



Heavy-Duty Vehicle Inspection and Maintenance (HD I/M) Workgroup Meeting:

Draft Proposed HD I/M Regulatory Text and Compliance Assistance Concepts for Small Fleets

March 29, 2021

Today's Agenda

- Purpose of workgroup meeting
- Framing today's discussion and overview of HD I/M program vision
- Notable modifications to draft regulatory text
- Potential concepts for compliance assistance for small fleets
- Next steps
- Open discussion and Q&A

Framing Today's Discussion and Overview of HD I/M Program Vision



Previous WG Meetings and Today's Focus

- December 17, 2020: First look at staff's overall draft regulatory HD I/M concepts
- February 22, 2021: Targeted discussion to solicit additional feedback on enforcement mechanisms
- March 22, 2021: Release of updated draft regulatory text
- Today's focus:
 - Discuss thoughts on revised draft regulatory text
 - Restructured and organized into draft regulation order format
 - Still draft; continued opportunities for stakeholder feedback
 - Highlight and discuss potential small business assistance concepts

Overview of HD I/M Program Vision

- Periodic testing requirements for emissions-related vehicle components
 - OBD data or opacity test data/emissions control inspection
- New enforcement mechanisms to complement periodic testing requirements, enhance compliance, and limit fraud
 - Network of roadside emissions monitoring systems
 - Compliance certificate/link to CA DMV registration
 - Enhanced roadside presence through multi-agency coordination
 - Freight contractor/facility requirements
- Implementation phase-in starting in 2023



HD I/M Implementation: Proposed Program Phase-In Approach

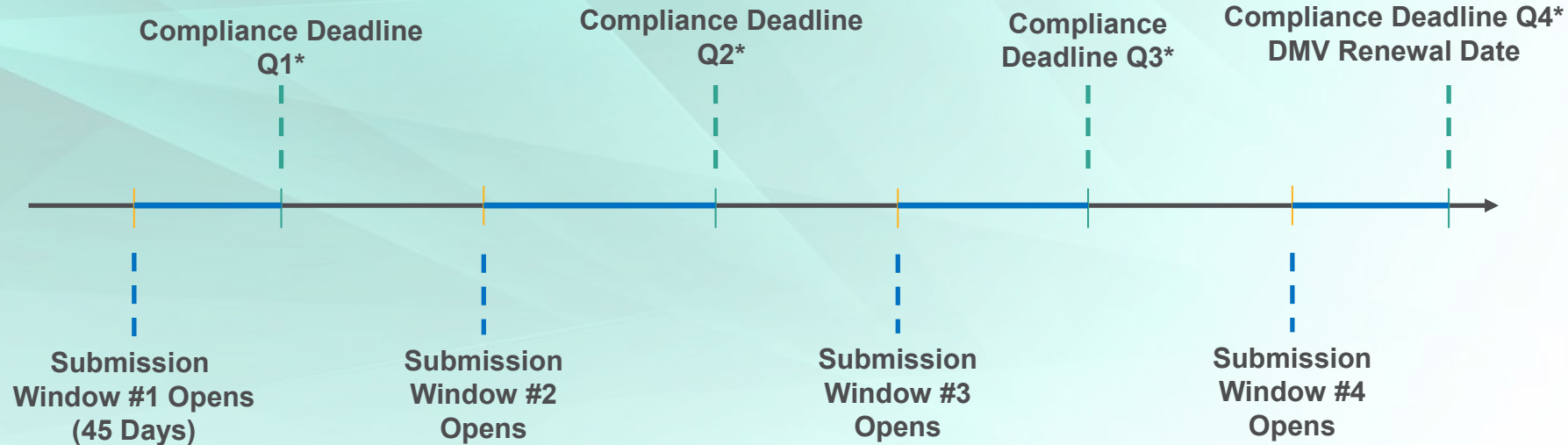
- First Phase – Begins **January 1, 2023**
 - High emitter vehicle screening
 - Vehicle owners establish accounts in HD I/M database by July 1, 2023
- Second Phase – Begins **July 1, 2023**
 - Enforcement of compliance certificate requirements starts
 - DMV registration holds for California registered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

Proposed Periodic Inspection Frequencies

- OBD-equipped vehicles: 4x per year
 - Passing test within 45 days of submission deadline
- Non-OBD vehicles: 2x per year
 - Passing test within 45 days of submission deadline

