



Interstate Ozone Transport for the 2008 NAAQS: Update and Discussion

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EPA Roadmap



Support State Plans (FIP Responsibility) – EPA stands ready to support and assist states

Build upon CSAPR Framework - update for 2008 ozone NAAQS

1. Identify downwind air quality problems – see Jan 22 memo
2. Identify upwind contributing states – looking at 1% NAAQS criteria
3. Identify emissions reductions to address significant contributions
4. Establish compliance mechanism – seasonal emission budgets

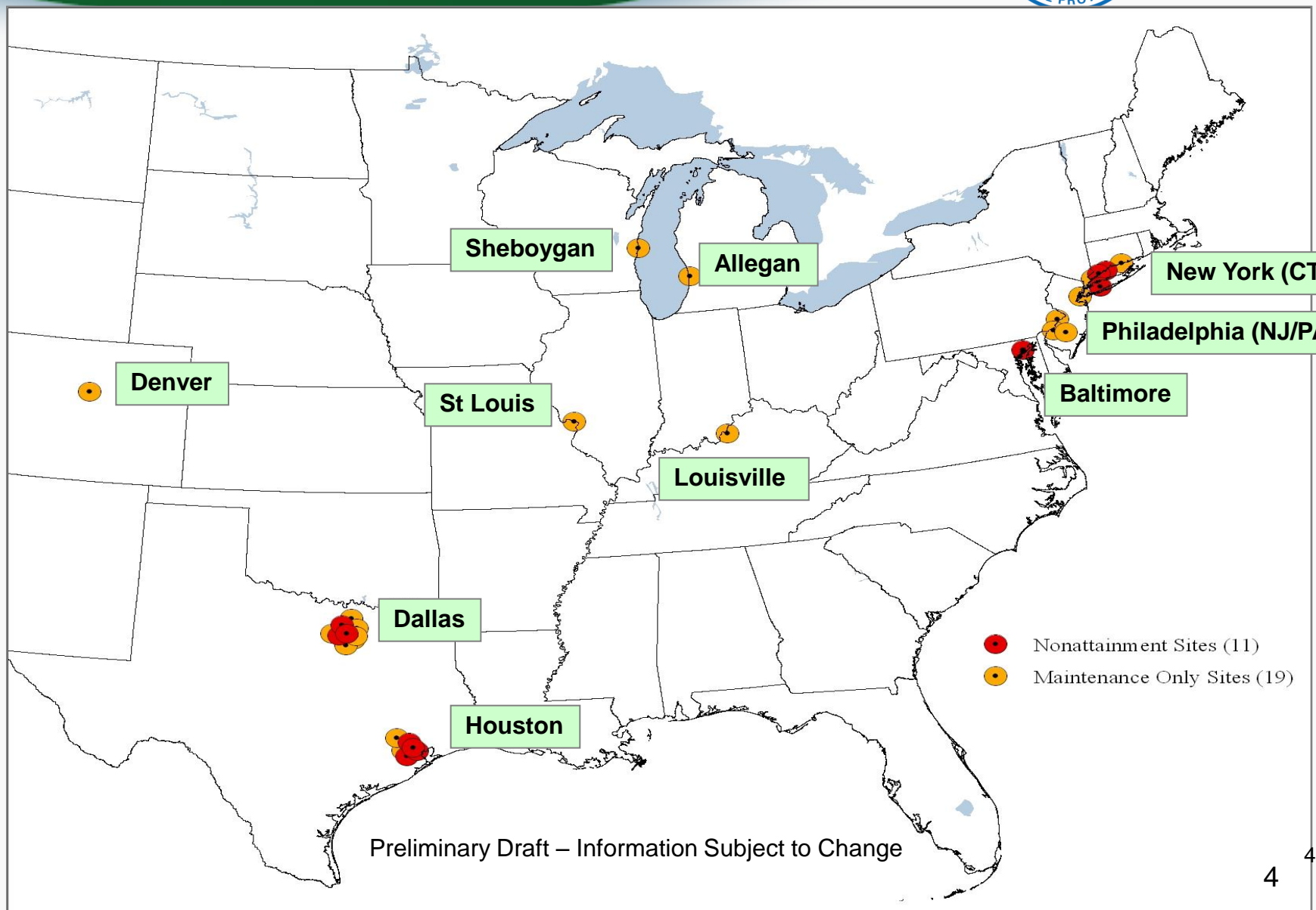
Other Factors – 176A petition, litigation on deadlines for acting on submitted SIPs, litigation on issuing findings of failure to submit SIPs, CSAPR litigation, 2015 ozone NAAQS review, and analytical issues

Quick Review of January 22 Memo



- Issued in order to help facilitate transport SIP development
- Reviewed 4-step analytic process & CSAPR framework
- Provided info on first two steps, based on preliminary air quality modeling data
 - Projected ozone concentrations
 - Contributions from upwind states to downwind locations.
- We are updating our air quality modeling assessment related to ozone transport for the 2008 NAAQS and will share that this summer.

