

Public Hearing to Consider Modifications to the LEV III Regulations, Hybrid Test Procedures, and Heavy-Duty Test Procedures

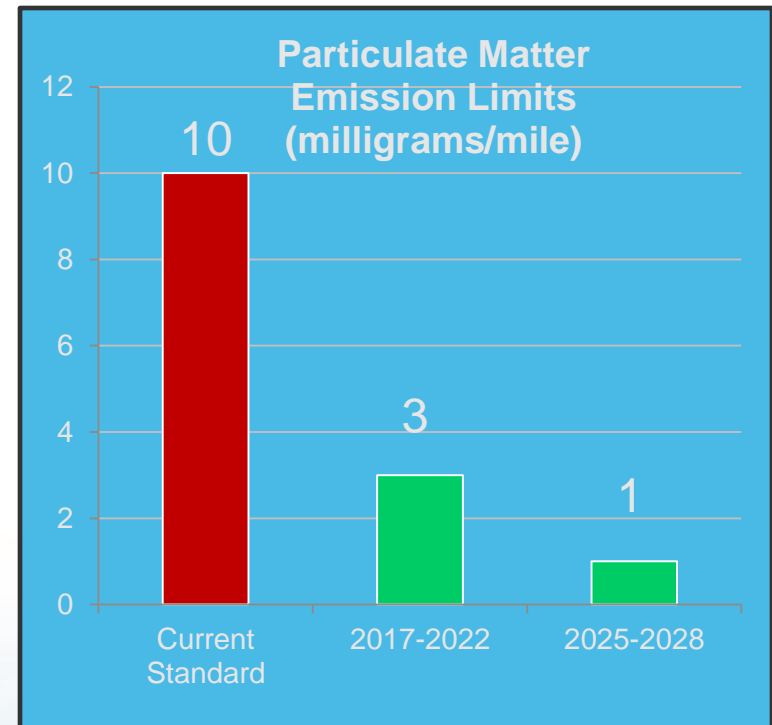
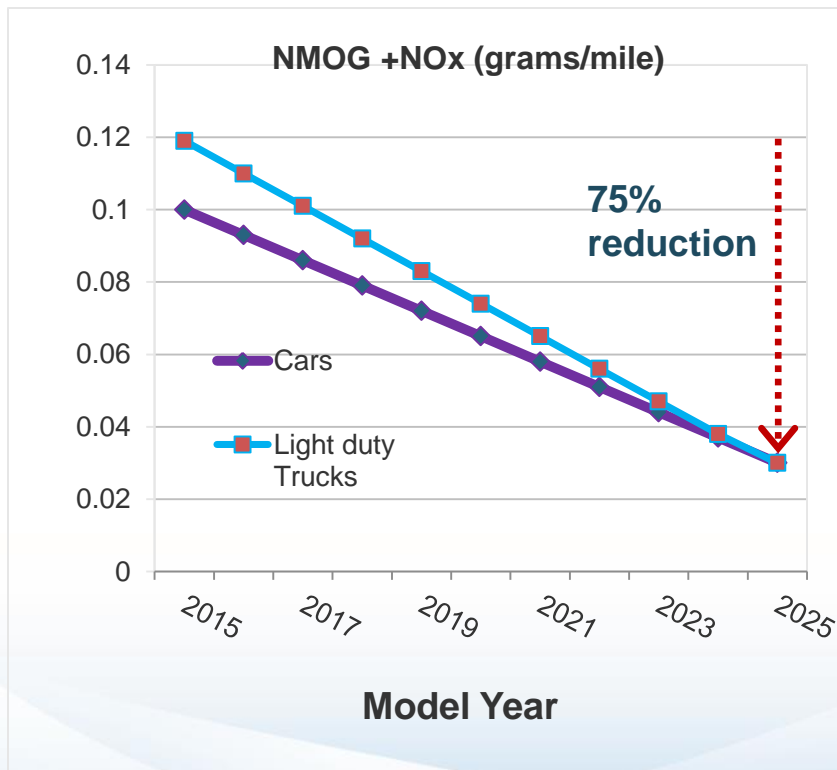
**Diamond Bar, California
October 23rd, 2014**

Topics

- Background
- Proposed changes to align with Tier 3
- Primary remaining differences
- Hybrid vehicle test procedure changes

California's Low-Emission Vehicle Program

- Adopted in 2012
- Achieves 75% reduction in smog-forming pollution
- Achieves 90% reduction in PM standard



U.S. EPA's Tier 3 Standards

- Developed largely in parallel with LEV III
 - Final Rule published April 2014
- Closely mirrors LEV III in structure and requirements
- Includes substantial updates to associated emission test procedures
 - New Part 1066 of the Code of Federal Regulations
- Includes similar clean gasoline



Purpose of Today's Proposal

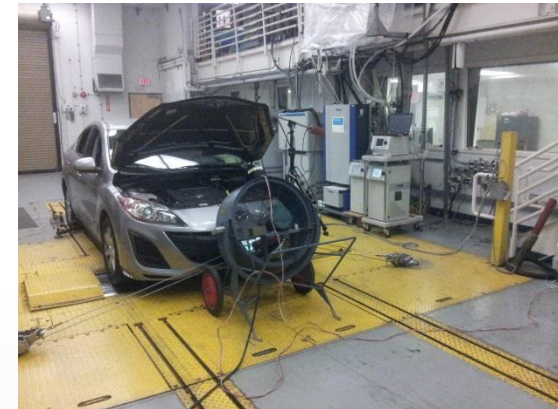
- Goal: Allow manufacturers to produce common vehicles that can meet both CA and federal standards
- Previously committed to revisit LEV III to further align with Tier 3
 - Where possible without comprising air quality benefits in CA
- Changes are targeted/technical in nature

