OTC SAS Committee Update OTC/MANEVU Annual Meeting June 11, 2025

Stationary and Area Sources Committee

Chair, Frank Steitz, New Jersey DEP



OZONE TRANSPORT COMMISSION

Presentation Overview

SAS 2024 Charge

- ✓ Assessing Source Emissions Inventory
- ✓ Provide Technical Support on Individual Sectors
- ✓ Cross-Committee Collaboration
- ✓ EPA 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.

Review SAS 2025 Charge

Assess Source Emissions Inventory

Update:

- The EGU natural gas and fuel oil turbine workgroup continued work requested by SAS.
- The **heat pump application workgroup** expanded to include units 5-50 MMBtu/hr in addition to targeting those <5 MMBtu/hr for applications.
- The workgroups have both met bi-weekly since inception to work on the inventory.

Assess Source Emissions Inventory (continued)

Update on the EGU natural gas and fuel oil turbine workgroup:

- The workgroup assembled a baseline inventory from several sources:
 - 2020 National Emissions Inventory (NEI)
 - Energy Information Administration (EIA)
 - Clean Air Markets Program Database (CAMPD)
 - additional state permit information
- The workgroup grouped the data by source type, unit size, ozone season, technology type and whether units have current NOx controls.
 - The goal is to determine units that are candidates for control measure recommendations.
- A comparison of technologically feasible applications of SCR or Water Injection to units without existing controls and the impact on ozone season NOx is underway.
- A report with recommendations for SAS to review is currently in preparation.

Technical Support on Sectors: Heat Pump Applications

Update on heat pump applications for <50 MMBtu/hr:

- The workgroup is refining the boiler inventory into segments that are less than 5
 MMBtu/hr and between 5 and 50 MMBtu/hr. This includes sorting and categorizing
 units with missing information.
- An intern is preparing a document of existing heat pump implementation examples.
- Next steps include sorting the size-specific inventories by industry and comparing with examples to determine suitable application.

State	Permit No.	Facility	Description_ID	Design Capacity (MMBtu/hr)	Fuel Type	SCC	SCC Sector	SCC Fuel
ME	A-000051	MCI INTERNATIONAL LLC	BOILER #1	2.6	Distillate Oil	10300501	Commercial/ Institutional: Boilers Dis	stillate Oil
ME	A-000051	MCI INTERNATIONAL LLC	BOILER #2	2.6	Distillate Oil	10300501	Commercial/ Institutional: Boilers Dis	stillate Oil
ME	A-000057	MAINEHEALTH	BOILER 1	5.1	Distillate Oil	10300501	Commercial/ Institutional: Boilers Dis	stillate Oil
ME	A-000057	MAINEHEALTH	BOILER 1	5.1	Natural Gas	10300603	Commercial/ Institutional: Boilers N a	ntural Gas

Technical Support on Sectors: Heat Pump Space Heaters

- A joint OTC/NESCAUM report was developed to quantify costs of transitioning from inefficient electric and fossil fuel-fired space heaters to heat pumps.
- Provides equipment, installation, and operating cost comparison for:
 - Heat pump vs. oil, methane, propane, and electric resistance space heaters.
 - Spreadsheet calculator like the water heater spreadsheet has been developed.
 - Report was reviewed by the SAS Committee.
 - <u>Final report</u> was posted on the OTC website in October.

Heat Pumps in the Northeast and Mid-Atlantic: Costs and Market Trends



Cross Committee Collaboration

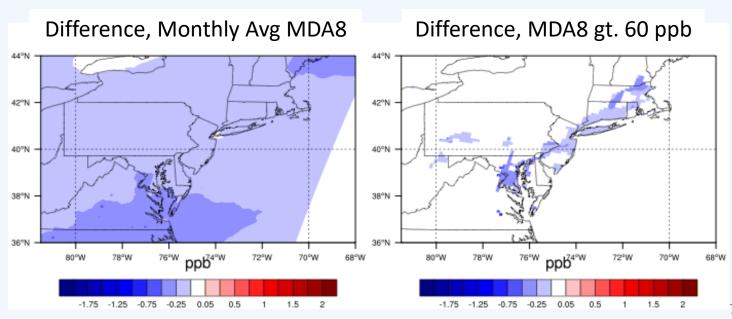
Update/Next Steps:

- Coordinating with Modeling Committee on:
 - ICI wood boiler screening modeling was presented to the SAS Committee and feedback suggests tabling this sector for additional analysis.
 - EGU natural gas and fuel oil turbine information will be shared with the MC when available.

Heat pump applications <50 MMBtu/hr information will be shared with the MC

when available.

Removing ICI Wood Boilers would lead to small decreases in MDA8 ozone concentrations



Office of Air Quality Planning and Standards (OAQPS) Engagement



Update:

- Held a workshop on October 7th with OAQPS and OAR to provide information to EPA on state regulatory options for cost-effective water and space heating that may also reduce building-related NOx emissions.
 - MDE, SCAQMD, and BAAQMD presented on zero emission water and space heating standards.
 - NESCAUM/OTC presented on technical and cost analyses.
 - MA presented on Clean Heat Standard.

Municipal Waste Combustors

Update:

- On January 23rd, 2024, EPA solicited comments on Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors Voluntary Remand Response and 5-Year Review.
- OTC SAS submitted <u>comments</u> to EPA on March 25, 2024 including the OTC Municipal Waste Combustors NO_x emissions <u>report</u>.
- EPA subsequently reopened the comment period on January 16th, 2025 requesting:
 - "additional information and documentation on verifiable historic pollutant emission concentration information (e.g., stack test reports, waste characterization reports and continuous emission monitor records) for the industry so that we can further assess the proposed maximum achievable control technology ("MACT") requirements, including operation of the control technologies over time."
- OTC plans on resubmitting white paper along with any new stack test information available from recent tests.
- The committee will coordinate with MANEVU TSC on their comment letter focusing on pollutants contributing to regional haze and visibility.

2025 SAS Charge Items

Four key focus areas:

- Assess source emissions inventory
- Provide technical support for individual sectors
- Cross-committee collaboration
- Engage with EPA on SAS issues





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Recap on OTC Model Rules

- Posted the consumer products model rule edits (based on stakeholder feedback):
 - Administrative and formatting updates: added dates, cleaned up rules, and reposted CP Phase I, II, III, and IV.
 - Clarified that "Sealant or Caulking Compound" does not include pipe thread sealants or pipe joint compounds.
- Posted the adhesives model rule edits:
 - Clarified that compliance for low solids adhesives is demonstrated utilizing a different formula than other adhesives.
- Discussed the Consumer Product Phase V model rule with Colorado.
 - Colorado has adopted the rule as a contingency measure for a 2027 ozone attainment date and is considering amending it to implement earlier as RACM, not contingency. The rule is different than the OTC model, such as exempting lubricants based on industry comments.