

OTC Mobile Sources Committee Overview

Fall Stakeholder Meeting

October 9, 2026

Mobile Sources Committee

Chair, Paul Farrell, CT Department of Energy and Environmental Protection



OZONE TRANSPORT COMMISSION

Presentation Overview

Mobile Sources Committee (MSC) 2026-27 Charge

- ✓ **Light-, Medium-, and Heavy-Duty Vehicle Emissions Standards**
 - Provide information on the proposed emissions standards, emissions impacts, and other proposed program elements and engage with EPA as needed,
 - Identify potential state regulatory options to reduce emissions from new light-, medium-, and heavy-duty vehicles, and
 - Provide technical and policy analysis to the OTC to support comment development on EPA proposed actions related to mobile sources.
- ✓ **In-Use Vehicle Emission Programs**
 - Identify and explore opportunities for potential new and innovative state regulatory options to reduce emissions from the mobile sources sector, including but not limited to OBD IM programs, anti-tampering programs, and indirect source programs.
- ✓ **Cross-committee coordination**
 - Identify and share with the Modeling Committee (MC), Stationary and Area Sources (SAS) Committee, and MANE-VU Technical Services Committee (TSC) a list of top strategies to achieve air quality goals, and
 - Coordinate with the MC to ensure ozone modeling scenarios reflect current federal rules for mobile sources.
- ✓ **Provide technical and policy support where needed, as resources allow**
 - Continued dialogue with EPA on incorporating tampering into MOVES and establishing SIP credit for state anti-tampering programs, and
 - Other issues identified by the OTC directors.

Light-, Medium-, and Heavy-Duty Emissions Standards

Manufacturers of Emissions Controls Association (MECA) Update on Industry Ability to Meet EPA Tier 4 Light Duty Emissions Standards

- Auto manufacturers are well-positioned to meet EPA's non-methane organic gas (NMOG) + nitrogen oxides (NOx) and particulate matter (PM) standards
- Gasoline particulate filters operate over all driving conditions for the entire life of a vehicle for about \$200
- MECA members are working with auto manufacturers to deploy gasoline particulate filters on 32 additional models for model year (MY) 2027
- Over 212 models already report certification levels below the 2032 limit of 15 milligrams per mile, and the same technologies can be deployed across the remaining fleet
- MECA members are working with auto manufacturers on NMOG + NOx certification targets of 10 milligrams per mile

Light-, Medium-, and Heavy-Duty Emissions Standards

Joint OTC/NESCAUM Letter on Proposed Revision of Tier 4 Emissions Standards

- On May 14, the EPA proposed the first part of a two-part rulemaking
- Part 1 proposed to adjust the implementation timeline from MY 2027 to MY 2029 for the Tier 4 criteria pollutant standards for light- and medium-duty vehicles
 - To allow EPA time to “reconsider the longer-term Tier 4 standards in a future Part 2 rulemaking where EPA will address potential updates to Tier 4 standards and related program elements.”
- On July 6, OTC/NESCAUM submitted a joint comment letter to EPA
 - OTC/NESCAUM opposed the EPA proposal asserting the Tier 4 standards are technologically feasible and delaying their implementation will increase emissions of NO_x, PM_{2.5}, volatile organic compounds (VOC)s, and air toxics
 - Increased emissions from the mobile sector will make it even more difficult for states in the OTR to attain the ozone National Ambient Air Quality Standards (NAAQS) and protect public health

Light-, Medium-, and Heavy-Duty Emissions Standards

Joint NESCAUM/OTC Letter on EPA Heavy Duty Vehicle NOx Rule

- On July 14, the EPA proposed amendments and nonconformance penalties for MY 2027 and later heavy-duty highway engines and vehicles, that would:
 - Postpone MY 2027 useful regulatory life requirements until MY 2030,
 - Remove extended warranty requirements for emissions control equipment,
 - Replace inducement provisions for selective catalytic reduction systems that use diesel exhaust fluid, and
 - Introduce nonconformance penalties for manufacturers, intended to be a “temporary bridge” to compliance.
- On August 28, OTC/NESCAUM submitted a joint comment letter to EPA
 - OTC/NESCAUM opposed the EPA proposal on the basis it will increase emissions of NOx and PM_{2.5} from heavy-duty vehicles, which already have an outsized impact on emissions in the OTR, and
 - Increased NOx emissions will hinder states efforts in the OTR to attain the ozone NAAQS and worsen public health across the country.

