



Department of  
Environmental  
Conservation

## Stakeholder Outreach

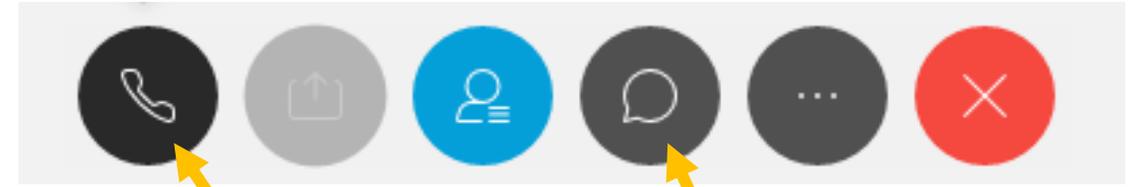
# Consideration to Revise 6 NYCRR Parts 218 and 200 to Incorporate California's Heavy-Duty Low NOx Omnibus and Phase 2 Greenhouse Gas Standards

September 28, 2022

DEC Panelists:

- Scott Wajda-Griffin
- Mitch Tabor
- James Clyne

# Meeting Procedures



- Attendees will be muted upon entry.
- Select audio connection:
  1. **Call Me (PREFERRED):** Provide a telephone number
  2. **Call Using Computer:** Requires microphone connection
  3. **I Will Call In:** Dial 518-549-0500, enter Access # 161 153 2527 and Attendee ID #
- Comments and questions can be sent in the Chat box at any time.
- For technical difficulties, call 518-402-8044.

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Chat box

# Agenda

- History
- Background
- On-going Medium- and Heavy-Duty Vehicle Electrification Efforts
- CA's Heavy-Duty Omnibus Regulation
- CA's Phase 2 Greenhouse Gas Regulation
- Q/A Period

# History of Part 218 – "Emission Standards for Motor Vehicles and Motor Vehicle Engines"

- Section 177 of Clean Air Act
- NY adopted CA mobile source program 1990, revised periodically
- NY adopted CA LEV & ZEV programs 1992
- Adopted CA medium-duty standards 2004 MY
- Adopted CA heavy-duty standards 2005 MY, reverted to federal heavy-duty diesel standards 2008 MY
- Adopted CA passenger vehicle ACC I 2012 – LEV III, ZEV, GHG
- Recent revision, 2021, Advanced Clean Trucks M/HD ZEV standards
- 2022 Proposals: HD Omnibus, P2 GHG, ACC II

# Background

- Ozone National Ambient Air Quality Standards (NAAQS)
  - Oxides of Nitrogen (NO<sub>x</sub>) contribute to ground-level ozone;
  - State Implementation Plan (SIP) commitments
  - EPA recently reclassified the NYMA as “severe” non-attainment
- Climate Leadership & Community Protection Act (CLCPA)
  - 40% greenhouse gas emissions reductions from 1990 levels by 2030
  - 85% greenhouse gas emissions reductions by 2050





# Ongoing NYS Medium- and Heavy-Duty ZEV Activities

# Medium- and Heavy-Duty Zero Emission Vehicle MOU

- 17 states, D.C., and Quebec commit to work to promote rapid and equitable electrification of trucks and buses
- Sets goal for at least 30% of new truck, van, and bus sales to be zero-emission by 2030, and 100% of sales by 2050
- Prioritizes deployment of electric trucks and buses in and near frontline and overburdened communities
- ZEV Task Force developed a Multi-State MHD ZEV Action Plan to identify barriers and recommended policies (e.g., ACT, HD Omnibus) to support widespread MHD vehicle electrification (July 2022)
  - <https://www.nescaum.org/documents/multi-state-medium-and-heavy-duty-zev-action-plan.pdf>



## MULTI-STATE MEDIUM- AND HEAVY-DUTY ZERO EMISSION VEHICLE

### MEMORANDUM OF UNDERSTANDING

WHEREAS, the Signatory States and the District of Columbia<sup>1</sup> recognize the importance of state leadership and coordinated state action to ensure national progress in the effort to reduce greenhouse gas (GHG) emissions and stabilize global warming;

WHEREAS, the Signatory States have statutory obligations or otherwise seek to significantly reduce statewide GHG emissions by 2050, consistent with science-based targets;

WHEREAS, transportation is now the nation's largest source of GHG emissions, and, after light-duty vehicles, medium- and heavy-duty trucks are the next largest source of transportation sector GHG emissions;

WHEREAS, the Signatory States have a statutory obligation to provide their citizens with air quality that complies with national health-based air quality standards, which are required to be protective of health and the environment with an adequate margin of safety;

WHEREAS, fossil fuel related emissions from medium- and heavy-duty vehicles (MHDVs) are a major source of nitrogen oxides (NOx), particulate matter, and toxic air emissions, which are preventing many densely populated areas from achieving compliance with federal ambient air quality standards;

