Air Quality Advisory Council Meeting
October 4, 2023

EPA's Good Neighbor Plan

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Timeline of Major Events

October 26, 2015
New NAAQS for ozone set by EPA

October 25, 2018
Oklahoma submits I-SIP to EPA, which includes Good Neighbor Transport SIP

February 22, 2022
EPA publishes proposed disapproval of Transport SIP

April 6, 2022
EPA publishes proposed FIP

April 22, 2022
Oklahoma submits comments on SIP disapproval

June 21, 2022
Oklahoma submits comments on proposed FIP

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The Four-Step CSAPR (Cross-State Air Pollution Rule) Framework

1) Identify downwind receptors that are expected to have problems attaining or maintaining the NAAQS,

2) Determine which upwind states significantly contribute (or are “linked”) to the downwind air quality problems,

3) For states that are “linked,” quantify the level of upwind emissions that need to be addressed to satisfy the “good neighbor” provision, and

4) Adoption of permanent and enforceable emission reductions in “linked” upwind states.

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The Oklahoma Transport SIP

- The Oklahoma transport SIP referenced modeling performed by EPA (using a 2011 base year with growth projections and updated point source emissions) and by the Texas Commission on Environmental Quality (TCEQ). TCEQ used a 2012 base year.
- The transport SIP also took advantage of potential flexibilities offered in a memo (dated March 27, 2018) from Peter Tsirigotis (Director of EPA's Office of Air Quality Planning and Standards), including the use of a 1 ppb screening threshold for significant contribution determination (rather than 1% of the NAAQS (0.7 ppb).

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The Oklahoma Transport SIP (Continued)

- The transport SIP started with a list of six receptors (outside of Oklahoma) with ozone attainment problems and used a 1 ppb threshold (one of the flexibilities mentioned previously) to eliminate three of them.
- The transport SIP then referenced TCEQ modeling data which showed that two of the remaining receptors (Denton and Tarrant, TX) were projected to come into attainment by 2023.
- The remaining problematic receptor was located in Allegan County, Michigan. The transport SIP used another flexibility offered in the March 2018 Tsirigotis memo to eliminate anthropogenic emissions from Canada.
- Then, the SIP provided a weight-of-evidence analysis, focusing on downward trends in Oklahoma EGU NO_X emissions and other factors which, when projected, would bring the Allegan County monitor into attainment by 2023.

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EPA's disapproval of Oklahoma's transport SIP

- EPA disagreed with the use of the 1.0 ppb threshold rather than the 1% (0.7 pbb) default.
- EPA rejected Oklahoma's use of the TCEQ modeling data that showed that two monitors to which Oklahoma contributed significantly would come into ozone attainment by 2023.
- In the proposed disapproval, EPA relied on more recent modeling (2016v2 – released December 2021) to show that Oklahoma is contributing significantly to ozone problems at two monitors: one in Denton County, Texas, and another in Cook County, Illinois.
- In the Final SIP disapproval, EPA relied on yet another new model (2016v3) which removed Cook County but kept Denton County and added Galveston, Texas.

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Inconsistencies in Modeling

State	County	Site ID	Oklahoma Linked to Receptor		
			March 2018 Tsirigotis Memo	Proposed OK SIP Denial	Final OK SIP Denial
Illinois	Cook	170310032	No	**Yes**	No
Michigan	Allegan	260050003	**Yes**	No	No
Texas	Brazoria	480391004	**Yes**	No	No
Texas	Denton	481210034	**Yes**	**Yes**	**Yes**
Texas	Galveston	481671034	No	No	**Yes**
Texas	Tarrant	484392003	**Yes**	No	No
Wisconsin	Milwaukee	550790085	**Yes**	No	No
Wisconsin	Sheboygan	551170006	**Yes**	No	No

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Summary of Oklahoma's situation regarding the 2015 ozone NAAQS and EPA's disapproval of our transport SIP

Does Oklahoma need additional NO_X reductions to meet the 2015 ozone NAAQS?

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Step 4: Adoption of permanent and enforceable emission reductions in "linked" upwind states.

If the FIP survives legal challenges, the adoption of permanent and enforceable reductions will occur through:

An updated ozone-season trading program with lower state budgets and other adjustments.

Federal NO_X limits on other (non-EGU) sources identified.

d. Step 4 Approach

The EPA proposes an approach similar to its prior transport rulemakings to implement the necessary emissions reductions through permanent and enforceable measures. The EPA proposes to require EGU sources to participate in an emissions trading program and proposes additional enhancements to the trading regime to maintain the selected control stringency over time and improve emissions performance at individual units, offering a necessary measure of assurance that emissions controls will be operated throughout the ozone season. For non-EGUs, the EPA proposes permanent and enforceable emissions rate limits and work practice standards, and associated compliance requirements, on several types of NO_X-emitting combustion units across several industrial sectors. The measures for both EGUs and non-EGUs are proposed to be required throughout the May 1–September 30 ozone season annually. The EGU program will begin with the 2023 ozone season, and non-EGU implementation will begin with the 2026 ozone season. Refer to Section VII.A of this proposed rule for details on the implementation schedule.

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How will the transport FIP affect Oklahoma sources: EGUs

Electrical Generating Unit Future Year Emission Baselines, Proposed Budgets and Illustrative Proposed Budgets (tons)

	2023		2024		2025		2026	
State	**Baseline**	**Projected Budgets**	**Baseline**	**Projected Budgets**	**Baseline**	**Projected Budgets**	**Baseline**	**Projected Budgets**
Oklahoma Proposed	10,463	10,265	10,463	9,573	10,283	9,393	10,283	4,275
Oklahoma Final	--	10,271	--	9,384	--	9,376	--	6,631

The state-wide ozone-season NO_X budget will decrease from 11,641 tons (currently) to 6,631 tons (projected) in 2026 and to 3,917 tons in 2027. (In the proposal, the projected quantity was 4,275 tons in 2026.)

