EPA also denies future Section 126 petitions that might be submitted by the 28 CAIR states and the District of Columbia. Citizens of Connecticut are subject to unhealthy air quality and the State is subjected to non-attainment status as a result of transported emissions from upwind states. Therefore we must rely on EPA to ensure that the protections of the CAA are realized. This proposal fails to demonstrate that the transported emissions from upwind states will be adequately mitigated, that Connecticut will be able to demonstrate future attainment or that Connecticut will be able to petition to obtain the protections available under the CAA to enforce the interstate transport provisions as they apply to 8-hour ozone.

EPA's reasoning and legal interpretations in support of the proposed CAIR FIP and the denial of Section 126 petitions are invalid. EPA's own modeling in support of CAIR suggests that many states will continue to contribute significantly to 8-hour ozone nonattainment in Connecticut after CAIR is implemented. The flaws in EPA's proposal are described below along with two practical recommendations to improve the applicability provisions and allocation schedule of the proposed CAIR FIP.

I. EPA's Reasoning is Flawed with Respect to Proposed Determinations under CAA Section 110(a)(2)(D) and Implied Denial of Future CAA Section 126 Petitions

Section 110(a)(2)(D) of the CAA requires that each state implementation plan (SIP) contain adequate provisions to prohibit any emissions activity within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment in any other state and to ensure compliance with the applicable requirements of Section 126 of the CAA (including interstate pollution abatement). In the proposed CAIR FIP, EPA asserts that the transport of ozone and its precursors will be sufficiently addressed by CAIR such that states will be able to eliminate any remaining ozone nonattainment through local emission reductions. EPA's own modeling and similar modeling results produced by our sister states contradict this assertion. Such modeling shows that emissions from numerous upwind states contribute significantly to nonattainment ozone levels in Connecticut and other Northeast states. Since CAIR barely reduces ozone levels in Connecticut (see Attachment A to this letter), a FIP based on CAIR fails to meet EPA's CAA Section 110(a)(2)(D) obligations.

In light of these facts, EPA's proposal to deny all future petitions under Section 126 of the CAA to reduce interstate transport of air pollution is both unacceptable and unsustainable. EPA has recognized CAA Section 126 petitions as a mechanism to address interstate transport.¹ However, EPA's proposed CAIR FIP attempts to illegally negate the ability for states to petition as provided in the CAA.² The predetermination of actions neither formed nor filed constitutes the elimination of this statutory tool to ensure clean air and protect downwind states by administrative fiat. This seems in conflict with the intent of and is unlawful under the CAA. EPA's modeling in support of CAIR indicates that for Connecticut, attainment of the 8-hour ozone National Ambient Air Quality Standard (NAAQS) will be impossible to demonstrate -- even with CAIR. As further evidence of the need to address transported emissions, Connecticut's shoreline monitors continue to show that Connecticut's worst air quality days are caused by transport from upwind states. As set out in Attachment A to this letter, Connecticut's ability to achieve 8-hour ozone attainment is intrinsically linked with out-of-state transport -- and CAIR offers little relief. Although CTDEP hopes the CAIR implementation yields significant environmental benefit, given the high percentages identified in EPA's own modeling of transported ozone into Connecticut (also shown in Attachment A), it is likely Connecticut will

¹ "In adopting this approach for determining whether a future broad, multi-state SIP call is appropriate, we note that other CAA mechanisms, such as SIP disapproval authority and State petitions under section 126, are available to address more isolated instances of the interstate transport of pollutants." 70 FR 25179/1 (the Final CAIR Rule).

² "The EPA intends to apply these same principles in responding to future section 126 petitions from States in the CAIR region addressing CAIR pollutants. Thus, we would deny these petitions with respect to any State having an approved SIP meeting the CAIR emissions reductions requirements and with respect to States for which EPA has promulgated a CAIR FIP. In such a case there would be no underlying section 110(a)(2)(D) violation, and such a violation is the predicate for granting a section 126 petition." 70 FR 49717/1 (the CAIR FIP).

need significant additional upwind reductions as well as additional local controls to achieve our air quality obligations. As such, Connecticut may have no other option to achieve the needed results except to file future CAA Section 126 petitions in order to seek additional upwind reductions from one or more groups of stationary sources.

