# INTERSTATE OZONE TRANSPORT

U.S. EPA, Office of Air and Radiation Clean Air Markets Division Air Quality Policy Division Air Quality Assessment Division AAPCA Spring Meeting March 29, 2017



## Interstate Transport SIP Obligations

- The CAA's "Good Neighbor Provision" [section 110(a)(2)(D)(i)] obligates states to prohibit emissions that will contribute significantly to downwind nonattainment or interfere with maintenance of any NAAQS in another state
- States must submit Good Neighbor SIPs within 3 years of promulgation of a new or revised NAAQS
- EPA must promulgate a FIP for a state within 2 years of finding that the state failed to submit a complete Good Neighbor SIP or if EPA disapproves the SIP



# Framework for Interstate Transport

- EPA's framework provides a roadmap for addressing the Good Neighbor Provision
  - This familiar framework has been used to address transported air pollution for ~20 years (e.g., NO<sub>X</sub> SIP Call, CAIR, CSAPR) with updates in response to stakeholder feedback and court decisions
  - EPA most recently applied this framework in the CSAPR Update for the 2008 ozone NAAQS
- The framework has four overarching steps:
  - Step 1: Identify downwind areas that are expected to have problems attaining and/or maintaining the NAAQS
  - Step 2: Determine which upwind states are "linked" to these downwind areas
  - Step 3: For linked states, quantify the level of upwind emission reductions that are needed to address the good neighbor obligation
  - Step 4: Implement reductions via enforceable requirements



#### **Cross-State Air Pollution Rule**

- CSAPR (finalized July 2011) addresses interstate transport obligations for the 1997 ozone NAAQS (and the 1997 and 2006 PM<sub>2.5</sub> NAAQS)
- CSAPR Update (finalized September 7, 2016) updates CSAPR ozone season program by addressing summertime transport of ozone for the 2008 ozone NAAQS in the eastern US
  - Covers 22 eastern states (see map on next slide) and sets power sector ozone season NO<sub>X</sub> emission budgets for each covered state starting with the 2017 ozone season (May 1, 2017).
  - Establishes a new ozone season NO<sub>x</sub> allowance trading program for CSAPR Update states
  - Facilitates a smooth shift from original CSAPR by transitioning a limited number of banked allowances for compliance
  - Responds to the July 2015 D.C. Circuit remand of CSAPR Phase 2 ozone season emission budgets for 11 states
  - Additional information at <u>http://www.epa.gov/airmarkets/final-cross-state-air-pollution-rule-update</u>



#### Final CSAPR Update Region for the 2008 ozone NAAQS





## Key Implementation Dates and Actions for the 2008 Ozone NAAQS

- Outstanding Good Neighbor obligations for the 2008 ozone NAAQS
  - CSAPR Update was a partial remedy for 21 eastern states (full remedy for TN)
  - The statutory date to promulgate a full FIP for KY passed in 2016 and the statutory full FIP deadline will expire for a number of other states starting in August 2017
  - CSAPR Update did not "FIP" western states or otherwise provide their interstate transport obligation (EPA is subject to statutory deadlines to promulgate FIPs for 4 western states)
    - 8/2017 statutory FIP deadline for CA and NM
    - 11/2018 statutory FIP deadline for UT
    - 3/2019 statutory FIP deadline for WY based on SIP disapproval, effective 3/6/2017 (82 FR 9142)
- These obligations can be remedied via SIPs or FIPs



## Key Implementation Dates for the 2015 Ozone NAAQS

- 10/2015: Revised ozone NAAQS promulgated
  - Implementation memo committed to issuing transport data (Air Quality Modeling NODA in December 2016 – see following slide)
- **10/2017**: Initial Area Designations (based on 2014-2016 data)
- 10/2018: Good Neighbor SIPs due
- 12/2020: Marginal attainment deadline; Moderate area attainment SIPs due
  - Assumes effective date of designations is December 31, 2017 (or later) such that attainment year would be 2020
- **12/2023**: Moderate attainment deadline
  - Using same assumptions above, attainment year would be 2023
  - Note that clean data in 2023 could be used for an extension



# Key Implementation Dates for the 2015 Ozone NAAQS

- In December 2016, EPA shared preliminary interstate ozone transport modeling information through a Notice of Data Availability (NODA) (82 FR 1733, January 6, 2017), which:
  - was developed considering stakeholder feedback
  - intends to help states prepare for (or start discussions on) transport SIPs for the 2015 ozone NAAQS
  - uses the first 2 steps of the CSAPR framework to provide preliminary interstate ozone transport information, including projected nonattainment and maintenance receptors for 2023
  - requests feedback on the datasets used in the modeling efforts and on the projection and modeling approach
  - Comment period closes on April 6, 2017



#### **Clean Air Act Section 176A**

- On January 11, 2017, EPA signed a proposed action to deny a CAA section 176A petition from several Northeastern states that requested that EPA expand the Ozone Transport Region by adding 9 additional states
  - EPA received the petition in 2013; EPA's statutory deadline to respond was in June 2015
  - EPA is subject to two consent decrees obligating EPA to finalize action by October 27, 2017
  - Public hearing scheduled on April 13 in DC (original date was March 14, but postponed due to weather). Comment period will be extended.