Table I.B-1: Preset CSAPR NO_X Ozone Season Group 3 State Emissions Budgets (tons) for 2023 through 2029 Control Periods*

State	2023 State Budget	2024 State Budget	2025 State Budget	2026 State Budget**	2027 State Budget**	2028 State Budget**	2029 State Budget**
Ohio	9,110	7,929	7,929	7,929	7,929	6,911	6,409
Oklahoma	10,271	9,384	9,376	6,631	3,917	3,917	3,917
Pennsylvania	8,138	8,138	8,138	7,512	7,158	7,158	4,828
Texas	40,134	40,134	38,542	31,123	23,009	21,623	20,635

How will the transport FIP affect Oklahoma sources: Non-EGU Sources

Table 2. Summary of Industries, Non-EGU Emissions Unit Types, and Applicability Requirements

Industry	Emissions Unit Type	Applicability Requirements
Pipeline Transportation of Natural Gas	Reciprocating Internal Combustion Engines	Nameplate rating of ≥1000 braking horsepower (bhp)
Cement and Concrete Product Manufacturing	Kilns	Directly emits or has the potential to emit 100 tpy or more of NO_X
Iron and Steel Mills and Ferroalloy Manufacturing	Reheat Furnaces	Directly emits or has the potential to emit 100 tpy or more of NO_X
Glass and Glass Product Manufacturing	Furnaces	Directly emits or has the potential to emit 100 tons per year (tpy) or more of NO_X
Iron and Steel Mills and Ferroalloy Manufacturing Metal Ore Mining Basic Chemical Manufacturing Petroleum and Coal Products Manufacturing Pulp, Paper, and Paperboard Mills	Boilers	Design capacity of ≥100 mmBtu/hr
Solid Waste Combustors and Incinerators	Combustors or Incinerators	Design capacity ≥ 250 tons of waste/day

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Summary of Oklahoma's comments on EPA's proposed transport FIP

- Oklahoma's Transport SIP is approvable and preferable.
- EPA should stand behind the Tsirigotis memos. Oklahoma relied in good faith on the guidance provided in those memos. EPA's inconsistency presents an undue burden for states trying to comply with EPA guidance.
- Oklahoma's evaluation of some of the modeling performed by EPA uncovered significantly flawed results, calling into question the entire effort. A rulemaking this complex requires states to take most of EPA's work on faith. If a problem arises, EPA has a duty to highlight the problems and to explain why – in spite of the problematic data – the approach EPA is taking is still justified. EPA did not meet this standard in developing this rule.
- The proposed FIP would result in over-control of NOx emissions

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Summary of Oklahoma's comments on EPA's proposed transport FIP (Continued)

- The timetable is too ambitious for installing controls on EGUs.
- An alternative schedule would be less harmful.
- The dynamic budget setting process EPA proposed should not be based on a single previous year.
- EPA should clarify that NO_X emission limits for non-EGU sources are only applicable during ozone season.
  - Addressed in Final
- Stack testing to demonstrate compliance should only occur during ozone season or immediately prior to ozone season.
  - Addressed in Final

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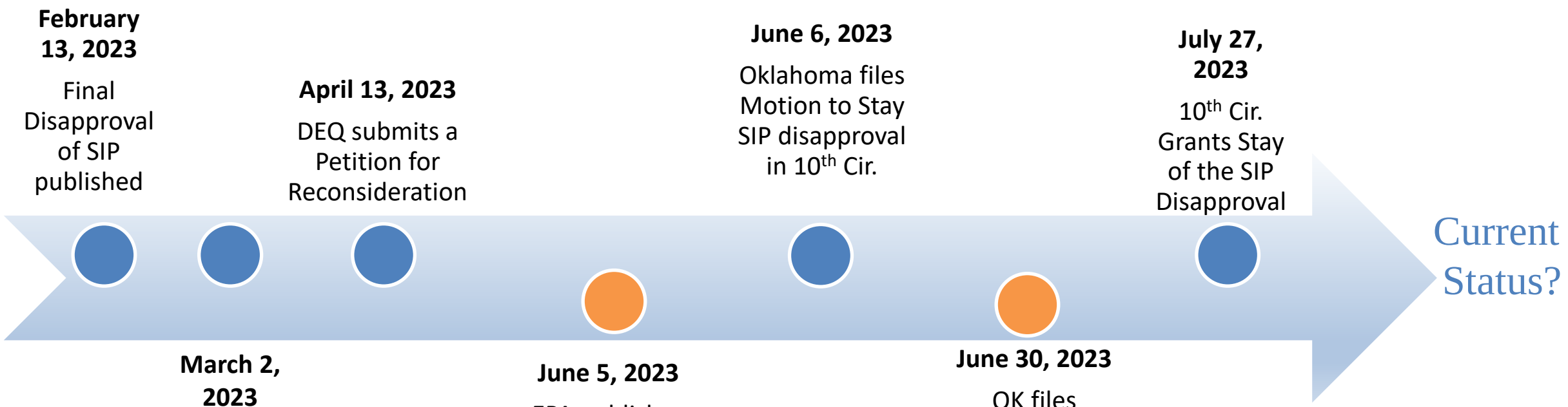
Timeline of Major Events



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Thanks!

Questions?

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