CTDEP disagrees with EPA's conclusions that an appropriate range of controls was considered in both determining the magnitude of emission reductions needed to eliminate significant contribution and in defining what constitutes highly cost effective. The magnitude of the CAIR ozone season NOx budget does not reduce upwind states' impact below the significance level in Connecticut, and EPA's own modeling indicates nonattainment will persist in Connecticut. Therefore the number of allowances allocated in the CAIR ozone season NOx budget to sources in states upwind from Connecticut must be lowered. In addition, the range of air pollution control technology that will be considered highly cost-effective in 2009 or 2015 may be very different than the range of such technology judged to meet such a standard in CAIR now. EPA should take this into consideration under the "significant contribution" standard of CAA Section 110.

Uncertainties such as future growth in the electric generating unit (EGU) sector and possible consequences of New Source Review reform provide additional reasons not to foreclose the CAA Section 126 option for states. Taken together, the modeled future ozone levels, CAIR's failure to address significant contribution adequately, EPA's failure to address the range of highly cost effective controls for EGUs and other sources, and significant uncertainties in the planning and projections provide ample reason for EPA to remove from the final CAIR FIP any language prejudging future CAA Section 126 petitions. Interstate transport cannot be judged before and apart from the attainment SIP process and doing so in this rulemaking is premature and short sighted.

As an unintended consequence of the proposed CAIR FIP, states experiencing significant contributions to nonattainment from interstate transport of air pollution may be left with no effective recourse to obtain the protections afforded by the Clean Air Act and assure our air quality problems are adequately addressed within the CAA time frames. Thus, the conundrum presented by the proposed rule. How can states like Connecticut meet the attainment deadlines? Connecticut is committed to implementing the viable air pollution control options however, to comply with the deadlines for attainment significant assistance is needed through reductions from out of state sources. Eliminating the legal tools necessary to persuade sources outside our state to reduce air pollution makes achieving attainment all the more difficult and is contrary to the intent of the CAA. Relying on lawsuits will only protract the time during which our citizens will be forced to breathe unhealthy air.

II. EPA's Denial of North Carolina's Petition Fails to Satisfy the Timing Requirements of CAA Section 126(c)

EPA's proposed CAIR FIP denies a petition submitted by North Carolina under CAA Section 126 in which North Carolina requests that EPA establish control requirements for EGUs in thirteen states based on findings that the EGUs significantly contribute to PM2.5 and/or 8-hour ozone NAAQS nonattainment and maintenance problems in North Carolina. EPA's denial of North Carolina's petition regarding 8-hour ozone is based on its technical analysis in support of

CAIR, which projects 8-hour ozone attainment for all of North Carolina by 2010.³ According to EPA, the promulgation of the CAIR FIP ensures CAIR's implementation and thereby satisfies North Carolina's concerns regarding interstate transport. However, the failure of CAIR and the CAIR FIP to satisfy the timing requirements of Section 126 of the CAA requires that EPA reverse its proposed denial of North Carolina's petition.

Section 126(c) of the CAA permits the continued operation of a source subject to a CAA Section 110(a)(2)(D) finding only if emissions limitations and other requirements are imposed to bring about compliance with Section 110(a)(2)(D) **"as expeditiously as practicable, but in no case later than three years after the date of such finding."** EPA indicates that the finding in question for North Carolina, if granted, would become effective no later than May 14, 2006.⁴ Thus, remedies to reduce emissions at the EGUs subject to EPA's finding would need to be fully implemented by May 14, 2009. However, the requirements of SIP revisions satisfying CAIR or the CAIR FIP will not be fully implemented until at least 2015 -- six years or more beyond the deadline.

EPA's explanation regarding the sufficiency of CAIR's timing under CAA Section 126, that initial action to reduce pollutants of concern occurs within three years, has no statutory basis. EPA indicates that the CAIR Phase I NO_x requirements "would commence within the 3-year maximum timeframe set out in Section 126(c)."⁵ However, the plain language of Section 126(c) clearly conflicts with EPA's interpretation that commencement of initial reductions alone is sufficient to address emissions from a source subject to a Section 110(a)(2)(d) finding. The language also does not support EPA's assertion that "section 126(c) on its face contemplates that control measures satisfying both section 126 and section 110(a)(2)(D) may stretch out beyond a three year period."⁶ This indicates EPA's disregard for the Congressional provisions and intent of the CAA in the CAIR FIP. The expeditiously as practicable standard was chosen by Congress to define the speed with which interstate transport issues must be addressed. In failing to meet this standard, EPA is denying Connecticut citizens timely clean air, which both EPA and CTDEP are committed to achieving.

III. Recommendations for the Proposed CAIR FIP's Applicability Provisions and Allocation Schedule

CTDEP appreciates the opportunity to comment on the CAIR FIP and appreciates that EPA has provided the available flexibilities for complying with the CAIR FIP. Nevertheless, it is hoped that EPA will seriously consider these comments in any final rule. CTDEP offers two recommendations to provide additional flexibility to the states regarding the proposed CAIR FIP's applicability provisions and allocation schedule to ensure a smooth transition to a CAIR trading program.

