

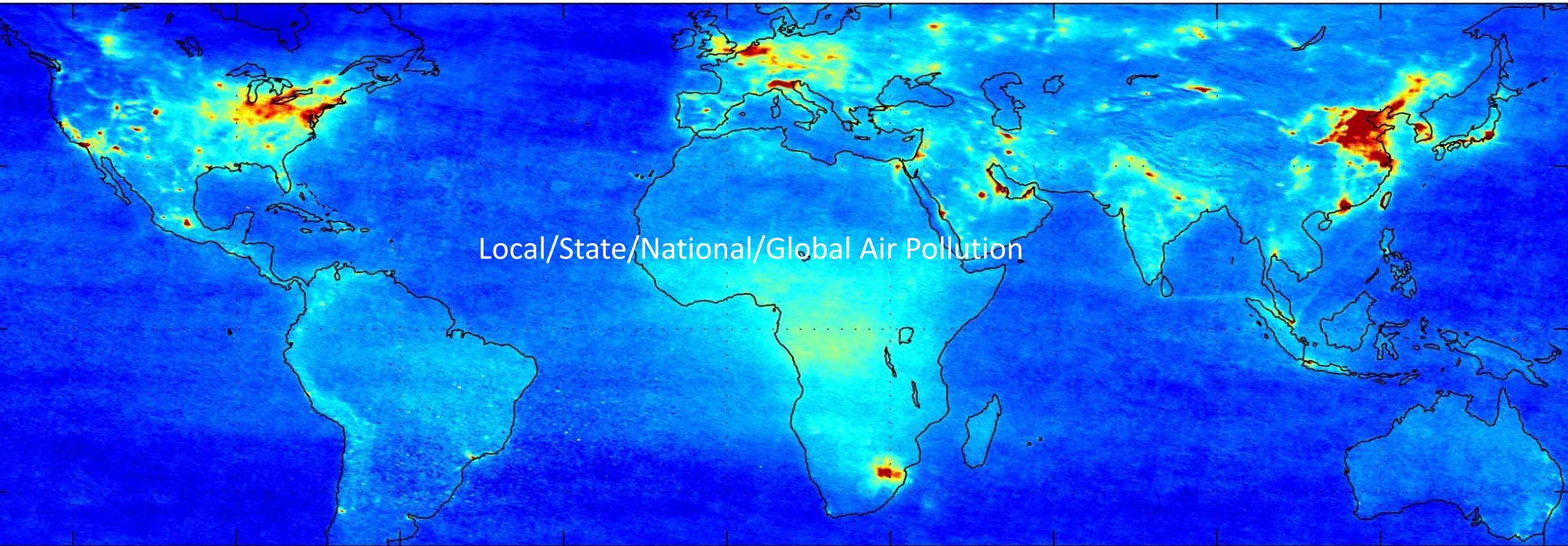


**“It’s a small
multi-pollutant
world after all.”**

The Clean Air Act: Multi-State, Multi-National Air Issues

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LAW 5390
FALL 2018



“The wind blows.” —Jed Anderson, The AL Law Group

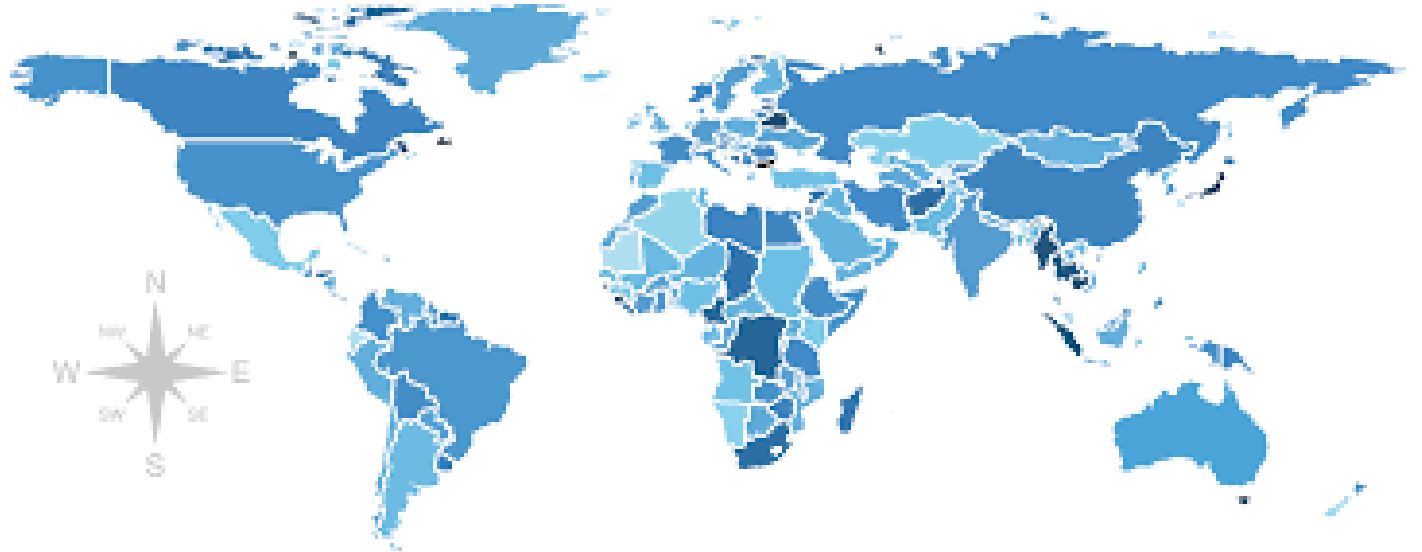


The 1970's-Based Clean Air Act Assumes that Air Pollution is Largely a Local Problem

---“**Each State** shall have the **primary responsibility for assuring air quality** within the entire geographic area comprising such state by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained . . .” **(Clean Air Act, Section 107(a))**

“Pollution is not respecting geo-political boundaries.”

“Scientific understanding of the global nature of air pollution has developed.”



“U.S. getting closer to background pollution levels—making transboundary pollution increasingly relevant.”

“The World is growing up.”

CAA Mechanisms for Dealing with Pollution Blowing in from other States and Countries

Multi-State

- Section 110A(2)(d) – “Good Neighbor” Provision
- Section 126 – Interstate Pollution Abatement
- Section 176A – Interstate Transport Region
- CAIR/CATR/CSAPR

Multi-National

- Section 179B
- Exceptional Events

“It’s your state”



“No, it’s your state”

Section 110 – “Good Neighbor”

What is the “Good Neighbor” Provision in the Clean Air Act?

- Section 110(a)(2)(D)(i) requires states to demonstrate to EPA that emissions from one state do not adversely affect another state. Specifically, the act prohibits any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will:
 - (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any National Ambient Air Quality Standard (NAAQS), or
 - (II) interfere with measures required to be included in the applicable implementation plan for any other state to prevent significant deterioration of air quality or to protect visibility.

- Section 110A2D requires upwind states to include control measures in their SIPs to address transport