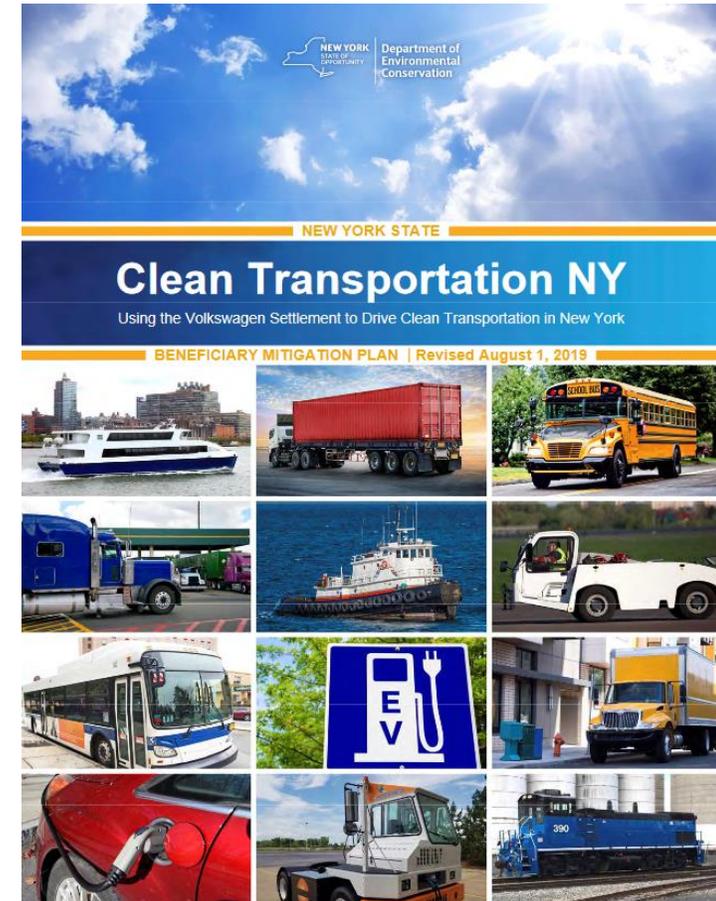
WHEREAS, emissions from MHDVs are a widely acknowledged, but unaddressed, environmental justice problem that directly and disproportionately impacts disadvantaged communities located near freight corridors, ports and distribution centers;

<sup>1</sup> Except where indicated otherwise, "Signatory States," as used in this document, includes the District of Columbia.

