



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



# DIVISION OF AIR QUALITY

AIR QUALITY, ENERGY, AND SUSTAINABILITY

## MEDIUM DUTY DIESEL VEHICLE INSPECTION REGULATION

BUREAU OF MOBILE SOURCES



Stakeholder Meeting - September 10<sup>th</sup>, 2020

# OVERVIEW

1. What regulations are we considering changing?
2. New Jersey medium duty vehicle fleet statistics.
3. Why should we inspect medium-duty diesel vehicles (MDDVs)?
4. Current and proposed inspection requirement and tests.
5. Questions and discussion.

# REGULATORY CONCEPT

- This proposal would require MDDVs to be subject to the same inspection requirements as other diesel vehicles.
- Currently, MDDVs are “self inspected.”
  - By regulation, this requires owners to submit periodic reports to the Motor Vehicle Commission (MVC) that shows the vehicles are in compliance.

# MEDIUM DUTY DIESEL VEHICLES IN NEW JERSEY

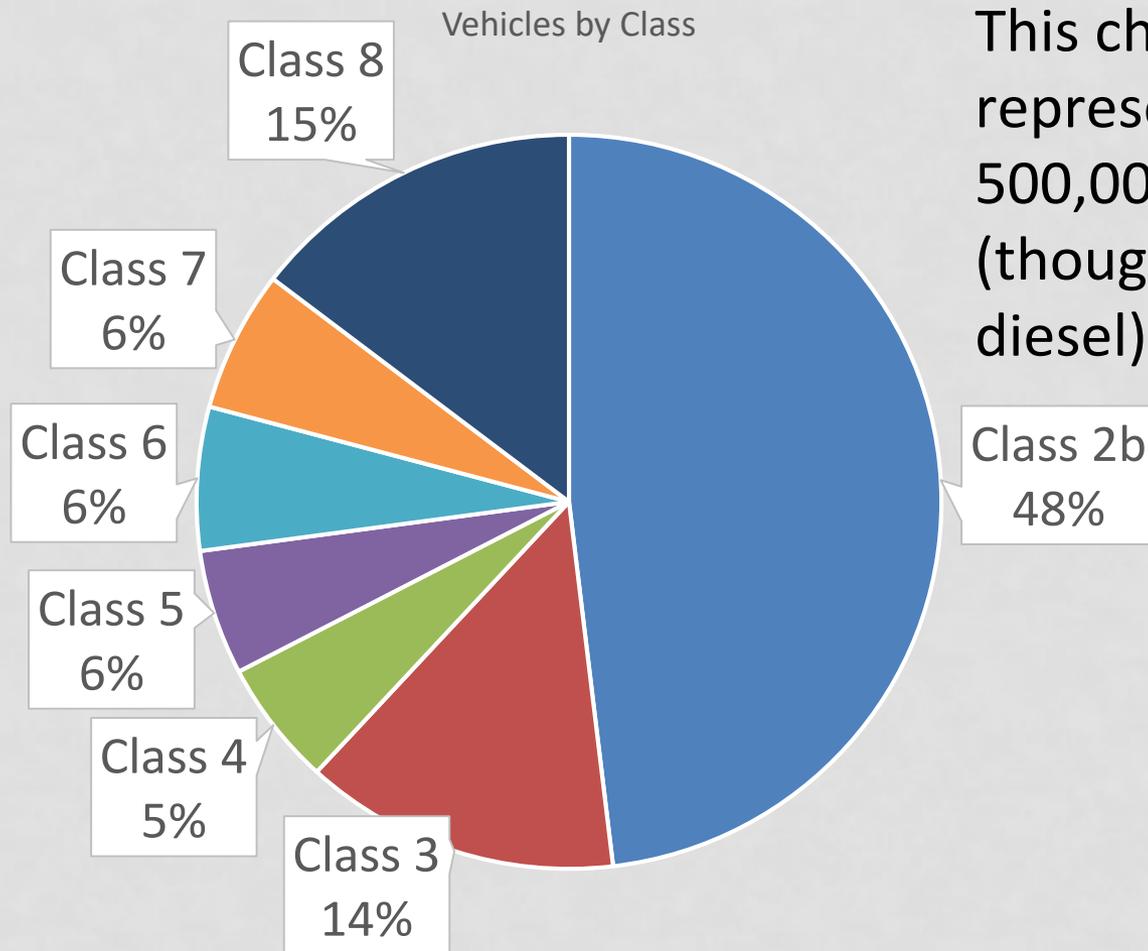
- For the purpose of this rulemaking only, New Jersey uniquely defines medium duty diesel vehicles as those between 8,500 lbs. and 18,000 lbs. gross vehicle weight rating (GVWR).
- We understand this is not a “normal” medium duty definition. It came about as a result of historical conditions and programs in New Jersey.