1. EPA proposes the abbreviated SIP option of the CAIR FIP to ease the administrative aspects of implementing CAIR. CTDEP recognizes the motivation behind this option and suggests a change to the proposed CAIR FIP that could further simplify state

³ 70 FR 49717/2.

⁴ 70 FR 49718/1.

⁵ 70 FR 49718/1.

⁶ 70 FR 49718/2.

implementation of CAIR: inclusion of ozone season NOx budgets in the final CAIR FIP for NOx SIP Call small/non-EGUs. Inclusion of NOx SIP Call small/non-EGUs in CTDEP's CAIR SIP is required in order to meet attainment goals and prevent backsliding. Inclusion of ozone season NOx budgets in the final CAIR FIP would address the difficulty that states with NOx SIP Call obligations and EPA will have in reconciling allowances for small and non-EGUs if the proposed CAIR FIP is finalized, and states are unable to submit abbreviated SIPs and/or EPA is unable to approve abbreviated SIPs in a timely manner.

2. CTDEP is also concerned about the allocation schedule in the proposed CAIR FIP. Based on language in the proposed CAIR FIP, it appears that a 5 to 6 year gap exists between the allowance vintage year and the years of data needed to calculate allocations under an updating allocation methodology. For example, allocations for 2013 would need to be submitted in October 2009. If a state wanted to use two previous years of operational data to calculate allocations, it would need to use 2007 and 2008 data for year 2013 allowance calculations. CTDEP is concerned about the use of data that are not representative of current operations, and requests that the final CAIR FIP allow the states to narrow this time gap between allowance year and data year(s). For example, CTDEP currently allocates its NOx SIP Call Program allowances based on data from the two previous control periods (i.e., 2005 allocations are based on 2003 and 2004 ozone season operational data).

CTDEP appreciates the opportunity to comment on the proposed CAIR FIP in furtherance of our mutual environmental goals. If you or members of your staff have any questions regarding this letter, please do not hesitate to contact Anne Gobin, Chief, Bureau of Air Management at 860-424-3026.

Yours truly,



Gina McCarthy
Commissioner

cc: Stephen Johnson, Administrator, EPA
Robert W. Varney, Regional Administrator (EPA New England)
Kimberly P. Massicotte, Assistant Attorney General (Connecticut Attorney General's Office)

ATTACHMENT A

EPA's CAIR modeling⁷ shows that emissions from numerous upwind states contribute significantly to nonattainment ozone levels in Connecticut and other Northeast states. Furthermore, emissions from Connecticut have been dramatically reduced in recent years, yet local controls won't solve the problem for a state that is located at the downwind end of the Northeast urban corridor. Highlighted here, from Connecticut's perspective, are two of the modeling methods EPA used to assess 1) the effects of CAIR emissions reductions on 8-hour ozone levels; and 2) the contribution to 8-hour ozone nonattainment due to transport from upwind states.

1. EPA Modeled 8-hour ozone with and without CAIR emission reductions

Table E-1 in Appendix E of EPA's above referenced modeling document is reproduced in part below. This table presents 8-hour ozone concentrations observed for the base period 1999-2003 and modeled for future years 2010 and 2015. The future years were modeled with existing CAA assumptions (i.e., 2010 base year and 2015 base year) and with CAIR emission reductions added to the CAA runs (i.e., 2010 CAIR and 2015 CAIR).

In New Haven County Connecticut, EPA's ozone modeling for 2010 shows CAIR's impact to be an improvement of only 0.3 ppb, reducing the 8-hr ozone design value from 91.6 ppb in the 2010 CAA base case to 91.3 ppb in 2010 with CAIR. In 2015, design values "improve" by only 0.7 ppb, from 89.8 ppb for the CAA base case to 89.1 ppb with CAIR. Obviously, CAIR provides minimal improvement to Connecticut's ozone problem.

Table E-1. 8-Hour Ozone Concentrations (ppb): Average 1999-2003, 2010 Base and CAIR, 2015 Base and CAIR; and the impact of CAIR on 8-hour ozone in 2010 and 2015.