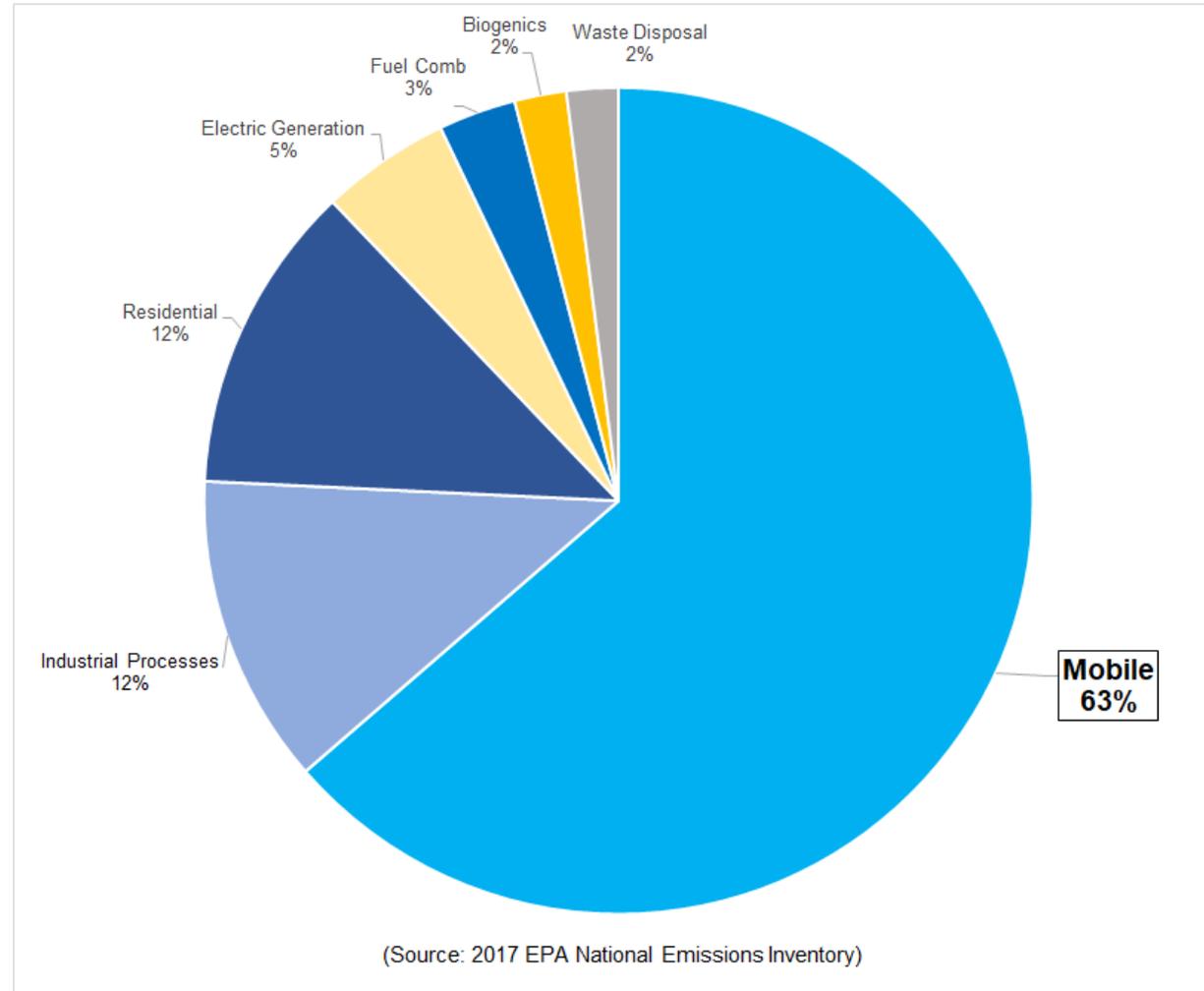


# Volkswagen Settlement

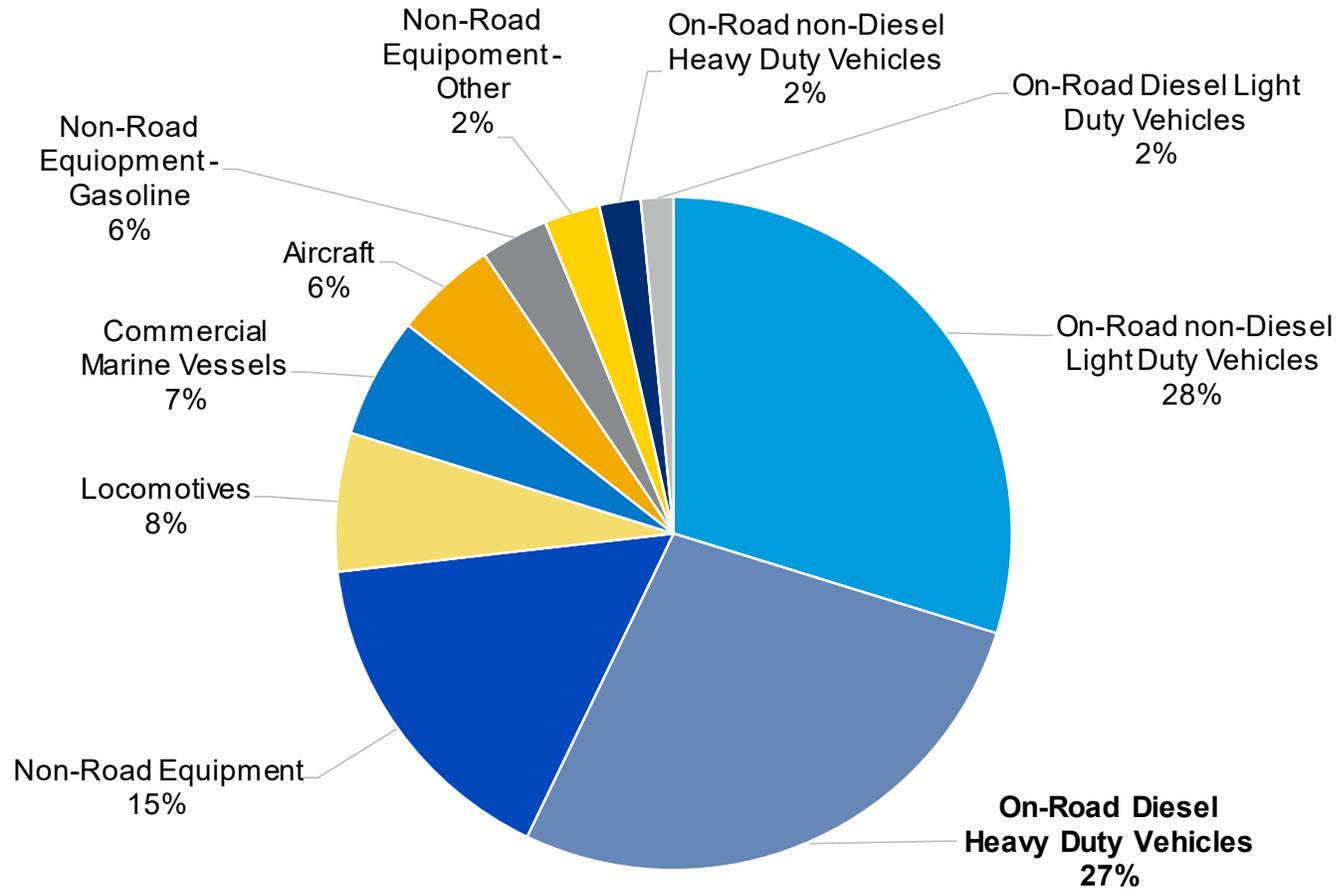
- 85% of NY's \$127.7 million planned for medium- and heavy-duty vehicle projects, emphasis on zero emissions
- Eligible mitigation items with allocated funding include:
  - Class 8 Local Freight & Port Drayage Trucks
    - ❖ NYSERDA New York Truck Voucher Incentive Program (NYVTIP), NYCDOT New York City Clean Trucks Program (NYC CTP)
  - Class 4-8 School Bus, Shuttle Bus, or Transit Bus
    - ❖ NYSERDA NYTVIP, NYPA electric transit bus charging infrastructure
  - Freight Switchers
  - Ferries/Tugs
    - ❖ NYCDOT Staten Island ferry
  - Class 4-7 Local Freight Trucks
    - ❖ NYSERDA NYTVIP, NYCDOT NYC CTP
  - Port Cargo Handling Equipment
    - ❖ NYSERDA NYTVIP
  - Federal Diesel Emission Reduction Act Option
    - ❖ PANYNJ drayage trucks