# WEIGHT RATINGS AND VEHICLE CLASS

- This proposal would affect diesel-fueled class 2b, class 3, class 4, and some class 5 vehicles.
- Examples of impacted vehicle types include pickups and vans, delivery trucks (e.g., UPS and FedEx), and box trucks.

<b>Class 1 - 6,000 lbs &amp; Less</b>     Minivan    Cargo Van    SUV    Pickup Truck
<b>Class 2 - 6,001 to 10,000 lbs</b>     Minivan    Cargo Van    Full-Size Pickup    Step Van
<b>Class 3 - 10,001 to 14,000 lbs</b>     Walk-in    Box Truck    City Delivery    Heavy-Duty Pickup
<b>Class 4 - 14,001 to 16,000 lbs</b>    Large Walk-in    Box Truck    City Delivery
<b>Class 5 - 16,001 to 19,500 lbs</b>    Bucket Truck    Large Walk-in    City Delivery
<b>Class 6 - 19,501 to 26,000 lbs</b>     Beverage Truck    Single-Axe    School Bus    Rack Truck
<b>Class 7 - 26,001 to 33,000 lbs</b>     Refuse    Furniture    City Transit Bus    Truck Tractor
<b>Class 8 - 33,001 lbs &amp; Over</b>     Cement Truck    Truck Tractor    Dump Truck    Sleeper

# NJ MEDIUM/HEAVY VEHICLE POPULATION BY CLASS



This chart represents about 500,000 vehicles (though not all are diesel).

# VEHICLES AFFECTED BY THIS PROPOSAL

- The population of diesel-fueled vehicles between 8,500 lbs. and 18,000 lbs. GVWR is about 100,000.
- Of those, ownership is split between commercial at 55% and private at 45%.

# REASONS TO INSPECT MDDVS #1

- Emission reductions
  - Twelve gasoline vehicles would need to be inspected to get the same benefit as one MDDV.
  - Benefits would exceed 121 TPY of NOx and 31 TPY of PM.
    - Equal to taking 90,000 cars off the road.

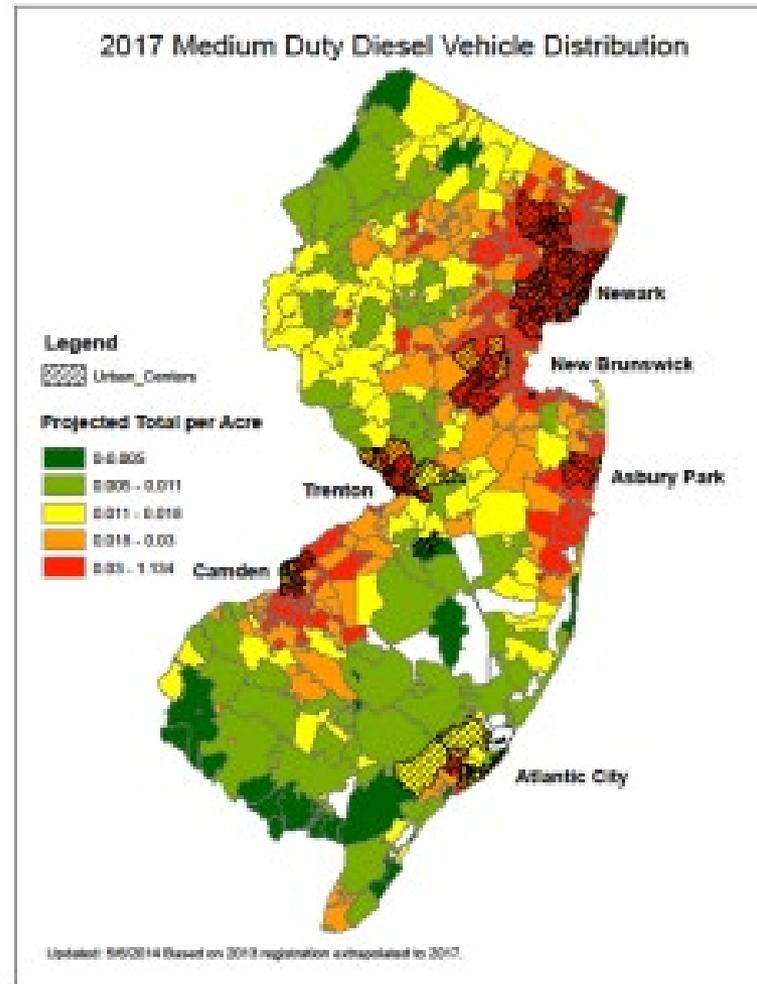
Benefits from vehicle inspections			
	# of vehicles	NOx benefit TPY	Tons/yr./vehicle
Light duty Gasoline	3,876,413	4,271	0.0001
Medium duty Diesels	102,204	121	0.0012
Heavy duty Diesels	104,000	438	0.0042

