

OTC SAS Committee Update

OTC and MANE-VU Stakeholders' Meeting

April 14, 2022

Stationary and Area Sources Committee

Chair, Frank Steitz, New Jersey DEP



OZONE TRANSPORT COMMISSION

Presentation Overview

SAS 2021 Charge

- ✓ Assessing Source Emissions Inventory
- ✓ Provide Technical Support on Individual Sectors
- ✓ Supporting RACT SIP
- ✓ Review Modeling Output
- ✓ Office of Air Quality Planning and Standards (OAQPS) Engagement

June 2021 OTC Resolution

- ✓ Municipal Waste Combustors (MWC)

Additional Focus Areas

- ✓ Cross Committee Workgroup on Inventory
- ✓ Building Related NOX Emissions

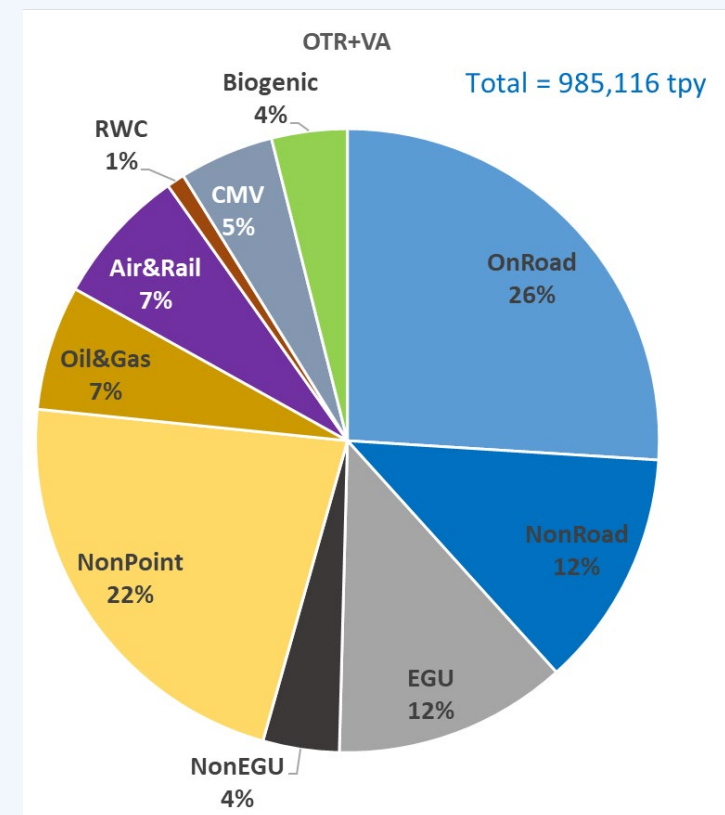
Assessing Source Emissions Inventory

SAS 2021 Charge:

- Review NO_x and VOC inventory for major and area sources and determine which sector(s) to evaluate for additional emission controls.
- Consider ozone and non-ozone season emissions and develop a ranked list of NO_x and VOC contributors.
- Consider emission sources in the OTR.

Status:

- The Workgroup ranked emissions for NO_x and VOC based on NEI and other data.



OTR + VA NO_x 2023 projected Inventory

Provide Technical Support on Individual Sectors

SAS 2021 Charge:

Following the inventory assessment, select sector to evaluate in a manner similar to that used for MWCs.

- Unit and emissions inventory;
- Review technologies for additional control;
- Analysis of potential emissions reductions;
- Recommendation on control level.
- Consider daily, ozone season, and yearly limits.



Status:

- ICI wood boilers are the third highest contributor to NOx emissions of ICI boilers.*
- An ICI wood boiler workgroup has been formed.
- A contractor has been hired to develop an inventory of units in the OTR.

*on an annual basis, the first and second highest contributors are commercial/institutional gas boilers and industrial gas boilers, and respectively

Supporting RACT SIP

SAS 2021 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:

- RACT cost-effectiveness data has been gathered from states and low, average, and high values have been compiled.
- SAS is adding information to the cost-effectiveness table to make it as comparable as possible from state to state.
- We will send the cost-effectiveness data to the Directors in May.

