OTC SAS Committee Update OTC/MANEVU Commissioners' Annual Meeting May 14, 2023

Stationary and Area Sources Committee

Chair, Frank Steitz, New Jersey DEP



Presentation Overview

SAS 2022 Charge

- ✓ Assessing Source Emissions Inventory
- ✓ Provide Technical Support on Individual Sectors
- ✓ Supporting RACT SIPs
- ✓ Review Modeling Outputs, Inputs, and Conclusions
- ✓ Office of Air Quality Planning and Standards (OAQPS) Engagement

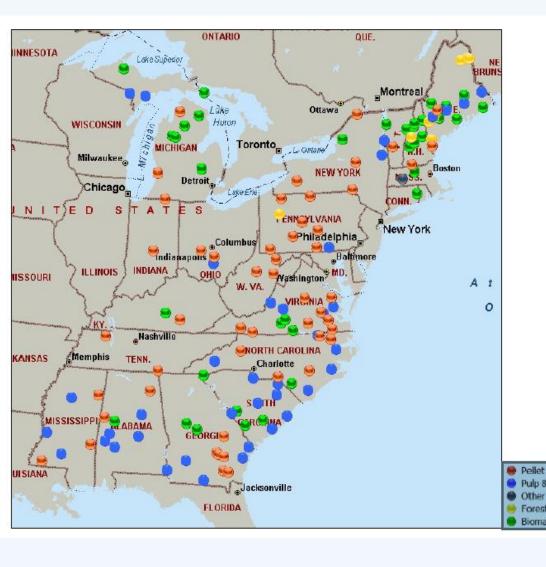
Additional Focus Areas

✓ Employ available emission inventory estimates to research and analyze additional strategies that reduce stationary and area source emissions in a cost-effective manner

Municipal Waste Combustor Work

- The SAS Committee has completed its work on MWC.
- Good Neighbor Plan included MWCs in list of non-EGU sources.
- EPA requested information to update the large MWC NSPS.
 - Emission guidelines for existing sources to be updated in addition to new sources.
 - OTC submitted its updated MWC report in response to the NSPS information request.
- Discussed a modeling analysis with the MC.

ICI Wood Boiler Inventory Analysis – Large Units



- Large units consist of:
 - Biomass power
 - Pellet plants
 - Paper mills
- Contractor (INRS) completed a draft inventory of units inside and outside the OTR.
 - Workgroup reviewing the inventory, data, and providing inputs.
 - Workgroup cataloging NOx and VOC limits for permitted facilities.

ICI Wood Boiler Inventory Analysis – Small Units

- Small units consist of:
 - Sawmills
 - Building heat (thermal)
 - Forest products
- Difficult to obtain data on this sector; few facilities have permits.
- Workgroup using a screening-level approach to assess sector "buckets."
 - Analysis based on fuel use and generic emission factor.
 - If the sector does not contribute significantly during the ozone season, OTC won't further refine the inventory.
 - INRS, NH, and DE developing independent "bucket" analysis.

Supporting RACT SIP

- RACT cost-effectiveness data has been posted on the OTC website.
- The RACT SIP/Control Measure Tool has been posted on the OTC website.
- The workgroup will revisit the IC engine RACT limits to determine if additional reductions are feasible and cost-effective.

Review Modeling Outputs, Inputs, and Conclusions

- SAS has sent a preliminary ICI wood boiler inventory to the MC to facilitate collaboration on the inventory.
- Will arrange a joint SAS/MC call to discuss the results.
- SAS providing results of building-related NOx inventory to the MC and will arrange a joint SAS/MC if needed.

Office of Air Quality Planning and Standards (OAQPS) Engagement



- The SAS Committee has shared the RACT SIP/Control Measure Tool and state information on cost-effectiveness with EPA.
- Plan to share additional sector analyses with EPA as appropriate (ICI wood boiler, natural gas boiler, other).

Discussion/Coordination Between Committees

- Developing a list of top control strategies.
- Continue discussion with MANEVU TSC on wintertime contributions to nitrates (ICI wood boilers, buildings, other).
- Working with the Modeling Committee to assess ozone season impacts from ICI wood boiler emissions.
- Coordinate on the inventory and impact of urban VOCs.
 - Area sources solvents are the greatest contributor to VOCs in the OTR.
- Identify opportunities for improvements in emissions estimation methodology.

Additional Focus Areas: Building-Related Emissions

- OTC-NESCAUM conducted a pilot analysis in 2021 for Connecticut that evaluated the potential to reduce NOx emissions from electrification of residential space and water heating appliances.
- This year, the analysis was expanded to all the OTC jurisdictions.
- The SAS Committee has completed reviewing the draft report.
- The directors were briefed on the preliminary results.
- Publication is anticipated this summer.

Questions?