DIVISION OF AIR QUALITY
AIR QUALITY, ENERGY, AND SUSTAINABILITY

MEDIUM DUTY DIESEL VEHICLE INSPECTION REGULATION

BUREAU OF MOBILE SOURCES

Stakeholder Meeting - September 10th, 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.
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.
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.
• 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.
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.

<table>
<thead>
<tr>
<th>Benefits from vehicle inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td># of vehicles</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Light duty Gasoline</td>
</tr>
<tr>
<td>Medium duty Diesels</td>
</tr>
<tr>
<td>Heavy duty Diesels</td>
</tr>
</tbody>
</table>
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 MDDVS #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.

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

<table>
<thead>
<tr>
<th>Weight Class (GVWR)</th>
<th>Fuel Type</th>
<th>Model Year</th>
<th>Smoke Opacity</th>
<th>Visible Smoke</th>
<th>OBD</th>
<th>Fuel Leak</th>
<th>Indicator Light Check</th>
<th>Emission Control Apparatus Examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,501 - 14,000 lbs</td>
<td>Diesel</td>
<td>2007 and older</td>
<td>●</td>
<td>●</td>
<td>NA</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008 and newer</td>
<td>NA</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>14,001 - 17,999 lbs</td>
<td>Diesel</td>
<td>2013 and older</td>
<td>●</td>
<td>●</td>
<td>NA</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014 and newer</td>
<td>NA</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
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.
Please send comments and/or technical support information to:

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