



Proposed Revised CSAPR Update: Overview

December 10, 2020

Presentation Outline



- Upcoming Milestones
- The CSAPR Update and its Remand
- Approach to Proposed Rule
- Major Provisions of Proposed Rule

Upcoming Milestones

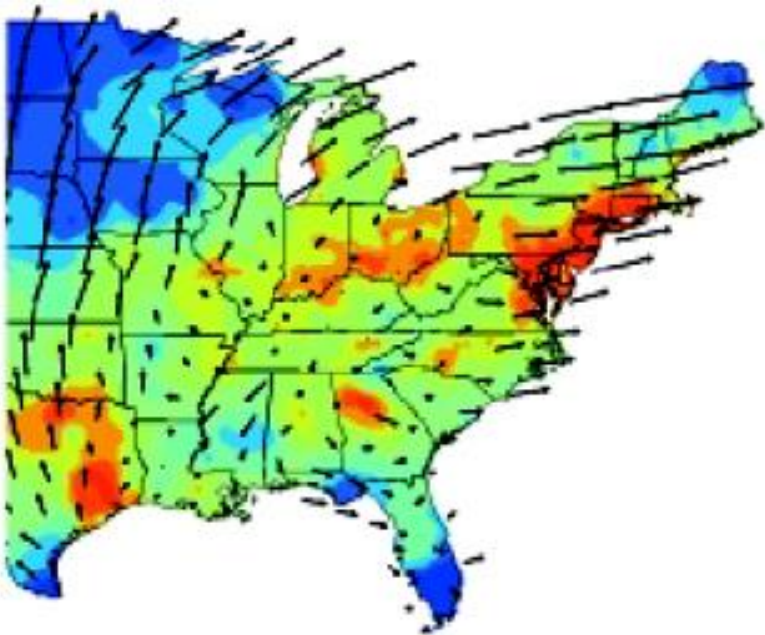


- The proposed rulemaking was signed on October 15, 2020
 - Published in the Federal Register on October 30, 2020
- There is a 45-day comment period, ending on December 14, 2020
- EPA held a virtual public hearing on November 12, 2020
- Details on the virtual public hearing as well as instructions on how to comment on the rule can be found on the proposed rule's webpage:
<https://www.epa.gov/csapr/revised-cross-state-air-pollution-rule-update>

Interstate Air Pollution Transport



Transport Winds and Ozone Patterns on High Ozone Days



- Interstate air pollution refers to pollution from upwind emission sources that impact the air quality in another state downwind.
- These pollutants can travel great distances (i.e., hundreds of miles), affecting air quality and public health both locally and regionally.
- Transport of pollutants across state borders can make it difficult for downwind states to meet the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$ and ozone.

The CSAPR Update and its Remand



CSAPR Update

- EPA finalized the CSAPR Update in 2016 to address interstate transport for the 2008 ozone NAAQS (75 ppb) in the eastern United States
 - Required emission reductions from 22 upwind states starting in the 2017 ozone season
 - Efforts were focused on immediately available and cost-effective emission reductions
 - EPA acknowledged that the CSAPR Update was only a partial remedy for 21 of the 22 states (exception was Tennessee)

Wisconsin v. EPA

- In September 2019, the DC Circuit remanded the CSAPR Update to EPA for allowing significant contribution to continue beyond downwind area attainment dates determined under CAA section 181.
- The court rejected petitioners' challenges to all other aspects of the CSAPR Update, including EPA's analytical methodology and the trading program.
- EPA continues to implement the CSAPR Update while the Agency pursues a rulemaking that is responsive to the court's remand (court-ordered deadline of March 15, 2021 for final signature).

Approach to Proposed Rule



- The proposed rule fully addresses good neighbor requirements for the 21 states given partial good neighbor FIPs under CSAPR Update.
- Unless otherwise stated, the proposed rule does not reopen any determinations, findings, or interpretations (statutory or regulatory) that were not remanded by the *Wisconsin* decision.
- Key aspects of analysis post-*Wisconsin*:
 - EPA has aligned its analysis and the implementation of emission reductions required to address significant contribution with the 2021 ozone season, which corresponds to the July 20, 2021, Serious area attainment date for the 2008 ozone NAAQS.
 - EPA has further assessed whether any additional emission reductions should be required beyond the 2021 attainment date - to the extent such reductions are impossible to require by that date
 - Analysis of non-EGUs in linked upwind states

Updated Geography for the 2008 Ozone NAAQS



2017 CSAPR Update Receptors and Linked Upwind States



2021-2022 Receptors and Linked Upwind States



2023-2025 Receptors and Linked Upwind States*



● Areas with nonattainment and/or maintenance-only receptors

■ Upwind states linked to one or more downwind receptors

*IL is no longer linked after 2024

Of the 22 linked upwind states in 2017, 10 states are projected to no longer be linked to nonattainment or maintenance problems at downwind receptors in 2021. The 12 states shown above are projected to remain linked.