- In the past, regional control programs like the NOx SIP Call and CAIR have allowed upwind states to easily comply with 110A2D
 - There is no such regional control program for the 75 ppb standard
- The 110 SIPs - for the 75 ppb standard - were due in early 2011
 - Legal challenges (by environmental groups) have already been initiated

“Good Neighbors” Provision



Section 126 – Interstate Pollution Abatement

Section 126 Petition – Pollution Abatement

- The classic upwind transport tool
- States can petition EPA to require controls on specific (or groups of) stationary sources that contribute to non-attainment in downwind areas
- Many OTC states have used Section 126 petitions in the past
- Presumes quick action by EPA if the Petition is successful



Section 176A – Ozone Transport Commission

Section 176A Petition

- Allows a state – or a group of states – to petition EPA to expand the current Ozone Transport Region
 - Would result in a 20 to 30 state Transport Region
 - Works from same kind of significant contribution concept as CSAPR
 - Would require super-regional planning, New Source Review (NSR), conformity and RACT (Reasonably Available Control Technology) across the region



CAA §176A

- **Interstate Transport Commissions**
 - EPA can establish a transport commission if the Agency creates a CAA §176A transport region.
 - EPA can address interstate ozone transport apart from convening a CAA §176A transport commission.
- **December 9, 2013 §176A Petition**
 - Filed by CT, DE, MD, ME, NH, NY, RI, and VT. PA joined a day later.
 - Petition requested EPA to add the states of Illinois, Indiana, Kentucky, Michigan, North Carolina, Ohio, Tennessee, Virginia, and West Virginia to the Ozone Transport Region (OTR).
 - These states are claimed to be “significantly contributing” to violations of the ozone standard, not just in the undersigned states, but throughout the OTR.
 - The OTR is defined in the CAA as the states of CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT and the CMSA that includes DC