Review Episodic and Other Modeling Outputs

SAS 2021 Charge:

- SAS will continue collaborative effort to evaluate the Modeling Committee's modeling outputs and conclusions.
- The approach, inputs, and assumptions for episodic modeling were developed jointly by SAS and the Modeling Committee in 2020 and the outputs will be reviewed and presented to the Air Directors by December 31, 2021.

Status:

- SAS and MC held joint calls on tagging.
- A Director briefing followed on tagging to meet the SAS Charge requirement.
- In addition, a joint SAS and Modeling Committee meeting on the impact of VOC emissions in NYC was held.

Office of Air Quality Planning and Standards (OAQPS) Engagement



SAS 2021 Charge:

- Exchange information on areas of mutual interest, such as MWCs and other sectors;
- Continue a dialogue on the feasibility of national action in targeted areas and coordinate on topics, including offshore wind, tank farms, and EPA ozone rule updates.

Status:

- SAS Committee held a call with OAQPS and OAR on 10-14-21 to discuss RACT SIP.
- Agreed to share the RACT tool and state information on cost-effectiveness with EPA.
- An additional call was held with OAQPS in April on off-shore wind permitting.

Municipal Waste Combustors (MWC)

June 2021 OTC Resolution on MWCs instructs OTC to:

- Conduct MWC stakeholder outreach on the MWC report and MOU process; and
- Develop Memorandum of Understanding on MWCs.

State	Number of Large Units*	Number of Small Units	Annual Tons of NOx Emissions - Large Units (2018)	Annual Tons of NOx Emissions - Small Units (2018)
Connecticut	12	0	2,169	0
Maine	4	2	670	278
Maryland	6	0	1,435	0
Massachusetts	11	6	4,754	173
New Hampshire	2	0	344	0
New Jersey	11	0	2,044	0
New York	18	5	3,999	456
Pennsylvania	19	0	3,531	0
Virginia	7	0	2,276	0
Total	90	13	21,221	906

MWC Inventory of OTR MWC Units and Annual NOx Emissions – Updated Based on Stakeholder Input March 2022 8

*Large units combust 250 tons or more of refuse a day

Municipal Waste Combustors (continued)

Status:

- The MWC Workgroup held three stakeholder web meetings.
- Meeting presentations are posted on the OTC website.
- The Workgroup compiled comments received on the MWC report and OTC responses.
- Comment document posted on the OTC website.
- Industry, environmental groups, local residents, community groups, and others commented on a range of topics including:
 - MWC characteristics listed in the report such as unit capacity;
 - MWC emissions;
 - Technology and cost assumptions; and
 - The need for further reductions from MWCs.

Municipal Waste Combustors (continued)

- The Workgroup revised the MWC report based on stakeholder comments received. The updated version is being reviewed by the OTC Stationary and Area Sources Committee and will be posted on the OTC website within a month.
- The Workgroup has drafted an MWC MOU for the June Commissioners' meeting.
 - OTC plans to post the MOU at the end of May

Additional Focus Areas

Cross-Committee Workgroup on Inventory

- SAS Committee members participated on a joint Modeling Committee, Mobile Sources Committee, MANE-VU TSC, MARAMA, and NACAA workgroup to provide recommendations on inventories.
- There was considerable information exchange among states.
- The effort may improve state review of data for inventories.
- Recommendations were submitted by individual states to EPA in December 2021.

Additional Focus Areas (continued)

Building Related NOx Emissions

- The SAS Committee will review an analysis of the potential to reduce NOx emissions from switching residential heating systems from fossil fuels to heat pumps in the OTR.
- Review will take place in May.
- The SAS Committee heard a presentation from the Regulatory Assistance Project on a potential hot water heater model rule.

Summary of SAS Committee Activities

- SAS completed its MWC stakeholder process and drafted an MOU that is being reviewed by air directors.
- SAS completed its inventory analysis of top NOx and VOC contributors.
- SAS identified wood boilers as the next sector to evaluate and has begun work on this sector.
- SAS held joint meetings with the Modeling Committee.
- SAS compiled RACT cost-effectiveness data and is preparing to send the information to the air directors.

Questions?