Major Provisions of the Proposed Rule (EGUs)

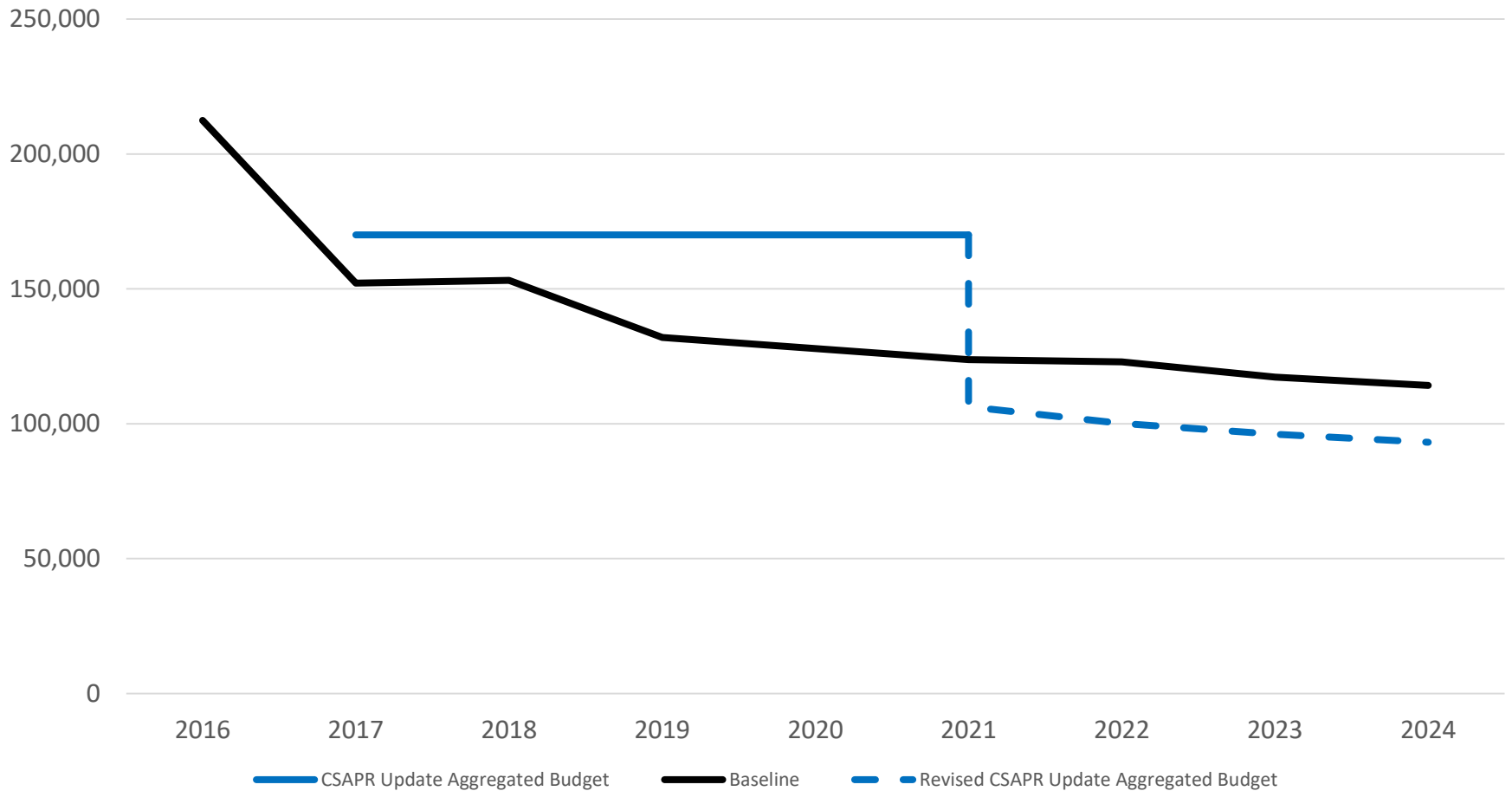


- **Mitigation strategies:** Evaluated emission reduction potential from the same suite of technologies considered by EPA in the CSAPR Update: Low NO_x Burners (LNB); optimizing existing selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) controls; and installing new SCR and SNCR controls.
- **Proposed control strategy:** EPA proposes to identify required emissions reductions based on the \$1,600 per ton level control strategy associated with optimizing existing SCRs and upgrades to state-of-the-art combustion controls (next slide).
- **Implementation:** New FIPs and new emissions budgets are proposed for the 12 linked states (see slide 10).
 - Consistent with a full-remedy approach and to incentivize ongoing operation of identified controls, budgets are established for each OS until downwind air quality problems are resolved (through the 2024 OS).
 - 2021: Optimization of existing SCR controls; 2022 – 2024: Continued optimization of existing SCR controls plus upgrade of combustion control.
 - The 2024 emissions budget applies to 2024 and each year thereafter.

Proposed Aggregated Budgets for Revised CSAPR Update Region



Ozone Season NOx Baseline and Aggregated Budgets for 12 Linked States (tons)



*Baseline values reflect reported emissions through 2019, and projected emissions using the engineering analytics baseline for subsequent years.

Proposed State Budgets: 2021 – 2024⁺



Upwind State	2021		2022		2023		2024+	
	Baseline ¹	Budget ²	Baseline ¹	Budget ²	Baseline ¹	Budget ²	Baseline ¹	Budget ²
Illinois	9,688	9,444	9,652	9,415	8,599	8,397	8,599	8,397
Indiana	15,856	12,500	15,383	11,998	15,383	11,998	12,755	9,447
Kentucky	15,588	14,384	15,588	11,936	15,588	11,936	15,588	11,936
Louisiana	15,488	15,402	15,488	14,871	15,488	14,871	15,488	14,871
Maryland	1,565	1,522	1,565	1,498	1,565	1,498	1,565	1,498
Michigan	13,893	12,727	13,893	11,767	11,056	9,803	10,841	9,614
New Jersey	1,346	1,253	1,346	1,253	1,346	1,253	1,346	1,253
New York	3,187	3,137	3,187	3,137	3,187	3,137	3,169	3,119
Ohio	15,832	9,605	15,917	9,676	15,917	9,676	15,917	9,676
Pennsylvania	11,570	8,076	11,570	8,076	11,570	8,076	11,570	8,076
Virginia	4,592	4,544	4,175	3,656	4,175	3,656	3,912	3,395
West Virginia	15,165	13,686	15,165	12,813	13,407	11,810	13,407	11,810
Total	123,770	106,280	122,929	100,096	117,280	96,111	114,156	93,092