176A Petition

- If included, the NE states would have a majority of voting members and could dictate control strategies for Midwestern states.
- The petition from NE states was based on old data going back to 2005
- U.S. EPA proposed to disapprove petition – comment period ran through May 15, 2017

176 A Petition

- January 2017, U.S. EPA proposed to deny petition, held public hearing on April 13, 2017
- Final disapproval on November 3, 2017
- U.S. EPA - other Clean Air Act mechanisms more effective, such as
 - 110(a)(2)(D) “Good neighbor provision”
 - Cross State Air Pollution Rule (CCSAPR)
 - U.S. EPA rules on motor vehicles

176 A Petition/ 126(b) Petition

- New York and other NE states appealed action
- Ohio and other affected states have requested to be allowed to intervene (accepted by court)
- On March 13, 2018, NY filed another 126 petition with US EPA – claiming NO_x sources above 400 tons per year are interfering with attainment of both 2008 and 2015 ozone standard and US EPA should require additional controls

CAIR/CATR/CASPR

Ozone Transport SIP Chronology

- NOx SIP Call - 1998
 - Designed to reduce regional transport of NOx, one of the precursors of ozone from large Electric Generating Units (EGUs) and Non-EGUs.
- Clean Air Interstate Rule (CAIR) - 2005
 - Designed to achieve NOx and SO2 emission reductions from EGUs in certain states.
- Cross State Air Pollution Rule (CSAPR) - 2011
 - Designed to reduce power plant emissions that contribute ozone and/or fine particle pollution to other states through NOx and SO2 emission reductions
 - Assist with attainment of the 1997 ozone and fine particle and 2006 fine particle NAAQS.

Each transport rule is an evolving process – incorporation of federal policy and court actions.

U.S. Supreme Court: Key Decisions Related to CSAPR

- Final ruling on April 29, 2014, EPA v. EME Homer City Generation
 - There is only one chance for states to develop a SIP, after that deadlines in the CAA for the Federal Implementation Plan (FIP) process is clear.
 - EPA's cost effective allocation of emission reductions is permissible under the Good Neighbor Provision.
- Over-Control in Non-Attainment Areas
 - "EPA cannot require a State to reduce its output of pollution by more than is necessary to achieve attainment in every downwind State or at odds with the one-percent threshold the Agency has set."
- Maintenance Areas
 - "Just as EPA is constrained, under the first part of the Good Neighbor Provision..." EPA is limited, by the second part of the provision, to reduce only by "amounts" that "interfere with maintenance," i.e., by just enough to permit an already-attaining State to maintain satisfactory air quality."



Source: <https://www.epa.gov/airmarkets>

History of EPA's CSAPR and CSAPR Update Proposed Rulemaking

- The U.S. Environmental Protection Agency (EPA) issued the Cross-State Air Pollution Rule (CSAPR) in July 2011.
- As amended, CSAPR required 28 states in the eastern half of the United States to significantly improve air quality by reducing power plant emissions that cross state lines and contribute to ozone and fine particle pollution in other states.
- CSAPR was scheduled to replace the Clean Air Interstate Rule beginning January 1, 2012.

History of EPA's CSAPR and CSAPR Update Proposed Rulemaking

- A number of petitioners challenged CSAPR in the D.C. Circuit in *EME Homer City v. EPA* (Case No. 11-1302).
- The D.C. Circuit subsequently issued decisions that stayed and then vacated the CSAPR rule before implementation began.
- On April 29, 2014, the U.S. Supreme Court reversed the D.C. Circuit's vacatur.
- The April 2014 U.S. Supreme Court decision also remanded the CSAPR litigation to the D.C. Circuit.
- On October 23, 2014, the D.C. Circuit granted the EPA's motion to lift the stay and shift the CSAPR compliance deadlines by three years.

History of EPA's CSAPR and CSAPR Update Proposed Rulemaking

- The EPA issued an interim final rule revising the compliance deadlines in its regulations, and the CSAPR Phase I implementation began on January 1, 2015, for the annual programs and May 1, 2015, for the ozone season program, with Phase II to begin in 2017.
- On June 30, 2015, the EPA issued a final notice finding that a number of states failed to submit “good neighbor” SIPs for the 2008 ozone standard. These findings established a 2-year deadline for the EPA to either approve an SIP or finalize an FIP that addresses the “good neighbor” requirement.
- On July 28, 2015, the D.C. Circuit remanded the ozone season budgets for 11 states to the EPA for reconsideration.