CMSA/MSA	State	County	Average 1999-2003	2010 Base	2010 CAIR	Impact of CAIR in 2010	2015 Base	2015 CAIR	Impact of CAIR in 2015
Mobile, AL	AL	Baldwin Co	79.0	72.5	71.4	-1.1	71.3	67.4	-3.9
	AL	Clay Co	82.0	64.3	63.1	-1.2	61.0	59.2	-1.8
Montgomery, AL	AL	Elmore Co	78.3	64.3	63.5	-0.8	60.7	59.4	-1.3
Birmingham, AL	AL	Jefferson Co	86.7	70.7	70.2	-0.5	66.4	65.5	-0.9
Decatur, AL	AL	Lawrence Co	78.7	66.4	66.1	-0.3	63.7	62.3	-1.4
Huntsville, AL	AL	Madison Co	82.7	68.8	67.9	-0.9	64.3	62.7	-1.6
Mobile, AL	AL	Mobile Co	79.0	72.9	71.9	-1.0	71.9	68.0	-3.9
Montgomery, AL	AL	Montgomery Co	80.0	65.6	64.8	-0.8	62.0	60.8	-1.2
Decatur, AL	AL	Morgan Co	83.0	70.6	70.0	-0.6	67.7	66.7	-1.0
Birmingham, AL	AL	Shelby Co	91.7	73.8	73.2	-0.6	69.2	68.2	-1.0
	AL	Sumter Co	74.0	61.5	60.9	-0.6	59.5	58.2	-1.3
Tuscaloosa, AL	AL	Tuscaloosa Co	78.0	62.5	62.1	-0.4	59.3	58.3	-1.0
Memphis, TN	AR	Crittenden Co	92.7	81.5	80.8	-0.7	78.6	78.0	-0.6
	AR	Montgomery Co	68.0	60.7	58.5	-2.2	58.6	55.9	-2.7
Little Rock, AR	AR	Pulaski Co	84.7	76.3	71.8	-4.5	73.4	68.4	-5.0
New Haven-Meriden, CT	CT	Fairfield Co	98.7	92.6	92.2	-0.4	91.4	90.6	-0.8
Hartford, CT	CT	Hartford Co	89.3	80.4	80.1	-0.3	77.4	76.8	-0.6
	CT	Litchfield Co	83.0	74.0	73.9	-0.1	71.3	70.8	-0.5
Hartford, CT	CT	Middlesex Co	90.0	89.0	88.6	-0.4	88.1	88.1	0.0
New Haven-Meriden, CT	CT	New Haven Co	99.0	91.6	91.3	-0.3	89.8	89.1	-0.7
New London-Norwich, CT	CT	New London Co	90.7	83.6	83.4	-0.2	81.8	81.1	-0.7
Hartford, CT	CT	Tolland Co	93.0	83.0	82.7	-0.3	79.7	79.1	-0.6
Dover, DE	DE	Kent Co	91.3	79.1	78.7	-0.4	76.6	75.5	-1.1
Philadelphia, PA	DE	New Castle Co	95.3	85.0	84.7	-0.3	82.8	81.5	-1.3

⁷ Technical Support Document for the Clean Air Interstate Rule, Air Quality Modeling, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, March 2005.

2. EPA modeled contribution to 8-hour ozone from upwind states

Table VI-2 of EPA's Air Quality Modeling Technical Support Document (reproduced in part below) presents the percent contribution to 8-hr ozone nonattainment due to transport from upwind states using an approach referred to as "source apportionment" based on the CAMx model.

For Fairfield, Middlesex and New Haven Counties in Connecticut, modeling indicates that 2010 base case 8-hr ozone concentrations range from 90-92 ppb and the percent of ozone due to transport ranges from 80-95%. For example, in New Haven County, 2010 base case modeling predicts that 95%, or 86.5 ppb of the total 91 ppb in New Haven results from transport from upwind states. Accounting for the modest improvements due to CAIR in 2010 (0.3 ppb as described above), transported levels alone are projected to be in excess of the 85 ppb 8-hour NAAQS, making it impossible for Connecticut to demonstrate compliance with the standard.

Table VI-2. Percent contribution to 8-hour ozone nonattainment due to transport from upwind States.

2010 Base Nonattainment Counties	2010 Base 8-Hour Ozone (ppb)	Percent of 8-Hour Ozone due to Transport
Fairfield CT	92	80 %
Middlesex CT	90	93 %
New Haven CT	91	95 %
Washington DC	85	38 %
Newcastle DE	85	37 %
Fulton GA	86	24 %
Anne Arundel MD	88	45 %
Cecil MD	89	35 %
Harford MD	93	31 %
Kent MD	86	47 %
Macomb MI	85	43 %
Bergen NJ	86	38 %
Camden NJ	91	57 %
Gloucester NJ	91	62 %