

# OTC Mobile Sources Committee Overview

## OTC/MANEVU Commissioners' Meeting

### June 13, 2024

## Mobile Sources Committee

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



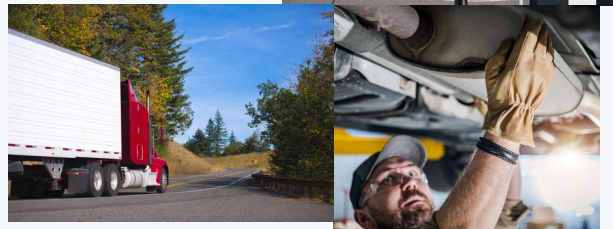
OZONE TRANSPORT COMMISSION

1

## Presentation Overview

### MSC 2023 Charge

- ✓ Medium- and heavy-duty truck NOx.
- ✓ Tampering and aftermarket catalyts.
- ✓ Cross-committee coordination.
- ✓ Provide technical and policy support where needed.



2

## Medium and Heavy-Duty Trucks

### Update on Activities:

- Eastern Research Group is on contract to conduct a cost benefit analysis of MHD diesel truck OBD-based inspection and maintenance:
  - Estimate the NO<sub>x</sub> and PM<sub>2.5</sub> emissions benefit of MHD OBD-based inspection and maintenance programs;
  - Incorporate data into MOVES and run the MOVES model to estimate changes in the inventory;
  - Monetize the health benefits associated with the reductions;
  - Estimate truck repair costs;
  - The study evaluated the Rhode Island IM program only;
  - ERG will present the draft finding to the MSC in August.

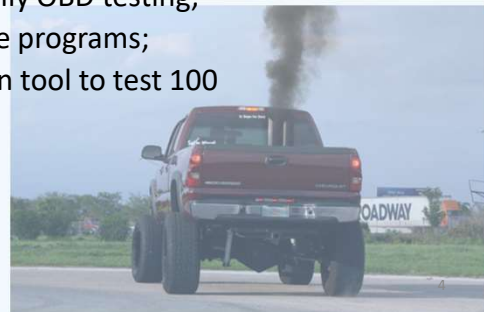
3

3

## Tampering Update

### Update:

- EPA presented results of a pilot to evaluate on-board diagnostic (OBD) based tampering detection tools to the MSC:
  - 30% of heavy-duty trucks evaluated had tampered emission control systems.
  - Not a representative sample of fleet.
- State MHD OBD-based programs:
  - MA and DE conducting MHD and medium-only OBD testing;
  - Tampering detection is a component of these programs;
  - NJ piloting a commercial tampering detection tool to test 100 HD trucks.

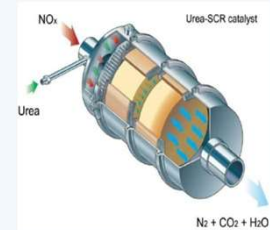


4

## Tampering Update (Continued)

### Update:

- Tampering authority memo:
  - Provides common sense recommendations on how states can improve their authority to enforce against tampering.
    - Allow for heavy-duty vehicle OBD based tools for emissions testing;
    - Include medium- and heavy-duty vehicles in inspection and maintenance programs;
    - Prohibit sale or operation of tampered vehicles.



5

## Tampering Update (Continued)

- The MSC has developed a Tampering Resolution:
  - Commit to working together to strengthen state tampering detection and enforcement programs.
  - Incorporate best practices when updating inspection and maintenance programs.
  - Collaborate with EPA to:
    - Incorporate the emission benefits of MHD OBD-based inspection and maintenance programs into the EPA MOVES model;
    - Evaluate strategies to identify tampered vehicles; and
    - Estimate the incidence of tampered MHD vehicles and excess NOx emissions from tampering.