¹ Emissions projected in each state for each year in the absence of the Revised CSAPR Update proposal

² Each state has a variability limit of 21%, meaning they can emit up to an assurance level of 121% of the budgets shown in the tables provided that they do not collectively exceed the regional budget and any available banked allowances.

Major Provisions of the Proposed Rule (non-EGUs)



- **Non-Electric Generating Units (non-EGUs)**
 - EPA evaluated whether emissions from non-EGU sources warrant control to eliminate the 12 linked upwind states' significant contribution
 - Based on an assessment of emission reduction potential from non-EGU sources, EPA concluded that few emissions reductions are available at a cost similar to the proposed control stringency for EGUs
 - EPA proposes, based on this assessment, that emissions controls for non-EGU sources in the linked upwind states are not required under the Step 3 multifactor test for purposes of the 2008 ozone NAAQS
- **Soliciting Comments**
 - EPA is requesting comment on the assessment of emissions reduction potential for the glass and cement manufacturing sectors
 - EPA is also requesting comment on (i) emission reduction potential from other control strategies or measures on a variety of emissions sources in several industry sectors and (ii) the feasibility of further controlling NO_x from IC engines and large ICI boilers, including optimizing combustion and installing ultra-low NO_x burners

Major Provisions of the Proposed Rule (trading program)



- **New CSAPR NO_x Ozone Season Group 3 Trading Program**
 - To implement the required emissions reductions, EPA proposes to establish a “Group 3” trading program with new budgets for ozone season emissions of NO_x from EGUs in the 12 linked states in this proposed rule.
 - Except for the revised stringency and geographic scope, the new Group 3 trading program would be virtually identical to the existing “Group 2” trading program established in the CSAPR Update.
 - EPA proposes to authorize a one-time conversion of allowances banked in 2017-2020 under the CSAPR NO_x Ozone Season Group 2 Trading Program into a limited number of allowances that can be used for compliance in the CSAPR NO_x Ozone Season Group 3 Trading Program.
 - EGUs in the remaining 10 states covered by the CSAPR Update would continue to comply with the Group 2 program.

CSAPR Regions