# 2017 New York State NOx Emissions Inventory



# 2017 New York State NOx Emissions by Transportation Sector

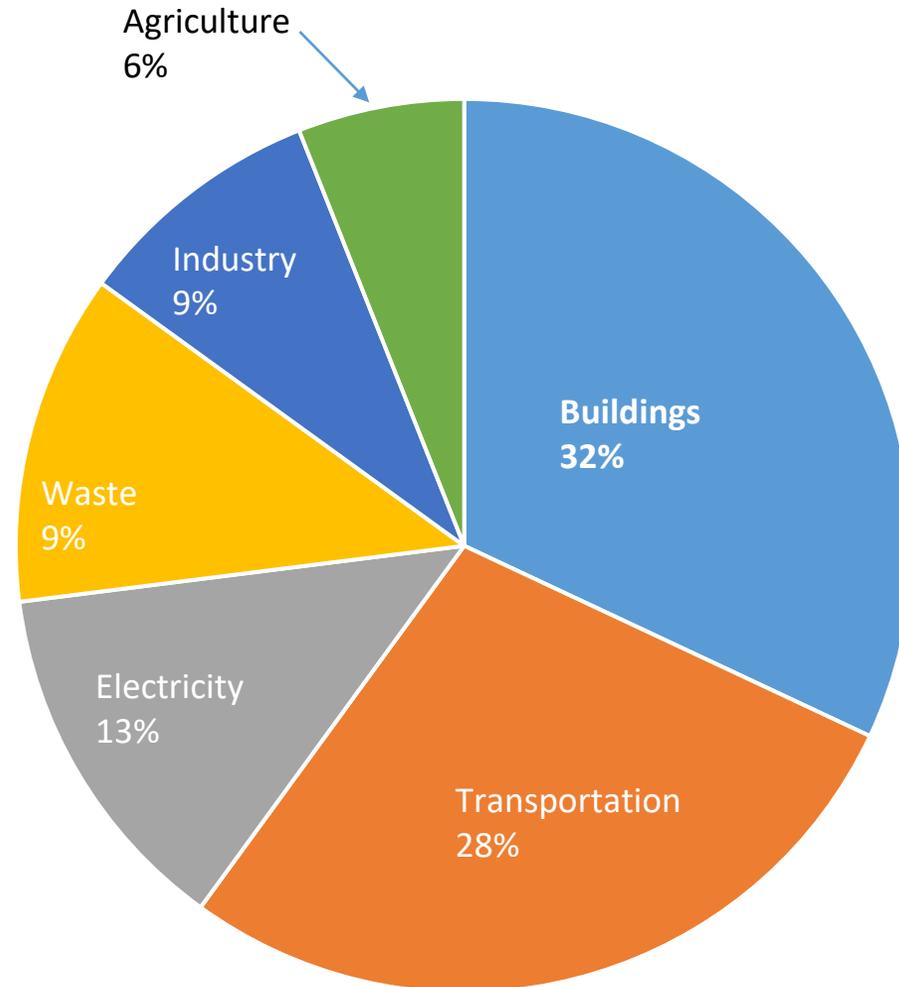


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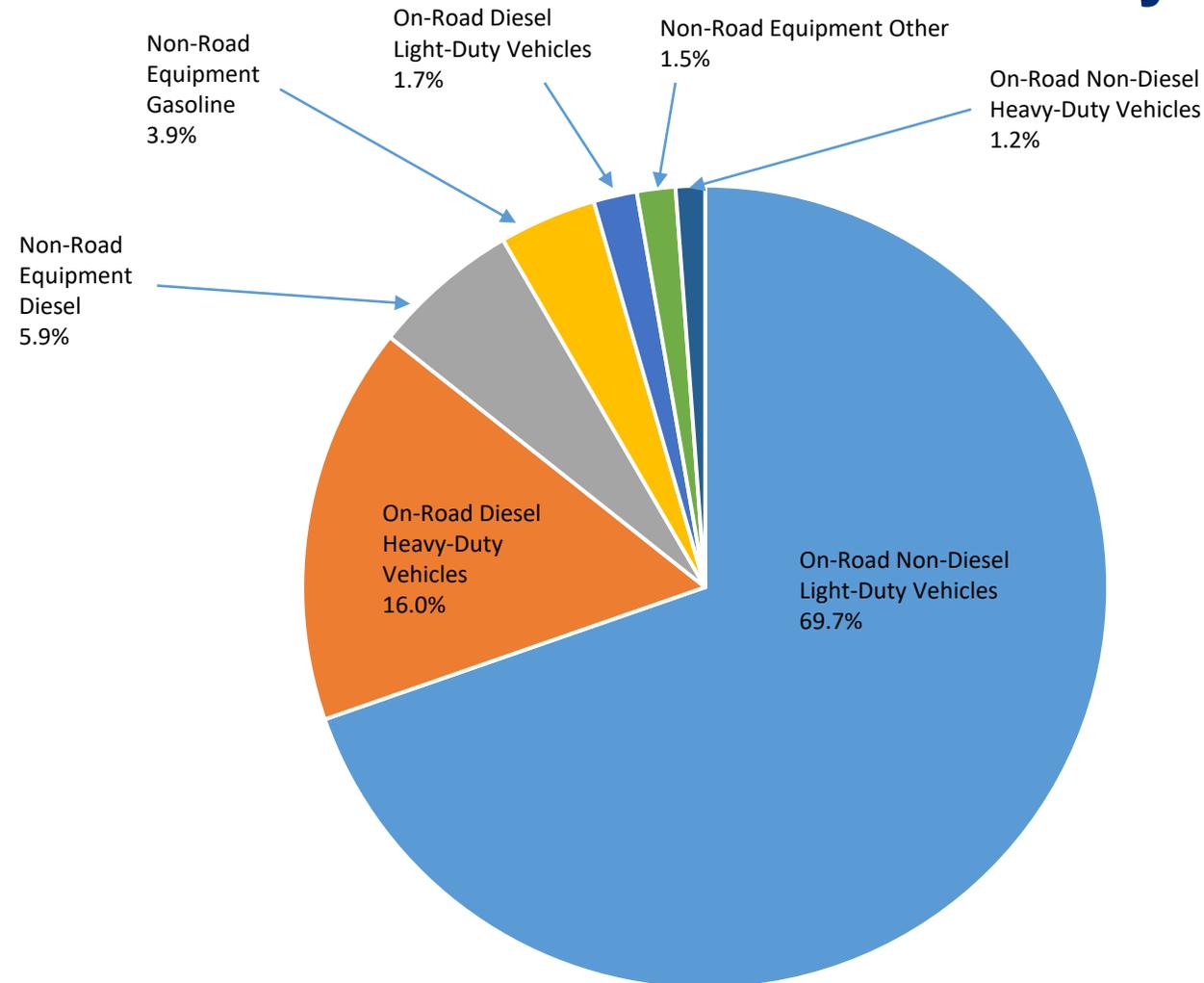
(Source: 2017 EPA National Emissions Inventory)



# New York State GHG Emissions by Sector



# 2017 New York State CO2 Emissions by Transportation Sector



(Source: 2017 EPA National Emissions Inventory)