Mobile Source Modeling Project Overview

- NESCAUM is working with a contractor to model how proposed federal rollback of mobile source control programs will affect ozone attainment, regional haze planning and other air quality mitigation programs
- Deliverables:
 - Emissions Impact Workbooks for each state
 - Summary of baseline emissions by county, the changes from four individual rule rollbacks, and the cumulative impact
 - 2-page Fact Sheet for each state
 - Meeting(s) to discuss findings with each state
 - Air Quality Modeling Files consistent with 2022v2 platform
 - SMOKE-ready MOVES emission rate tables
 - SMOKE-ready vehicle activity files
 - Counterfactual and one Cumulative Rollback Scenario

Emissions Impact Workbooks

- Focus on limited pollutants CO_{2e}, NO_x, PM_{2.5}, VOC, SO₂, and NH₃
- Annual emissions for all years 2022 to 2040 (with some interpolation)
- Latest version of MOVES (MOVES5) at the County Scale resolution
- MOVES will be run in Inventory Mode
- Emissions for representative counties from NESCAUM states
- Apportionment factors to expand emissions from these representative counties to cover the entire state
- Baseline and four modeling scenarios, with deltas, and cumulative impact summarized

Emissions Impact Workbook Modeling Scenarios

- **Baseline (Counterfactual): Assumes previously adopted policies remain in effect**
 - Assumes all existing state and federal vehicle regulations remain in effect as originally adopted
 - Serves as reference case for measuring emissions changes in all other scenarios
- **Scenario 1: CA Clean Vehicle Standards Rollback (CAA Section 209 Waiver Recission)**
 - Removes ACCII, ACT, and HDO rules in CA and CAA section 177 states
 - Reverts affected states to federal vehicle standards
- **Scenario 2: Scenario 1 + Federal Phase 3 HDV GHG Standards Rollback**
 - Adds anticipated changes to EPA's 2027 Phase 3 GHG standards for HDVs
 - Measures combined impact of removing CA clean vehicle standards and EPA's 2027 HDV GHG standards
- **Scenario 3: Scenario 2 + Federal LDV/MDV Multi-Pollutant Standards Rollback**
 - Adds anticipated changes to EPA's 2027 multi-pollutant standards for LDVs and MDVs
 - Measures cumulative impact across all major vehicle classes
- **Scenario 4: Scenario 3 + Federal Vehicle GHG Program Repeal (MY2012+)**
 - Adds repeal of EPA's GHG standards for LDVs, MDVs, HDVs beginning with MY2012
 - Evaluates a return to pre-2012 era for GHG (i.e., no federal vehicle GHG standards)

Note: Scenarios are cumulative; each includes all changes from previous scenario.

In-Use Vehicle Emission Programs

MECA presented to MSC on tampering and defeat device technology

Aftermarket Catalytic Converter Sales

- EPA Compliant Converters
 - Sales have declined by 49% since 2015
 - Sales have decline by 37% since 2020
- CARB Compliant Converters
 - Sales have declined by 74% since 2013
 - Sales have declined by 53% since 2020
- Three Significant Factors
 - Original equipment manufacturers converters overwhelmingly last the lifetime of the vehicle
 - Annual average replacement rate of 0.6% of the entire in-use fleet
 - Foreign dumping of non-compliant aftermarket converters
 - Increasing sales of tampering devices

In-Use Vehicle Emission Programs

MSC to examine how information from MECA can inform state inspection and maintenance programs

- Better awareness and tools to perform careful inspection of downstream oxygen (O₂) sensors, welds on catalytic converters
- Consumer awareness stressing compliant aftermarket catalytic converter suppliers and legal repairs
- Advocate with on-line retailers to remove videos and advertising of illegal products

Cross Committee Coordination

- The leadership of the MSC and MC continue to coordinate to ensure the outputs of the regulatory rollback emissions modeling allow for ozone modeling in the OTR, include SMOKE-ready files for 2031, 2032, and 2038
- The MSC will continue to coordinate with the MC, as needed

Summary and Discussion

Light-, Medium-, and Heavy-Duty Emissions Standards

- Tier 4 Emissions Standards Technology Feasibility Update
- [Joint OTC/NESCAUM Comment Letter on Proposed Revision of Tier 4 Standards](#)
- [Joint OTC/NESCAUM Comment Letter on EPA HDV NOx Rule](#)
- Emissions Modeling of Federal Regulatory Rollbacks

In-Use Vehicle Emission Programs

- Tampering and Defeat Device Technology Presentation

Cross Committee Collaboration

- Emissions Modeling of Federal Regulatory Rollbacks

Provide Technical and Policy Support Where Needed

Thank you!

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