Proposed Modifications to LEV III

- Add separate NOx standard and phase-in option for medium-duty vehicle (MDV) categories
- Add standards that apply at high altitude
- Align small volume manufacturer standards through MY 2025
- Add evaporative system testing requirements
- Adopt new federal test procedures (CFR Part 1066)
- Add certification fuel reciprocity



Evaporative Emission Testing



Exhaust Emission Testing

Proposed LEV III Light-Duty Supplemental PM Standards

- Strengthening of SFTP PM standards identical to Tier 3
- Additional requirement beyond Tier 3:
 - ‘Anti-backsliding’ provision ensures consistent progress towards final 6 mg/mi standard

US06 PM Standards (mg/mi)

| Model Year | Proposed | Current | |
|-------------------|-----------------|----------------|-----------------|
| | 0-8,500 lbs | 0-6,000 lbs | 6,001-8,500 lbs |
| 2017-2018 | 10 | 10 | 20 |
| 2019+ | 6 | 10 | 20 |

Primary Differences Between LEV III and Tier 3 that Will Remain

| | Start of Program | Full Useful Life (miles) | Extra Credit for PHEVs | 1 mg/mi FTP PM Standard MY 2025+ | NMOG + NOx Credit Life | Fleet Average Based on Sales in |
|----------------|------------------|----------------------------|------------------------|----------------------------------|------------------------|---------------------------------|
| LEV III | MY 2015 | 150k | yes | yes | 5 years | CA+S177 |
| Tier 3 | MY 2017 | 120k/ 150k ¹ | no | no | 8 years ² | 50-state |

¹Option for 120k or 150k for some vehicles

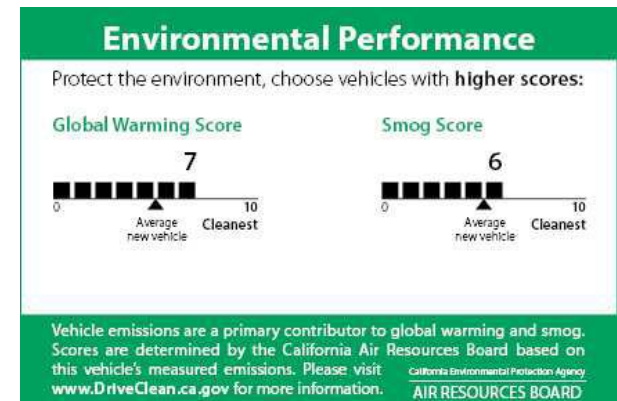
²Reverts to 5 years in 2024+ MY

Rationale for Key Differences

- 1 mg/mi FTP PM Standard MY 2025+
 - Ensure PM emissions remain very low
 - Reassessment part of mid-term review
- Credit Life of 5 years vs. 8 years
 - Further extension can unnecessarily delay compliance with the standards
 - Already extended from LEV II (3 year declining value) to LEV III (5 year full credit value)
- Compliance Based on CA+S177 sales
 - Enables continued strong certification, in-use compliance, and enforcement programs
 - Ensures full emission benefits are achieved

Other Proposed LEV III Changes

- Advanced technology vehicle reporting requirements
 - To better plan for infrastructure and rebate budgets
- Updates to the smog score and global warming score for the window label of new cars
- Includes changes since Staff Report released:
 - Administrative/clarifying changes





Proposed Changes to HEV Test Procedures

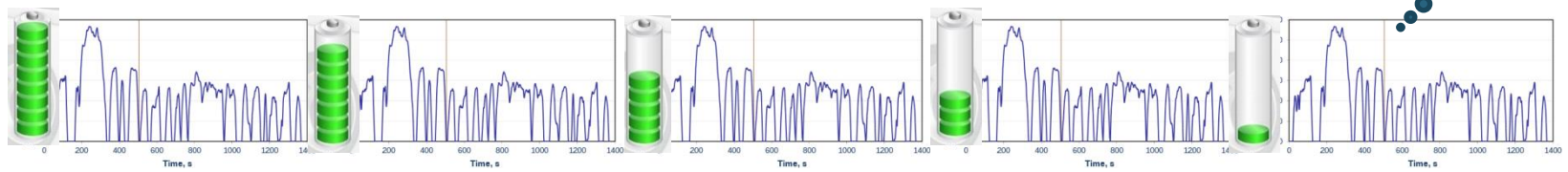


Overview of Proposed Changes

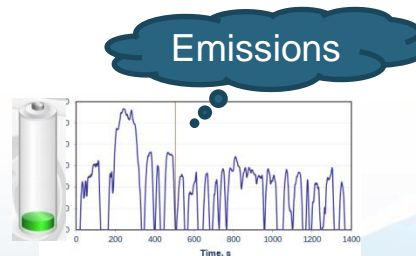
- Current procedures adopted before any plug-in hybrid (PHEV) actually existed
- Changes focus on test procedure streamlining and simplification
 - Especially for PHEVs with significant electric range
 - Improved harmonization with federal test procedures
- Changes were developed by ARB
 - Based on in-house testing of five PHEV models
 - Significant involvement by U.S. EPA and industry

Example of Proposed Change to PHEV Test Procedure

- Currently, PHEVs required to drive through all of the electric miles each time an emission test is performed.
 - Time-consuming especially for PHEVs with substantial electric range



- Proposed alternative:



Summary

- Proposed changes are limited
- Proposed changes allow manufacturers to produce common vehicles to meet both CA and Federal standards
 - Without sacrificing air quality benefits
- No significant environmental or economic impact of proposal
- Broad stakeholder support for proposal
- Staff recommends adoption of the staff proposal