# California's Heavy-Duty Low NOx Omnibus Regulation

# CA's Heavy-Duty Low NOx Omnibus

- Emission standards
- Additional amendments
  - Heavy-Duty In-Use Test Procedure (HDIUT) Amendments
  - Onboard Diagnostic (OBD) Requirements
  - Warranty Periods and Useful Life Periods
  - Emissions Warranty Information and Reporting (EWIR) and Corrective Action
  - Heavy-Duty Durability Demonstration/Maintenance Schedule
  - Emissions Averaging, Banking, and Trading (ABT) Program
  - Heavy-Duty Hybrid Powertrain Certification Test Procedure



# Emissions Standards

# Emissions Standards

## Omnibus Heavy-duty Diesel- and Otto-Cycle Engine NOx Standards

(MY 2024\* to 2026)

MYs	MDDE/LHDD/MHDD/HHDD				MDOE/HDO
	FTP Cycle (g/bhp-hr)	RMC-SET Cycle (g/bhp-hr)	Low-load Cycle (g/bhp-hr)	Idling (g/hr)	FTP Cycle (g/bhp-hr)
2024-2026	0.050	0.050	0.200	10	0.050

MDDE: Medium-duty diesel engines 10,001-14,000 lbs. GVWR

LHDD: Light heavy-duty diesel engines 14,001-19,500 lbs. GVWR

MHDD: Medium heavy-duty diesel engines 19,501-33,000 lb. GVWR

HHDD: Heavy heavy-duty diesel engines >33,000 lbs. GVWR

MDOE: Medium-duty Otto-cycle engines 10,001-14,000 lbs. GVWR

HDO: Heavy-duty Otto-cycle engines >14,000 lbs. GVWR

RMC-SET: Ramped Modal Cycle Version of the Supplemental Emission Test

FTP: Federal Test Procedure

\*California Omnibus NOx standards would apply to New York State sales of model year 2026 and subsequent heavy-duty engines and vehicles.

# Emissions Standards

## Omnibus Heavy-Duty Diesel and Otto-Cycle Engine NOx Standards

(MY 2027 and Subsequent)

Test Procedure	MDDE/LHDD	MDOE/HDO	HHDD			
	/MHDD		MY2027-2030		MY2031 and Subsequent	
	MY2027 and subsequent	(at Useful Life)	(≤435,000 miles)	(>435,000 miles)	(≤435,000 miles)	(>435,000 miles)
FTP Cycle (g/bhp-hr)	0.020	0.020	0.020	0.035	0.020	0.040
RMC-SET cycle (g/bhp-hr)	0.020	—	0.020	0.035	0.020	0.040



# Emissions Standards

## Omnibus Heavy-Duty Diesel and Otto-Cycle Engine NO<sub>x</sub> Standards

(MY 2027 and Subsequent), cont.

Test Procedure	MDDE/LHDD /MHDD	MDOE/HDO	HHDD			
	MY2027 and subsequent		MY2027-2030		MY2031 and Subsequent	
	(at Useful Life)	(at Useful Life)	(≤435,000 miles)	(>435,000 miles)	(≤435,000 miles)	(>435,000 miles)
Low-load cycle (g/bhp-hr)	0.050	–	0.050	0.090	0.050	0.100
Idling (g/hr)	5 at Useful Life	–	5 at Useful Life	5 at Useful Life	5 at Useful Life	5 at Useful Life



# Emissions Standards

## Omnibus Optional Low NOx Exhaust Emission Standards for 2024 and Subsequent Model

### Heavy-Duty Diesel Engines<sup>A</sup> (g/bhp-hr)

Model Year	Test Procedure	Oxides of Nitrogen	Non-methane Hydrocarbons	Carbon Monoxide	Particulates
2024-2026	FTP and RMC cycles / Low-load cycles	0.020/0.080 or 0.010/0.040	0.14	15.5	0.005
2027 and subsequent	FTP and RMC cycles / Low-load cycle	0.010/0.025	0.14	15.5	0.005

<sup>A</sup>A manufacturer may not include an engine family certified to the optional NOx emission standard in the federal or NY-ABT for NOx but may include it for non-methane hydrocarbons



# Emissions Standards

## Omnibus Optional Low NOx Exhaust Emission Standards for 2024 and Subsequent Model

### Otto-Cycle Heavy-Duty Engines<sup>A</sup> (g/bhp-hr)

Test Procedure	Model Year	Oxides of Nitrogen	Non-methane Hydrocarbons	Carbon Monoxide	Formaldehyde	Particulates
FTP cycle	2024-2026	0.010 and 0.020	0.14	14.4	0.01	0.005
FTP cycle	2027 and Subsequent	0.010	0.14	14.4	0.01	0.005

<sup>A</sup>A manufacturer may not include an engine family certified to the optional NOx emission standard in the federal or NY-ABT for NOx but may include it for non-methane hydrocarbons



# Emissions Standards

- Heavy-duty particulate matter (PM) standard of 0.005 g/bhp-hr
- PM standard would apply to New York State sales of model year (MY) 2026 and subsequent heavy-duty engines and vehicles

# Emissions Standards

- Heavy-Duty Diesel Engines > 525 bhp Limited Exemption
  - Provided for in CA's Heavy-Duty Omnibus for MY 2024-2026
  - Only eligible for manufacturers who had previously certified and sold California-certified engines
  - The number of engines sold through this exemption is limited to 110 percent of the manufacturers' 2018 or 2019 MY New York sales volume, whichever is greater
  - Manufacturers utilizing the exemption are required to meet CARB's pre-2024 MY idling requirement of 30 grams of NOx per hour
  - Note NY's proposed adoption will begin 2026 MY