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#### 176A Petition and CSAPR Update States



#### Clean Air Act Section 126

- Under CAA Section 126, any state (or political subdivision) may petition EPA for a finding that a major source or group of stationary sources emits or would emit any pollutant in violation of the Good Neighbor Provision
- EPA is required by statute to act on the petition within 60 days. EPA generally extends this deadline by 6 months as authorized by Section 307(d)(10) of the Act.
  - EPA has generally found that the 60-day period is insufficient to develop a proposal, take comment, determine whether to grant, and develop a remedy if granted
  - Even with the 6-month extension, these deadlines are extremely difficult to meet
- Where EPA finds that a source is violating the Good Neighbor Provision, EPA generally promulgates a compliance schedule, which the CAA says can be up to 3 years with increments of progress



#### **Clean Air Act Section 126**

Petitioning State	Response Deadlines	Named EGU Sources	Ozone NAAQS Cited
CT*	1/25/17	Brunner Island, PA	2008
DE (4 petitions)	3/5/17 4/7/17 7/9/17 8/3/17	<ol> <li>Brunner Island, PA</li> <li>Harrison, WV</li> <li>Homer City, PA</li> <li>Conemaugh, PA</li> </ol>	2008 and 2015
MD	7/15/17	36 EGUs at 19 facilities in IN, KY, OH, PA and WV	Emphasized 2008

\*On March 9, 2017, CT provided its notice of intent to sue for EPA's failure to respond to its 126 petition by the January 2017 deadline. Sierra Club submitted an NOI on the same petition on March 10, 2017.



# Implementing Good Neighbor Provision for 2015 Ozone NAAQS

- EPA recognizes...
  - States have expressed a desire for regulatory certainty when complying with CAA requirements, planning for emissions reductions and planning for attainment
  - The CAA envisions a SIP-led process even while states have made clear that they
    need information and direction from EPA to understand how to compose
    approvable and timely transport SIPs to address regional (multi-state) air quality
    problems
  - While states have asked for additional information in developing SIPs, they can ultimately use any available information to demonstrate that they are meeting their interstate transport obligations



## Implementing Good Neighbor Provision for 2015 Ozone NAAQS

- EPA recognizes...
  - The regional nature of ozone pollution and interstate transport necessitate collaborative efforts (multi-state and/or state-EPA) to resolve interstate ozone problems
  - The regional nature of the ozone problem may also result in coordinated action on multiple Good Neighbor plans across states contributing to a common attainment or maintenance challenge (potentially to include addressing legal obligations such as on a single SIP or FIP obligation)



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## Example Questions/Issues Raised by States

- Given the uncertainty of the preliminary modeling data, does EPA intend to provide (by August 1, 2017) updated national modeling results for 2023 that incorporate feedback from states?
- In the absence of additional guidance/tools, what should states do with the preliminary AQ modeling data?
  - If a linked state's contribution to all receptor(s) is well <u>below</u> 1%, can the state point to the data in the AQ Modeling NODA and say they have no obligation?
  - If a linked state's contribution to all receptor(s) is well <u>above</u> 1%, should the state independently consider cost-effective reductions for inclusion in a Good Neighbor SIP?
  - If a linked state's contribution to all receptor(s) is <u>close to</u> 1%, should the state independently consider cost-effective reductions but also look to EPA analyses to inform whether the state is in or out?
  - Will states with contribution above 1% have the ability to demonstrate that they have no obligation? If yes, how (*e.g.*, collective contribution)?
  - How should states consider the potential impacts of the Clean Power Plan in the preliminary AQ modeling?
- Does EPA intend to issue clear, national direction to ensure that states develop approvable Good Neighbor SIPs in advance of the October 2018 deadline?
  - Will EPA quantify states' interstate pollution obligations?
  - Will EPA provide tools to help states address their interstate pollution obligations?



#### **Questions For Discussion**

- How can we best support and assist states in submitting approvable good neighbor SIPs?
  - Does it help for us to: identify receptors? Identify linkages? Identify cost of potential reductions? Identify budgets?
  - Should EPA update its AQ analysis (i.e., receptors and linkages), identifying the scope of the ozone transport problem? If so, what is most useful to states?
  - What type of tools or analyses could EPA develop and/or what type of tools are available to help assess emissions reduction and control obligations for EGUs and non-EGUs?
- What factors should be considered that would cause EPA to address transport differently in the east versus the west? Is a 1% threshold appropriate for western states?
- What are states' expectations regarding balancing the flexibility provided by limited EPA action (e.g., informal collaboration) with the certainty provided by detailed EPA action (e.g., guidance or an obligations rule)?
- How should EPA address the situation where some EGUs included in CSAPR Update are idling their controls?