Periodic Inspection Schedule: OBD-Equipped Vehicles

Program Vision



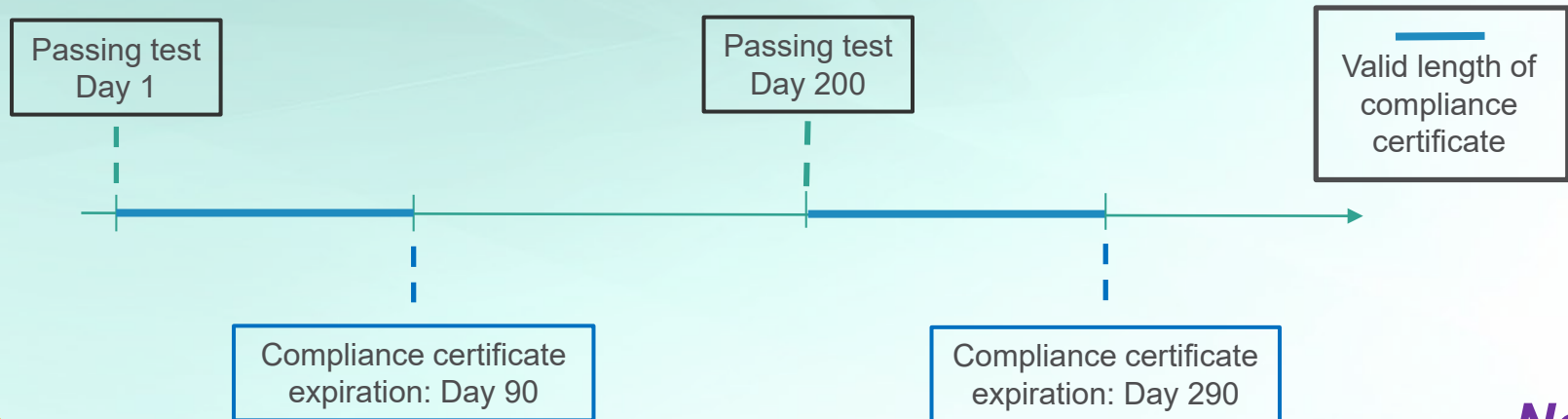
Passing Compliance
Test Required to Renew
Compliance Cert.

*Compliance deadline based on 3-month operating periods with an ending date of the vehicle's DMV registration date. (i.e., 2/22, 5/22, 8/22, 11/22)

Non-OBD vehicles
Two compliance deadlines per
year, 45 days submission window

Alternative Periodic Testing Option

- Alternative submission method for fleets that may not operate in CA on a consistent basis
- Passing test submission grants a 90 day compliance certificate from date of successful submission
 - 180 days for non-OBD vehicles



Proposed Periodic Inspection Flexibilities

- Low-use vehicle:
 - Operates less than 1000 miles per year
 - Annual data submission
 - Passing test within 90 days of submission deadline
- Partial year registration vehicle
 - CA vehicles in DMV partial registration year program that operate no more than 6 months out of a given compliance year
 - Annual data submission
 - Passing test within 90 days of submission deadline
- Out-of-state motorhomes exempted - **New**
- Option to obtain a 5-day temporary permit once a year to exempt a vehicle from requirements – **New**
 - Expanded from 3 days

OBD Vehicle Compliance Testing: Proposed Options

- CARB-certified continuously connected remote OBD device (CC-ROBD): telematics
- HD I/M-approved tester using a CARB-certified non-continuously connected remote OBD device (NCC-ROBD)
- Assessing potential for additional testing options
 - CARB-certified NCC-ROBD devices at designated locations in CA (i.e., truck stops, etc.)
 - Referee network
 - Could inspections be performed remotely through video/cell phone application? - **New**
 - Allow for convenient way for tests to be performed anywhere?

Proposed Non-OBD Vehicle Compliance Testing

- Testing requirements
 - SAE J1667 opacity test (Diesel only)
 - Alternative fuel vehicles excluded from opacity test – **New**
 - Emissions Control Equipment Inspection
 - Visual/functional inspection of vehicle's emissions control components
 - Now combined in draft reg text as vehicle emissions control equipment inspection - **New**
 - Ensure emissions related components are in their certified configurations
- Testing required to be performed by a HD I/M approved tester

Proposed HD I/M-Approved Testers

- Approved individuals who may perform OBD/non-OBD vehicle compliance testing
 - Testers not limited to CA, can be based anywhere
- Online training course required to demonstrate competency with program requirements and testing methods
 - Approximately one day to complete
 - To be completed every two years
 - One-time challenge exam offered in lieu of training course
- Testers to register with CARB and submit vehicle compliance data through their registered account

Notable Modifications to Draft Regulatory Text



Summary

- Reorganized to present more clearly the requirements for each regulated entity
- Expanded detail for roadside emissions monitoring, HD I/M-approved testers, and freight contractor/facility requirements as previously mentioned
- Updates to device requirements and certification process based on stakeholder feedback from previous meetings

Proposed Requirements for Vehicles Detected by a Roadside Emissions Monitoring System

OBD-Equipped Vehicles:

- A PM emissions measurement that would correspond to exceeding the equivalent OBD trigger threshold for illuminating the MIL
- A NO_x emissions measurement that would correspond to exceeding the equivalent OBD trigger threshold for illuminating the MIL