# Emissions Standards

- Transit Bus Engine Exemption
  - CARB created a diesel engine exemption for transit agencies within the structure of the California Innovative Clean Transit (ICT) regulation
  - New York has not adopted ICT, nor is proposing adoption of ICT
  - New York is proposing an exemption for new diesel-fueled transit buses sold to any New York State transit agency under Section 218-2.1(b)

# Additional Amendments

# Additional Amendments

- Heavy-Duty In-Use Test Procedure (HDIUT) Amendments
  - California's HDIUT program will replace the current Not-To-Exceed (NTE) test procedure with a Three-Bin Moving Average Window (3B-MAW) test procedure beginning with the 2024 and subsequent model year heavy-duty engines
  - 3B-MAW test procedure for diesel engines distinguishes modes of operation according to three bins: idle operation, low load operation (similar to LLC), and medium to high load operation (similar to FTP/RMC-SET)
  - Heavy-duty Otto cycle engines would be evaluated on the FTP cycle only

# Additional Amendments

- Onboard Diagnostic (OBD) Requirements
  - Under the Heavy-Duty Omnibus revisions, CARB included revisions to 13 CCR sections 1968.2 and 1971.1 to NO<sub>x</sub> and PM malfunction criteria and “test-out” criteria to keep these criteria around current levels (i.e., use a NO<sub>x</sub> emission standard of 0.20 g/bhp-hr and a PM standard of 0.01 g/bhp-hr when determining these criteria)
  - California recognized that current OBD systems may not presently have the capability to accurately measure NO<sub>x</sub> emissions at the levels corresponding to the more stringent NO<sub>x</sub> emission standards. The Heavy-Duty Omnibus revisions therefore keep OBD malfunction emission thresholds at today’s levels



# Additional Amendments

- Warranty Periods and Useful Life Periods
  - Amendments apply to diesel, gasoline, and alternative fuel engines as well as engine families used in hybrid vehicle applications
  - Amendments also apply to engines in vehicles that use a California-certified hybrid powertrain
  - Beginning in 2027 MY, any failure that causes the vehicle's OBD MIL to illuminate is considered a warrantable condition
  - Beginning in 2027 MY, warranty coverage would apply to all California-certified vehicles and California-certified engines, regardless of where the vehicle is registered. The California warranty would remain if the vehicle/engine was sold or moved and registered outside of New York State

# Additional Amendments

## Omnibus Warranty Periods

MY	LHDD	MHDD	HHDD	HDO
WARRANTY				
2022-2026*	110,000 miles 5 years	150,000 miles 5 years	350,000 miles 5 years	50,000 miles 5 years
2027-2030	150,000 miles 7 years/ 7,000 hours	220,000 miles 7 years/ 11,000 hours	450,000 miles 7 years/ 22,000 hours	110,000 miles 7 years/ 6,000 hours
2031 and Subsequent	210,000 miles 10 years/ 10,000 hours	280,000 miles 10 years/ 14,000 hours	600,000 miles 10 years/ 30,000 hours	160,000 miles 10 years/ 8,000 hours

\*California Omnibus NOx standards would apply to New York State sales of model year 2026 and subsequent heavy-duty engines and vehicles.



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# Additional Amendments

## Omnibus Useful Life Periods

MY	LHDD	MHDD	HHDD	HDO
USEFUL LIFE				
2024-2026*	110,000 miles 10 years	185,000 miles 10 years	435,000 miles 10 years/ 22,000 hours	110,000 miles 10 years
2027-2030	190,000 miles 12 years	270,000 miles 11 years	600,000 miles 11 years/ 30,000 hours	155,000 miles 12 years
2031 and Subsequent	270,000 miles 15 years	350,000 miles 12 years	800,000 miles 12 years/ 40,000 hours	200,000 miles 15 years

\*California Omnibus NOx standards would apply to New York State sales of model year 2026 and subsequent heavy-duty engines and vehicles.



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# Additional Amendments

- Warranty Periods and Useful Life Periods
  - Amendments also include warranty requirements for heavy-duty hybrid powertrains certified through the optional certification test procedure. In general, the warranty periods for California-certified heavy-duty diesel engines would be applicable to California-certified heavy-duty hybrid powertrains for use in comparable vehicles
  - Amendments include longer useful life periods for heavy-duty engines used in heavy-duty vehicles

# Additional Amendments

- Emissions Warranty Information and Reporting (EWIR) and Corrective Action
  - Amendments include improvements to the effectiveness of the previous EWIR and corrective action program
  - Promotes the identification and correction of emissions control components more expeditiously
  - The need for corrective action relies on warranty failure rates and prevents the use of components that are known to have failure rates that exceed corrective action thresholds in future MYs

# Additional Amendments

## Omnibus Recall Reporting and Corrective Action Thresholds

MYs	Emission Warranty Information Report (EWIR)	Field Inspection Report (FIR)	Emissions Information Report (EIR)	Recall or Corrective Action Threshold
2024 – 2026	1% or 12 Unscreened Claims	4% or 25 Unscreened Claims	4% or 25 Failures	4% or 25 Failures (whichever greater)
2027 – 2030	1% or 12 Unscreened Claims	<u>Years 1-5</u> 4% or 25 Unscreened Claims <u>Years 6-7</u> 5% or 30 Unscreened Claims <u>Years 8-10</u> 7% or 50 Unscreened Claims	<u>Years 1-5</u> 4% or 25 Failures <u>Years 6-7</u> 5% or 35 Failures	<u>Years 1-5</u> 4% or 25 Failures (whichever greater) <u>Years 6-7</u> 5% or 35 Failures (whichever greater)