# REASONS TO INSPECT MDDVS #2

- It is a cost effective control measure.
  - This initiative would not impose any ongoing fees on the State for inspection as all MDDV inspections can be sent to Private Inspection Facilities (PIFs).
  - The emission reductions are quantifiable and substantial for a small investment on behalf of the State.
- Increased costs are borne by the vehicle owners.
  - Cost of inspection.
  - Cost of repairing failures and tampering.
    - Since MDDVs are required to be maintained under self-inspection regulations anyway, this is not considered to be a new cost.

# REASONS TO INSPECT MDDV'S #3

- MDDVs are primarily registered and operated in urban, environmentally-overburdened communities.
- These areas are already at increased risk from vehicle pollution.



# REASONS TO INSPECT MDDVS #4

- MDDVs show a high rate of emission control tampering.

Date Investigated	Facility Name	Inspected	Tampered	% Tampered	
7/11/2018	Dealer #1	35	10	29%	
8/9/2018	Dealer #2	15	4	27%	
9/27/2018	Dealer #3	16	5	31%	
10/30/2018	Dealer #4	8	1	13%	
2/5/2019	Dealer #5	33	1	3%	
2/6/2019	Dealer #6	3	1	33%	
2/25/2019	Dealer #7	50	14	28%	
4/4/2019	Dealer #8	5	2	40%	
5/7/2019	Dealer #9	3	2	67%	
6/20/2019	Dealer #10	5	1	20%	
10/10/2019	Dealer #11	2	1	50%	
11/15/2019	Dealer #12	3	1	33%	
<b>Totals</b>		12	178	43	24%

# RECENT ENFORCEMENT ACTION

- On July 8, 2020:

**Attorney General, DEP Commissioner File Lawsuit Against  
Nation's Largest Auto Auction Company For Selling Tampered, Super-Polluting Vehicles  
At Same Time, DEP and DCA Announce Actions Against 11 NJ-Based Dealers Responsible  
For  
Selling Same Unlawfully-Polluting Automobiles**

**TRENTON** – Attorney General Gurbir S. Grewal, Department of Environmental Protection (DEP) Commissioner Catherine R. McCabe and Division of Consumer Affairs (DCA) Director Paul R. Rodriguez today announced multiple legal actions to protect the public from the sale of tampered vehicles that release excessive amounts of air pollution....

In the first action, Attorney General Grewal and Commissioner McCabe announced a lawsuit against Manheim Remarketing Inc., the nation's largest vehicle auction company, alleging that it violated New Jersey's pollution control laws by facilitating the sale of hundreds of tampered vehicles in the state.

According to the Complaint, DEP identified over 200 vehicles offered or sold through Manheim that were clearly disclosed as tampered, and a surprise DEP inspection at a Manheim facility last year found that 28 percent of inspected vehicles were unlawfully tampered....

# PROBLEMS WITH SELF-INSPECTION

- Outside of our investigations, you can find owners of MDDVs advertising them for sale with blatantly tampered emission controls.
  - There are vendors offering devices and selling services for “EGR delete” and DPF removal.
- “Coal rolling” is a real thing, where owners modify their diesel pickups to produce huge volumes of excess smoke on demand.
  - 2015 law (see next slide).
  - The easiest way to enforce this law is to check for emissions control tampering at a periodic inspection.

# Rolling Coal Law – Signed May 5, 2015

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## **N.J.S.A. 26:2C-8.57**

No person shall retrofit any diesel-powered vehicle with any device, smoke stack, or other equipment which enhances the vehicle's capacity to emit soot, smoke, or other particulate emissions, or shall purposely release significant quantities of soot, smoke, or other particulate emissions into the air and onto roadways and other vehicles while operating the vehicle, colloquially referred to as "coal rolling."