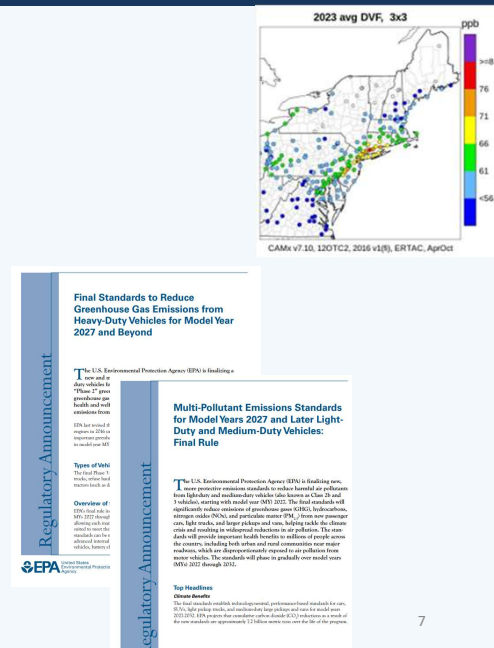
6

6

## Cross Committee Collaboration

### Update

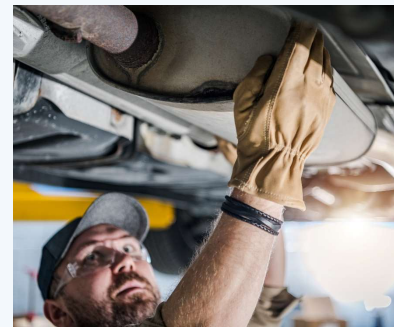
- The MSC sent modeling results of federal and California vehicle regulations to the Modeling Committee.
- Will have a follow-up discussion to discuss how to integrate the modeling results into the air quality models.
- In addition, since the last MSC-MC discussion, two new federal rules have been finalized:
  - EPA's LD/MD multipollutant regulation;
  - EPA's HD Phase 3 GHG regulation;
- May need to discuss updating the MOVES modeling.



7

## As Resources Allow: Aftermarket Catalyst Model Rule Update

- 2014 OTC aftermarket catalyst model rule update:
  - Added definitions;
  - Added provisions NY codified in 2022 on matching CARB certified catalysts to federally certified vehicles;
  - Added specifications on the placement of converters; warranty and record keeping requirements for manufacturers;
  - Disallowed used, recycled, or salvaged catalysts.



8

8

## Aftermarket Catalyst Update (continued)

- Posted on the OTC website with the OTC/MANEVU stakeholder meeting materials;
- Took comments from stakeholders until May 3<sup>rd</sup>.
- The MSC is addressing comments received from stakeholders.

9

9

## As Resources Allow: Biodiesel Emission Factors

- The MSC sent EPA a letter requesting EPA update its models to accurately reflect biodiesel emissions.
  - For 2007+ engines, MOVES assumes biodiesel blends have no impact on emissions.
  - A literature review found engines running on biodiesel blends emit more NO<sub>x</sub> and VOC than engines running on ultra low sulfur diesel.
- OTC asked EPA to disallow federal funding for biodiesel if research shows engines running on biodiesel blends emit more NO<sub>x</sub> than those using ULSD.



10

10

## Summary and Discussion

### **Medium- and Heavy-duty Trucks**

Oversaw a cost benefit analysis of MHD OBD-based IM programs.

### **Anti-Tampering**

Finalized tampering authority memo.

Followed EPA's pilot to evaluate tampering detection tools.

States began conducting tampering detection using OBD-based tools.

Drafted Tampering Resolution.

### **Cross Committee Collaboration**

Coordinating with the Modeling Committee on modeling and NOx reductions from the federal and CA rules.

### **Technical Support on Policy Where Needed**

Requested comment from stakeholders on updated aftermarket catalyst model rule.

Sent a letter to EPA on the need to re-assess biodiesel emissions.



11

11

# Thank you!

## Mobile Sources Committee

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



## OZONE TRANSPORT COMMISSION

12

12