# Additional Amendments

## Omnibus Recall Reporting and Corrective Action Thresholds, cont.

MYs	Emission Warranty Information Report (EWIR)	Field Inspection Report (FIR)	Emissions Information Report (EIR)	Recall or Corrective Action Threshold
2031 and subsequent	1% or 12 Unscreened Claims	<u>Years 1-5</u> 4% or 25 Unscreened Claims <u>Years 6-7</u> 5% or 35 Unscreened Claims <u>Years 8-10</u> 7% or 50 Unscreened Claims	<u>Years 1-5</u> 4% or 25 Failures <u>Years 6-7</u> 5% or 35 Failures <u>Years 8-10</u> 7% or 50 Failures	<u>Years 1-5</u> 4% or 25 Failures (whichever greater) <u>Years 6-7</u> 5% or 35 Failures (whichever greater) <u>Years 8-10</u> 7% or 50 Failures



# Additional Amendments

- Heavy-Duty Durability Demonstration/Maintenance Schedule
  - Amendments include options to the mileage and service accumulation procedures for durability demonstration
  - Revised scheduled maintenance internal provisions to ensure the effectiveness of the lengthened emission defects warranty for the intended periods

# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - DEC is proposing the development of a New York State dedicated heavy-duty engine ABT (NY-ABT) based on the CA-ABT developed under Heavy-Duty Omnibus
  - It's needed as New York's adoption of Heavy-Duty Omnibus would cause the current federal ABT to no longer accurately account for credits generated in New York State
  - Manufacturers may begin participating in the NY-ABT program for 2022 and subsequent MYs California-certified medium-duty engine families, heavy-duty engine families and optionally certified Otto-cycle hybrid powertrain families

# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - For 2024 and subsequent MYs, all manufacturers that certify products in California must enroll in the NY-ABT program
  - Heavy-duty zero-emission powertrain families can participate in the NY-ABT program
  - Only federal credits generated from 2010 to 2021 MY engines could be transferred into the NY-ABT; credits generated prior to the 2010 MY would not be eligible for transfer
  - Manufacturers that do not begin enrollment in the NY-ABT program in 2022 MY may not transfer any federal-ABT credits into the NY-ABT program

# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - Credits in the NY-ABT bank may only be used for five model years after the year in which they are generated (including transferred federal credits)
  - All NY-ABT calculations must be performed using NY sales volume
  - The number of federal credits eligible for transfer would be limited based on the volume of heavy-duty engine sales a manufacturer has in NY
  - The limit is determined by the percentage of NY engine sales relative to national sales for each averaging set over the preceding three model years (2019-2021)

# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - The NY-ABT program would contain four averaging sets:
    - ❖ Light heavy-duty diesel
    - ❖ Medium heavy-duty diesel
    - ❖ Heavy heavy-duty diesel
    - ❖ Heavy-duty zero-emission
  - Transfer of credits between any averaging sets is prohibited except for the heavy-duty zero-emission averaging set
  - Zero-emission powertrain families with models used in Class 4 through 8 vehicles are eligible to generate NOx and PM credits in the heavy-duty zero-emission averaging set

# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - Zero-emission NOx and PM credits can be banked for use in future model years through 2026 MY
  - Credits generated through the heavy-duty ZEV averaging set can be transferred into any other averaging set
  - Beginning with 2024 MY, zero emission powertrains must be certified through California's Zero-Emission Powertrain Certification program to receive credits

# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - The NY-ABT program for medium-duty and heavy-duty diesel engines and optionally certified diesel hybrid powertrain families will have separate family emissions limits (FELs) for each certification emissions test cycle: FTP, RMC, and LLC for engine families (Vehicle-FTP, Vehicle-RMC, and Vehicle-LLC cycles for optionally certified diesel hybrid powertrain families)
  - Manufacturers that produce and certify engines and optionally certified hybrid powertrains that comply with future model year requirements are, on a voluntary basis, eligible for early compliance credit multipliers



# Additional Amendments

- Emissions Averaging, Banking, and Trading (ABT) Program
  - Early compliance credit multipliers will only be available for 2022 through 2030 MY California certified engine families and optionally certified diesel hybrid powertrains
  - Credits generated from zero-emission powertrain families are not eligible for early compliance credit multipliers
  - Manufacturers must submit end-of-year reports for each engine family, optionally certified diesel hybrid powertrain family, and zero-emission powertrain family participating in the NY-ABT program

# Additional Amendments

- Heavy-Duty Hybrid Powertrain Certification Test Procedure
  - Amendments include changes to the powertrain certification test procedures for heavy-duty hybrid vehicles to provide manufacturers a voluntary option to certify hybrid powertrains to criteria pollutant emission standards
  - Aligns with federal procedures for powertrain testing based on EPA's Phase 2 Greenhouse Gas (GHG) technical amendments for powertrain testing
  - This certification process provides an option for manufacturers of hybrid powertrains to certify their product in addition to the existing heavy-duty engine certification

# California's Phase 2 Greenhouse Gas (GHG) Standards Regulation

# CA Phase 2 GHG

- NY proposes to adopt CA's Phase 2 GHG Standards regulation beginning with 2026 MY heavy-duty engines and vehicles sold in NY
- CA's Phase 2 GHG largely aligns with current federal Phase 2 GHG regulations with a few distinctions
- NYSDEC is excluding the adoption of CA's Phase 2 GHG trailer requirements that apply to trailer manufacturers and trailer owners under this proposed rulemaking

# CA Phase 2 GHG

- Differences between CA's Phase 2 GHG and federal Phase 2 GHG include:
  - CA's Phase 2 GHG regulation no longer includes a "Deemed to Comply" provision as the prior Phase 1 GHG regulation. Applicable medium- and heavy-duty manufacturers are required to submit information directly to CARB for independent verification and certification under CA's Phase 2 GHG regulation
  - CA's Phase 2 GHG regulation includes additional labeling requirements for Class 2b and 3 pick-ups and vans (PUVs)
  - California requires that emission control identifiers (ECIs) be printed on the labels for tractor and vocational vehicles to facilitate visual inspection



