



Heavy-Duty Vehicle Inspection and Maintenance (HD I/M) Program Development

May 27, 2021
Public Workshop

Today's Agenda

- Why HD I/M?
 - Background and Senate Bill 210 (Senator Connie Leyva; Statutes of 2019)
- Elements of Draft HD I/M Program
 - Proposed Phase-In
- Draft Enhanced Enforcement Mechanisms
- Compliance Assistance
- Next steps
 - Continued program development
- Open discussion/questions and answers

Why HD I/M?



Background: California's Air Quality Challenges

- Over 12 million Californians breathe unhealthy air
- Areas with the worst air quality
 - South Coast ozone
 - San Joaquin Valley particulate matter (PM 2.5)
- HD trucks remain one of the largest emissions contributors in the state



Senate Bill 210 and HD I/M

- SB 210 directs CARB to develop and implement a new, comprehensive HD I/M program, working with partner State agencies
 - Target malfunctioning vehicles with high emissions
 - Require all vehicles operating in California to comply
 - Allow on-board diagnostics (OBD) system checks to identify broken emissions-related components
 - Conduct “Smog Check” for big trucks
- Program objectives:
 - Maintain low emissions throughout a vehicle’s life
 - Ensure emissions controls are working properly
 - Minimize inspection downtime for vehicle owners



SB 210 HD I/M Vehicle Applicability

- Heavy-duty vehicles (non-gasoline) with gross vehicle weight rating (GVWR) > than 14,000 pounds operating in California subject to program
 - In-state, out-of-state/country
 - Owner-operators



- Gasoline heavy-duty vehicles > 14,000 pounds not covered because already subject to BAR's Smog Check program
- Limited exemptions: zero-emission trucks, military tactical vehicles, etc.

Compliance Certificate

- All vehicles must have a valid HD I/M compliance certificate (can be digital) to legally operate in California
- Criteria to obtain compliance certificate:
 - In good standing with periodic testing requirements
 - No enforcement issues, for example, high emitter issues
 - Pay annual compliance fee
- DMV registration block would be placed on California vehicles operating without a valid compliance certificate

Elements of Draft HD I/M Program



High Level Overview of Draft HD I/M Elements

- Periodic testing requirements for emissions-related vehicle components
- Enhanced enforcement mechanisms
 - Roadside emissions monitoring system network and automated license plate recognition cameras
 - Compliance certificate/link to DMV registration for California vehicles
 - Enhanced field enforcement efforts

Draft: Vehicle Owner Responsibilities

- Vehicle owner: report initial owner and vehicle information in CARB's HD I/M database starting January 2023
- Existing Department of Motor Vehicles and International Registration Plan vehicle data to be used to minimize reporting burden
 - Update information as needed
 - Use HD I/M reporting system to pay annual compliance fee and obtain compliance certificate for each vehicle
 - Keep valid compliance certificate with vehicle while in operation (can be electronically accessible)
- Repair vehicle in timely manner if identified with malfunction indicator light (MIL) on; vehicle over opacity limits

Malfunction Indicator Light



Draft: Driver Responsibilities

- Driver: at roadside (CHP weigh stations or other roadside locations)
 - Show compliance certificate to the inspector or officer upon request
 - Keep documentation about the hiring entity/copy of contract with the hiring entity in the vehicle
 - Allow inspectors to perform requested OBD or smoke opacity compliance testing and emissions control system inspection to check for tampering

Draft: Periodic Testing Overview

- Periodic testing requirements for emissions related vehicle components
 - 2013+ MY Engines: OBD equipped vehicles
 - OBD test submission: 4x per year
 - Pre-2013 MY engines: Non-OBD equipped vehicles
 - Opacity test submission and visual/functional inspection: 2x per year
- Some flexibility options available (for example, low-use vehicles)

Draft: OBD Vehicles - Testing Options

- CARB-certified telematics service providers
 - Continuously connected devices on the vehicle
- HD I/M Approved Testers
 - Similar to current PSIP testing structure
- Possible additional options:
 - CARB-certified devices for check out at designated locations in CA (i.e., truck stops, etc.)
 - Referee inspection - virtual appointments