2018 Projected Nonattainment & Maintenance Sites Outside of California



Preliminary Draft – Information Subject to Change

Identifying Near-Term EGU NO_x Reduction Potential



- The next two slides are excerpted from EPA's presentation at the April 8 Transport Workshop.
 - Goal was to facilitate a dialogue with states about EGU NO_x reduction strategies that could help address interstate ozone transport for the 2008 NAAQS.
 - Focus of presentation was EGU NO_x reduction strategies that can be in place by the 2017 ozone season.
- EPA assessed the NO_x reduction potential from
 - Operating existing post-combustion controls
 - State of the art combustion controls
 - Shifting generation to lower-emitting EGUs
- More information on EPA's power sector modeling can be found at www.epa.gov/powersectormodeling.

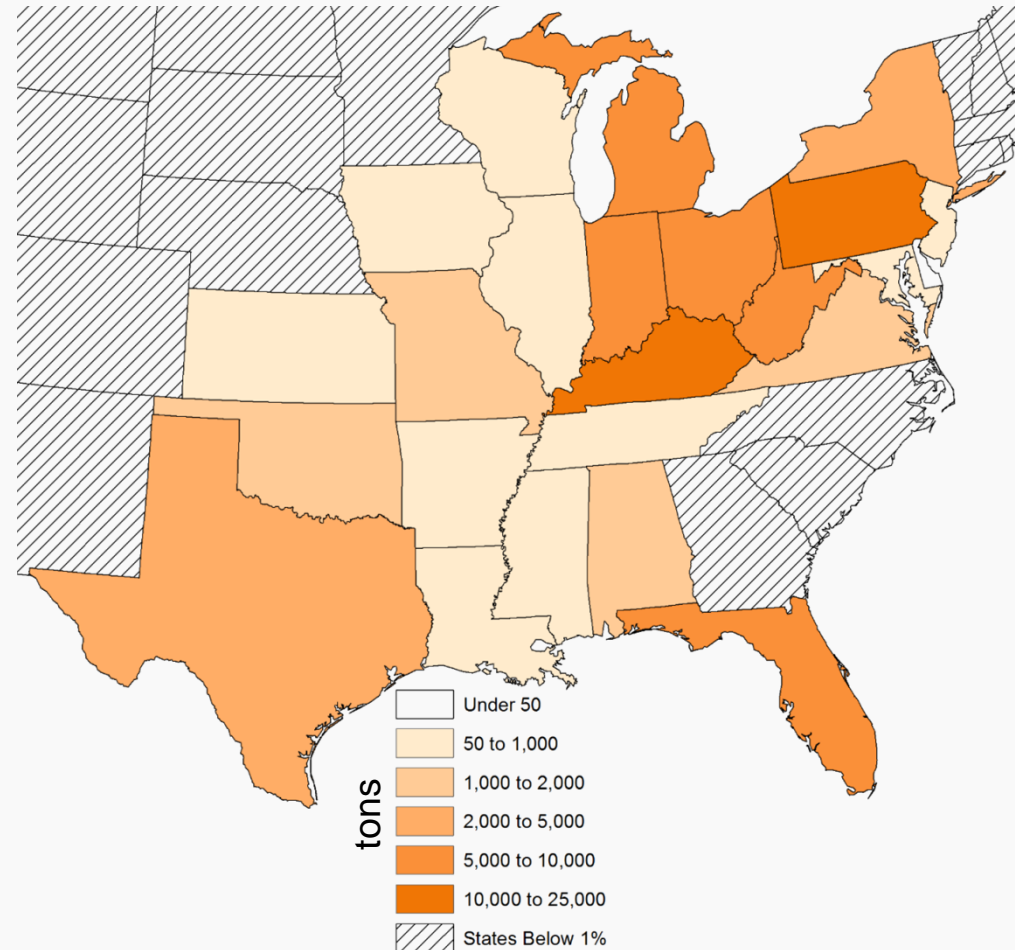
Near-term EGU NO_x Reductions



Reductions from all near-term EGU NO_x reduction strategies

- The map illustrates the location of NO_x reductions achieved from all EGU NO_x strategies:
 - Operating existing post-combustion controls (SCR and SNCR)
 - State of the art combustion controls
 - Shifting generation to lower-emitting EGUs (illustrated using \$1,300 per-ton assessment)
- Ozone season EGU NO_x reduction potential in the states examined adds up to over 80,000 tons.