Overview of EPA's CSAPR Update Proposed Rulemaking

- On November 16, 2015, the EPA proposed an update to the Cross-State Air Pollution Rule (CSAPR) for the 2008 ozone National Ambient Air Quality Standards (NAAQS) by issuing the proposed CSAPR Update Rule.
- On December 3, 2015, the “Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS” was published in the Federal Register (80 FR 75706).
- The EPA proposed that the CSAPR Update Rule will reduce interstate air pollutant emission transport that significantly contributes to nonattainment, or interferes with maintenance, of the 2008 ozone NAAQS in the eastern U.S.
- To achieve this goal, the proposed CSAPR Update Rule would further limit ozone season (May 1 through September 30) nitrogen oxide (NO_x) emissions from Electric Generating Units (EGUs) in 23 eastern states.

Overview of EPA's CSAPR Update Proposed Rulemaking

- The EPA's proposed CSAPR Update Rule also responds to the July 2015 remand of certain CSAPR NO_x emissions budgets by the United States Court of Appeals for the D.C. Circuit.
- In response to the D.C. Circuit remand in *EME Homer City*, the EPA proposed the CSAPR Update Rule to replace the existing Phase II CSAPR ozone season NO_x emissions budgets for nine states (Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia, and West Virginia) with updated budgets designed to address interstate transport with respect to the 2008 ozone NAAQS.
- The EPA also proposed to remove two states (South Carolina and Florida) from the CSAPR ozone season NO_x trading program.

Largest Contributions by State

Upwind State	Largest Downwind Contribution to Nonattainment Receptors for Ozone (ppb)	Largest Downwind Contribution to Maintenance Receptors for Ozone (ppb)
MO	1.63	3.69
NE	0.24	0.36
NH	0.02	0.07
NJ	8.84	12.38
NY	16.96	17.21
NC	0.55	0.93
ND	0.11	0.28
OH	2.18	7.92
OK	1.70	2.46
PA	9.39	15.93

Upwind State	Largest Downwind Contribution to Nonattainment Receptors for Ozone (ppb)	Largest Downwind Contribution to Maintenance Receptors for Ozone (ppb)
RI	0.02	0.08
SC	0.16	0.21
SD	0.08	0.12
TN	0.51	1.67
TX	2.44	2.95
VT	0.01	0.05
VA	1.87	5.29
WV	0.95	3.11
WI	0.34	2.59

Proposed Ozone Season NO_x Emission Budgets by State

State	EGU NO _x Ozone Season Emissions Budgets	Variability Limits	EGU NO _x Ozone Season Assurance Levels
Pennsylvania	14,387	3,021	17,408
Tennessee	5,481	1,151	6,632
Texas	58,002	12,180	70,182
Virginia	6,818	1,432	8,250
West Virginia	13,390	2,812	16,202
Wisconsin	5,561	1,168	6,729
Region Cap	311,867	65,493	

EPA NO_x Cost Thresholds

EGU NO_x Cost Threshold

\$500/ton	CSAPR ozone season NO _x cost threshold; fully operating post-combustion controls that are already running
\$1,300/ton	Widespread availability of restarting idled SCRs and state of the art combustion controls
\$3,400/ton	NO _x SIP Call ozone season NO _x cost threshold, adjusted to 2014\$; widespread availability of restarting idled SNCRs
\$5,000/ton	Widespread availability of new SCRs
\$6,400/ton	Widespread availability of new SNCRs
\$10,000/ton	Upper bound

Section 319– Exceptional Events

Exceptional Events

- Exceptional events are air pollution events not readily controlled through traditional State Implementation Plan Processes
- Exceptional events are defined by Section 319 of the Clean Air Act
 - affects air quality;
 - is not reasonably controllable or preventable;
 - is an event caused by human activity that is unlikely to recur at a particular location or a natural event; and
 - is determined by the Administrator through the process established in the regulations . . . to be an exceptional event
- Exceptional Event Types - Where Satellite Data has been Useful
 - Wildfires Plumes
 - Dust Storms
 - Stratospheric Ozone Intrusions

Section 179B – Foreign Pollution

Section 179B – Foreign Pollution

Section 179B

“A SIP shall be approved if ‘the submitting State establishes to the satisfaction of [EPA] that the implementation plan of such State would be adequate to attain [the NAAQS] . . . but for emissions emanating from outside the United States.’” -----42 USC § 7509a