# CURRENT MDDV SELF-INSPECTION REQUIREMENTS

- 13:20-26.17
- (c) Certification of self-inspection... is a representation by the owner or lessee... that, at a minimum, the diesel vehicle is in compliance with the Department of Environmental Protection emission standards set forth in N.J.A.C. 7:27-14, all applicable requirements regarding the muffler and emission control apparatus and that the diesel vehicle can successfully pass the test procedures set forth in N.J.A.C. 7:27B-4...
- 13:20-26.11 Required inspection and maintenance
  - (a) The following items of equipment shall be inspected and maintained at least once every three months:
    - 14. Exhaust system and exhaust emissions, including the requirements set forth at N.J.A.C. 7:27-14.4(a)2, 3, 4, and 5 and 14.5(d)
- 13:20-26.13 Certification
- Every owner or lessee shall certify to the Chief Administrator\* on a form prescribed that he or she has inspected and maintained his or her vehicles in conformity with this subchapter. Such certification shall be made once every 12 months.
- \*Chief Administrator of MVC

# CURRENT MDDV SELF-INSPECTION TESTS

- Under Department regulations at N.J.A.C. 7:27-14.5, a person performing a self-inspection on a MDDV is required to check:
  - Visible smoke
  - Indicator lights (MIL, DPF, SCR, etc.)
  - Visible fuel leaks
  - Emission control apparatus
- These are all non-instrumented tests that do not require any equipment, though they do require some knowledge and training, which vehicle owners are not provided.

# PROPOSED MDDV INSPECTION TESTS

- The proposed inspection tests for MDDVs would be identical to those already required of other diesel vehicles.
  - In addition to the tests required for self-inspection, MDDVs would also be subject to either smoke opacity or OBD testing based on weight and model year.

Weight Class (GVWR)	Fuel Type	Model Year	Test Type					Emission Control Apparatus Examination
			Smoke Opacity	Visible Smoke	OBD	Fuel Leak	Indicator Light Check	
8,501 - 14,000 lbs	Diesel	2007 and older	•	•	NA	•	•	•
		2008 and newer	NA	•	•	•	•	•
14,001 - 17,999 lbs	Diesel	2013 and older	•	•	NA	•	•	•
		2014 and newer	NA	•	•	•	•	•

# MDDV INSPECTIONS

- MDDVs would be directed to Private Inspection Facilities (PIFs) for their official inspections.
  - NOTE: This requirement is under the purview of the MVC and not DEP regulation.
- Only PIFs are equipped with smoke meters to measure smoke opacity.
- PIFs charge vehicle owners directly for their services, thus the State would incur no additional inspection fees from its inspection contractor.

# MDDV INSPECTION ALTERNATIVES

- Fleet MDDVs are less likely an issue. Privately-owned pickups are most often tampered.
- How can we fairly ensure compliance across 100,000 vehicles?
  1. Reporting – owners required to report detailed results of self-inspections (including emission controls with photos) to DEP.
  2. Telematics – owners required to purchase and install remote OBD tracking and reporting devices.
  3. Randomly-selected MDDVs outfitted with mini-PEMS to monitor emissions for random time periods
  4. DEP enforcement spot checks on all of the above to ensure accurate reporting.

# STAKEHOLDER FEEDBACK OPPORTUNITIES

- Are there any questions about this material?
- Specific issues for consideration and discussion are on subsequent slides.

# DISCUSSION ISSUES

- Issues for discussion:
  - Strategy
    - Is there any other way to achieve cost effective, sustainable reductions that will achieve emission reductions across all MDDVs?
      - Random roadside pullovers and identifying tampering at time of sale will not catch most in-use compliance issues.
  - Schedule
    - These requirements could likely not be implemented in the inspection system until a new contract is awarded, as it will require software changes.
      - Hardware changes are required for HD OBD inspection and not unique to MDDVs.

# DISCUSSION ISSUES

- Industry assistance
  - Can industry organizations help us with outreach and education?
- Enforcement
  - Current inspection enforcement is by windshield stickers.

# COMMENTS

Please send comments and/or technical support information to:

[njairrulesmobile@dep.nj.gov](mailto:njairrulesmobile@dep.nj.gov)

Use the following heading in the subject line of the email:

Medium Duty Diesel Vehicle Inspection Regulation

By September 24, 2020