Draft: Non-OBD Vehicle Testing



- Testing requirements for trucks with pre-2013 model year engines
 - SAE J1667 opacity test (Diesel only)
 - Alternative fuel vehicles excluded from opacity test
 - Emissions Control Equipment Inspection
 - Visual/functional inspection of vehicle's emissions control components to check for tampering
- Testing must be performed by a HD I/M approved tester
 - Successfully completed CARB-approved training course

Draft Enhanced Enforcement Mechanisms



Draft: Roadside Emissions Monitoring System Network

- Real-time emissions monitoring equipment to be deployed throughout the state
- Network will screen for high emitting vehicles for follow up compliance testing



Draft: Automated License Plate Recognition Camera Network



- Capture license plate numbers and fleet information
- Can cross-check with HD I/M database to identify vehicles operating in California without a valid compliance certificate

Draft: Freight Contractor/Facility Requirements

- Freight contractors must verify annually that fleets/vehicles hired or dispatched to California are HD I/M-compliant
 - Affirmation of fleet wide compliance
- Ports and intermodal railyards required to verify that only HD I/M-compliant vehicles enter/operate on their properties



Enhanced Field Enforcement Efforts

- CARB field inspection efforts in coordination with CHP
- SB 210 authorizes CHP to check for:
 - Illuminated MIL light in vehicle
 - Valid compliance certificate
 - Visible smoke



HD I/M Implementation: Proposed Phases

- First Phase – Begins **January 1, 2023**
 - High emitter vehicle screening
 - Vehicle owners establish accounts in HD I/M database by July 1, 2023
- Second Phase – Begins **July 1, 2023**
 - Enforcement of compliance certificate requirements starts
 - DMV registration holds for California registered vehicles start
- Third Phase – Begins **January 1, 2024**
 - Periodic testing starts

Compliance Assistance



Potential Compliance Assistance Concepts

- Objectives
 - Develop options to assist fleets in complying with HD I/M and repairing their vehicles
- Potential concepts:
 - Repair time extension for unavoidable delays
 - Truck purchase extensions
 - Compliance extensions to be approved by referees
- Additional potential financial assistance concepts under evaluation through CARB's incentives programs

Draft: Repair Time Extension

- Eligible fleets could apply for additional time to repair their vehicles
- Lengthen repair time from 45 days under current proposal to 90 days if more time is needed
- Fleets could operate their vehicles during this period
- Benefit: More time for fleets to repair their vehicles

Draft: Truck Purchase Time Extension

- Eligible fleets may apply for up to 90 extra days to purchase new or newer truck to replace the truck needing repair
 - Includes zero-emissions truck purchases
 - Could include different requirements based on fleet size
 - More time may be granted if proof is provided showing longer vehicle acquisition time is needed
- Must report to CARB intent to purchase
- Must demonstrate good-faith effort, e.g., dealer's quote for vehicle purchase
- Fleets operate their current vehicles during extension
- Benefit: More time for fleets to locate vehicle and secure funds needed for vehicle purchase

Next Steps



Next Steps: HD I/M Development

- Additional HD I/M workgroup meetings and workshops throughout 2021
 - Upcoming events and releases in Summer 2021:
 - SB 210 pilot program results and draft report
 - Release 3rd draft of proposed HD I/M regulatory text
 - Additional public meetings as necessary
- Board hearing: December 9 -10, 2021

For More HD I/M Program Information

- Visit CARB's website at: <https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program>
- Subscribe to receive HD I/M email updates at: https://public.govdelivery.com/accounts/CARB/subscriber/new?topic_id=hdim
- Contacts:
 - Krista Fregoso at Krista.Fregoso@arb.ca.gov
 - James Goldstene at James.Goldstene@arb.ca.gov
 - For compliance assistance concepts: Bob Nguyen at Bob.Nguyen@arb.ca.gov

OPEN DISCUSSION AND QUESTIONS AND ANSWERS

Options to ask questions:

- Separate Zoom links for question/answer sessions with Spanish or Punjabi translation
- Use Zoom's "raise hand" button in the webinar window - staff will unmute you
- Type your question in Q&A in the webinar window
- For those who joined via a conference call, press #2 to "raise hand"