

OTC SAS Committee Update

OTC/MANE-VU Stakeholders Meeting

September 21, 2022

Stationary and Area Sources Committee

Chair, Frank Steitz, New Jersey DEP



OZONE TRANSPORT COMMISSION

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

Assessing Source Emissions Inventory

SAS 2022 Charge:

- Develop a list of top control strategies at either the regional or localized levels to meet ozone attainment, air quality, and regional haze goals.
- Assess area source emissions contribution. Evaluate accuracy of the National Emissions Inventory (NEI) characterization of emissions.
- Identify top sectors of concern and assess approaches to characterize emissions from each source category identified.
- Identify opportunities for improvements in estimation methodology.
- Share information with Air Directors to determine approach with regard to the 2023 NEI and/or the base year emissions inventory associated with any EPA regulatory modeling efforts.

Assessing Source Emissions Inventory (continued)

Next steps:

- Quality of emission inventory to be evaluated:
 - MARAMA staff assessing inventory data quality for VOC and NOx source sectors.
 - OTC/NESCAUM staff identifying top area source contributors from the modeling committee.
 - SAS/MARAMA comparing modeling outputs with inventory sector emissions.
- Assess inventory on the following:
 - Quality of emission estimates of source inventory.
 - Possible sectors where inventory should be assessed: solvents, stationary reciprocating engines.
- Develop list of top control strategies at either the regional or localized levels to meet ozone attainment, air quality, and regional haze goals.

Provide Technical Support on Individual Sectors

SAS 2022 Charge:

- Evaluate industrial, commercial, and institutional (ICI) Wood Boiler sector:
 - Develop a refined emissions inventory;
 - Compare refined emissions inventory with the NEI;
 - Collaborate with the MC to assess ozone season impacts from NO_x and VOCs in the refined inventory;
- Review emission control options for NO_x and VOCs; and
- Document sector impacts and provide potential recommendations to Air Directors on control options/costs.
- Collaborate with the MANE-VU TSC, OTC MC, and OTC MSC to evaluate wintertime contributions to nitrates.

Technical Support on Individual Sectors (Continued)

Status and next steps:

- An ICI wood boiler inventory is in process. The contractor is developing an inventory of units and emissions inside and outside the OTR.
- Inventory developed from regulatory and industry databases, augmented with first-hand knowledge of the industry.
- SAS ICI boiler workgroup will review and present to full SAS in the fall.



Supporting RACT SIP

SAS 2022 Charge:

- Finalize RACT Tool - searchable database of state RACT standards including data from state RACT analysis, control strategies, regulatory limits, and cost-effectiveness.
- Develop OTC recommendations for cost-effectiveness thresholds for presumptive and case-by-case basis RACT.
- Evaluate development of expanded module allowing for comparison of control approaches.

Status and next steps:

- RACT cost-effectiveness data has been gathered from states and low, average, and high values have been compiled.
- The RACT SIP tool (v1) is undergoing final review and work is beginning on v2 .
- The SAS Committee will share the RACT Tool (including the cost-effectiveness data) with EPA once finalized.

Supporting RACT SIP (continued)

Next Steps on RACT SIP V2 Tool:

V2 would allow SAS to estimate emissions reductions from control measures for different sectors.

- For example, the MWC module of the RACT tool would include OTR MWC unit emissions and allow the user to apply different levels of control to the units.
- The tool would provide potential NO_x emission reduction estimates from source categories to assess different policies.
- SAS will be soliciting input from the Air Directors and other OTC committees on how to modify the Tool.

Review Modeling Outputs, Inputs, and Conclusions

SAS 2022 Charge:

- Episodic modeling – review findings from episodic modeling work, including sensitivity analysis, and where applicable use these results to inform SAS work.
- ICI wood boiler impacts – provide refined ICI wood boiler inventory information to the Modeling Committee and discuss a potential modeling assessment.

Status and next steps:

- The SAS Committee is working with the MC on modeling of municipal waste combustors, area sources such as solvents, urban VOCs, and ICI wood boilers.

Office of Air Quality Planning and Standards (OAQPS) Engagement



SAS 2022 Charge:

- Continue to exchange information on areas of mutual interest, including municipal waste combustors, ICI wood boilers, the OTC RACT Tool, offshore wind permitting, tank farms, and federal ozone rule updates, as identified by SAS and EPA OAQPS. Report progress to Air Directors each month.
- Identify opportunities to work with EPA's Emissions Inventory Analysis Group to assess and improve the 2023 NEI.

Status and next steps:

- Shared MWC work product from the 2021 Charge with OAQPS staff.
- MWCs were subsequently included in EPA's Transport Rule as a potential area of future control. SAS will follow implementation of final rule and provide input when needed.
- Share the RACT tool and state information on cost-effectiveness with EPA.

Summary

- Continue to identify top emission reduction strategies for stationary sources.
- Wood-fired ICI Boilers identified as the next sector for evaluation and detailed inventory/analysis work is underway.
- Finalize RACT SIP Tool v1 and distribute.
- Start development of RACT SIP Tool v2.
- Working with MC on episodic modeling, urban VOCs, MWCs, and Wood ICI.
- Ongoing engagement with OAQPS.