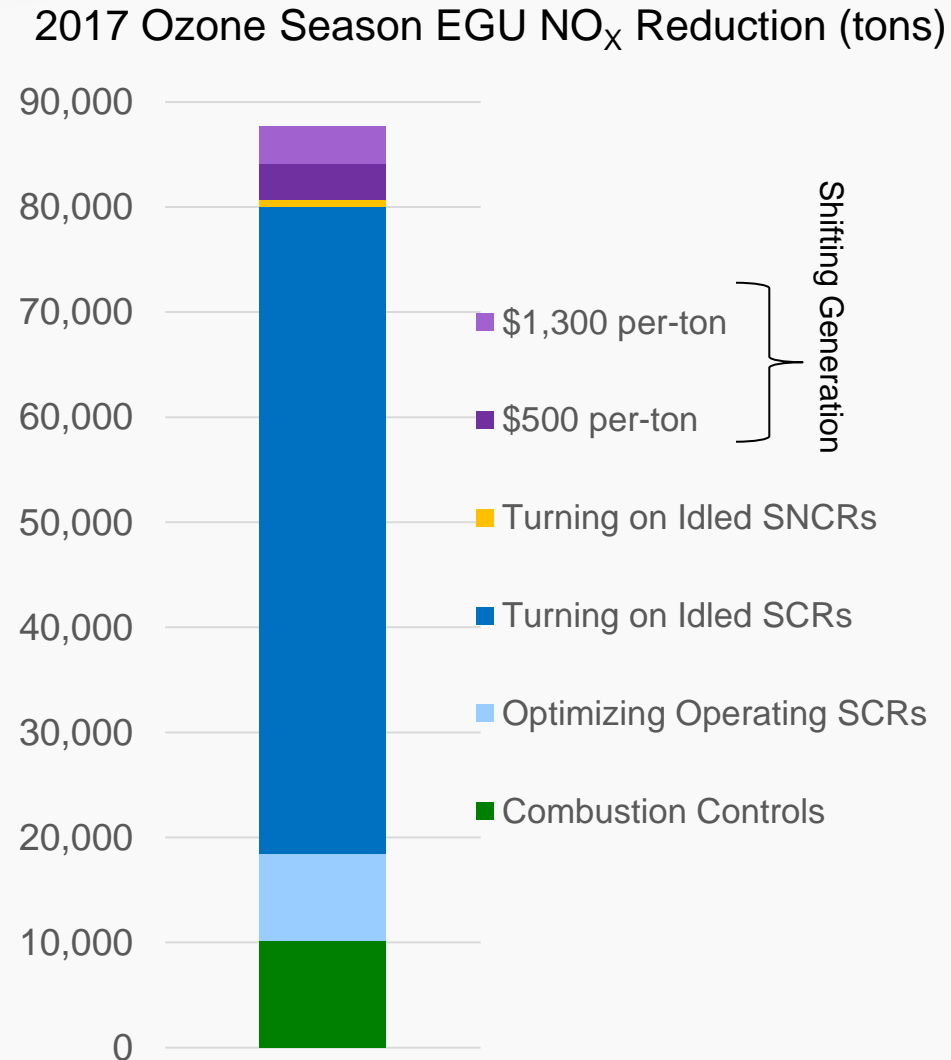
2017 Ozone Season EGU NO_x Reduction (tons) - All Near-term EGU NO_x Reduction Strategies -



Near-term EGU NO_x Reductions (Continued)



- State of the art combustion controls achieve approximately 10,000 tons of ozone season EGU NO_x reductions.
- Utilizing existing SCRs achieves approximately 70,000 tons of ozone season EGU NO_x reductions.
 - Optimizing SCRs achieves 8,300 tons.
 - Turning on idled SCRs achieves 62,000 additional tons.
- Turning on idled SNCRs achieves 700 tons of ozone season NO_x reductions.
- Shifting generation achieves approximately 3,400 tons at \$500 per-ton and an additional 3,600 tons at \$1,300 per-ton.



EPA Messages from April 8 Transport Workshop



- Meaningful near-term EGU NO_x reductions are available by the 2017 ozone season:
 - Optimizing and operating existing post-combustion controls (SCRs and SNCRs)
 - Installing and optimizing state-of-the-art combustion controls (LNB and OFA)
 - Shifting generation to lower-emitting EGUs
- EPA strongly encourages the development and submittal of transport SIPs for the 2008 ozone NAAQS that provide for such reductions.
- EPA may be able to approve such measures as “SIP strengthening” even though the SIP may not address full obligation.
 - Need for and availability of near-term reductions warrants this partial approach, as was done in CSAPR for the 1997 ozone standard

Additional Takeaways from April 8 Transport Workshop



- States want to know more about what should be included in an approvable “good neighbor” SIP.
- We will continue to refine our numbers and will continue to share results. As part of that ongoing engagement, we are especially interested in seeing how our numbers compare to those being developed by SCOOT and other regional assessments of these near-term EGU measures.
- FIP being developed in parallel through notice/comment rulemaking.
- Many downwind states also eager to talk about reductions beyond near-term and beyond EGU.
 - EPA recognizes necessity of doing this to fully address any remaining obligations for the 2008 NAAQS in parallel with any obligations for a potentially revised NAAQS
 - We are interested in doing this in parallel with our important efforts on near-term EGU reductions.