Non-OBD Vehicles:

- A PM emissions measurement that would correspond to exceeding the equivalent smoke opacity limits

Proposed Freight Contractor Requirements *Specific Revisions*

- Freight contractors shall verify compliance for any fleet or vehicle hired or dispatched in CA and keep records
- Shippers, brokers, receivers, motor carriers or any other intermediary parties will need to keep:
 - Compliance certificates of fleets or vehicles dispatched
 - Transactions and agreements between shippers, brokers, and motor carriers
- Applicable freight facilities will include only ports and intermodal railyards and will be required to:
 - Attest that only compliant vehicles will enter and operate on their property; or
 - Maintain records of all vehicles that enter their property for which compliance cannot be verified
- Vehicle owners and drivers must retain the following information in the vehicle:
 - Documentation about the hiring entity
 - Copy of contract with hiring entity

Proposed Revisions to OBD Device Requirements

- Providing vendors flexibility to choose which OBD protocols (e.g., SAE J1939 or J1979) their devices support
 - ROBD devices may support one or more OBD protocols
 - ROBD devices are no longer required to be capable of supporting all OBD protocols
 - Upon adoption of the SAE J1979-2 protocol, ROBD tools supporting SAE J1979 shall also meet the requirements of the SAE J1979-2
 - Enhanced cybersecurity

Reducing Complexity of OBD Devices and Certification Process

- Removal of CC-ROBD key event detection requirements (data submission triggers)
 - Device power loss, MIL status change, E-VIN/Engine SN/CAL ID/CVN change, change in readiness status change, GPS notification
- Reduced testing requirements associated with device field testing
 - Minimum 100 vehicles per NCC-ROBD OBD protocol
 - Minimum 100 data submissions/30 vehicles per CC-ROBD OBD protocol
 - Previously had proposed up to 1000 vehicles for testing

Potential Concepts for Compliance Assistance for Small Fleets



Compliance Assistance Program Concepts

- Objectives
 - Develop options to assist small fleets in complying with HD I/M and effectively repairing their vehicles
 - Expediting repairs = Reducing excess emissions
 - Enable small fleets to stay in business
- Potential concepts
 - Repair time extension for small fleets
 - Zero-emission truck incentives
 - Loans to purchase extended warranty

Repair Time Extension Concepts

- Repair time extension program
 - Eligible fleets can apply for additional time to repair their vehicles
 - Lengthen the repair timeframe from 45 days under current proposal to 90 days if determined more time is needed
 - Fleets allowed to continue to operate their vehicles during this period
 - Benefit: Allow more time for fleets to repair their vehicles
- Eligible fleets ≤ 3 trucks

Repair Time Extension Concepts (con't)

- Vehicle purchase time extension program
 - Eligible fleets can apply for additional time – up to 90 days – to purchase new or newer truck to replace the truck needing repair
 - More time may be granted if proof is provided showing longer vehicle acquisition time is needed
 - Must report to CARB intent to purchase and provide documentation to demonstrate good-faith effort, e.g., dealer's quote for vehicle purchase, etc.
 - Fleets allowed to continue to operate their current vehicles during this period
 - Benefit: Allow more time for fleets to locate vehicle and to secure funds needed for vehicle purchase
- Eligible fleets ≤ 3 trucks

Zero-Emission Truck Incentives

- There are opportunities for fleets to transition to zero-emission vehicles
 - Commercially available zero-emission trucks and buses cover a wide variety of vocations and duty cycles
 - Manufacturers are offering more than 100 different ZEV truck and bus configurations from Class 3 through Class 8
 - Some vehicles available today include delivery vans, school buses, refuse trucks, cutaway shuttles, terminal tractors, and passenger vans



Existing Zero-Emission Incentive Programs

- HVIP, Moyer, truck loans, and community air protection (CAP)
- Benefit: Reduce cost hurdle to transition to zero-emission trucks
- Kick-off workshop on the Fiscal Year 2021-22 Funding Plan:
 - Date:** Tuesday, March 30, 2021
 - Time:** 9:00 a.m. to 1:00 p.m. (PT)
 - Location:** Webinar/Teleconference
- Meeting notice link:
<https://content.govdelivery.com/accounts/CARB/bulletins/2c0f7e9>
- Zoom webinar registration link:
https://us02web.zoom.us/webinar/register/WN_WEO7FARsQmOvywOjDAE_Jg

Next Steps



Next Steps: HD I/M Development

- CARB staff seeks your feedback
 - Staff is available for follow-up meetings
 - Contact information on next slide
- Additional HD I/M workgroup meetings and workshops throughout 2021
 - Next meeting expected in June 2021
- Board hearing: December 9-10, 2021
- Implementation: phase-in starting in 2023

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

OPEN DISCUSSION AND Q & A

Options to ask questions:

- 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.”