# CA Phase 2 GHG

- Continued - Differences between CA's Phase 2 GHG and federal Phase 2 GHG include:
  - CA's Phase 2 GHG regulation requires additional reporting of air conditioning (A/C) system information to support the A/C leakage standard
  - CA's Phase 2 GHG regulation provides low-Global Warming Potential (GWP) refrigerant credits to manufacturers for vehicles with a refrigerant with a GWP of 150 or less in its motor vehicle A/C system
  - CA's Phase 2 GHG regulation has additional requirements for plug-in hybrid electric vehicles (PHEVs) to qualify for federal advanced technology multiplier credit including no increase in NOx emissions and all-electric range requirements

# CA Phase 2 GHG

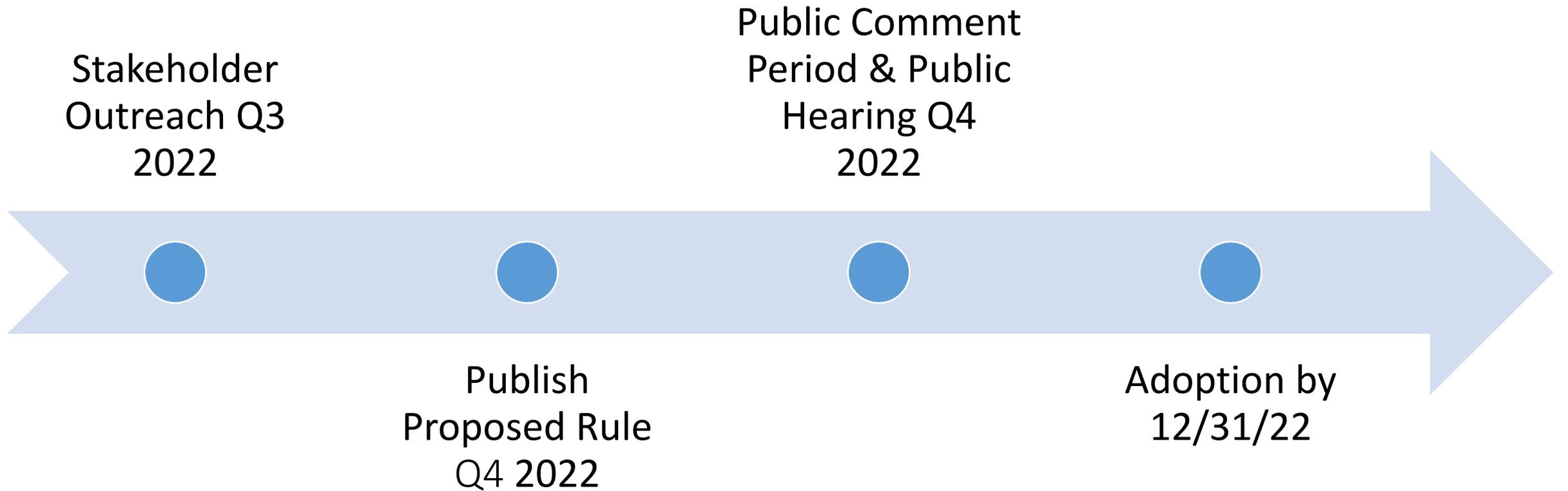
- Continued - Differences between CA's Phase 2 GHG and federal Phase 2 GHG include, cont.:
  - CA's Phase 2 GHG regulation includes an additional compliance option that would allow transit bus manufacturers that certify their NY-sold transit buses with the federal custom chassis standards to produce a certain percentage of the NY-sold zero emission transit buses
  - CA's Phase 2 GHG regulation requires all glider manufacturers, including small manufacturers, to use 2010 MY and newer engines in gliders

# CA Phase 2 GHG

- CA's Phase 2 GHG regulation requires manufacturers, including those producing gliders, to provide engine family information along with vehicle identification for each certified vehicle in the vehicle's end-of-year report
- CA's Phase 2 GHG regulation may require separate credit tracking for NY due to credit provision differences from the federal program:
  - Manufacturers may generate low-GWP refrigerant credits
  - Additional requirements for manufacturers that produce transit buses that are California-certified to the custom chassis standards
  - Additional requirements that allow the use of a PHEV advanced technology multiplier of 3.5 (no NOx increase, all-electric range)

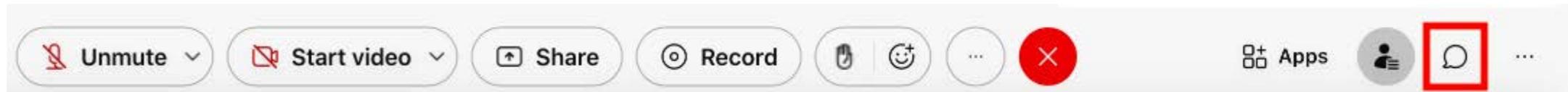


# Potential 218 Adoption Schedule



# Question and Answer

- Send questions/comments in the Chat box



## DEC Panelists

- Mitchell Tabor, NYSDEC
- Scott Wajda-Griffin, NYSDEC
- James Clyne, NYSDEC

Enter questions  
in the chat box  
here

# Thank You

To get more information and updates, go to the DEC Website

This presentation will be available at: <https://www.dec.ny.gov/chemical/8394.html>

MHD ZEV MOU: <https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf>

MHD ZEV Action Plan: <https://www.nescaum.org/documents/multi-state-medium-and-heavy-duty-zev-action-plan.pdf>

NYS VW Appendix D: <https://www.dec.ny.gov/chemical/109784.html>

**Stakeholder Comments** for possible New York adoption of California's Heavy-Duty Omnibus and Phase 2 Greenhouse Gas Standards may be submitted to: [air.regs@dec.ny.gov](mailto:air.regs@dec.ny.gov)