Engine and Vehicles – Compliance Information System (EV-CIS)

Heavy-Duty (HD) Engines and Vehicle GHG Phase II

Informational Kickoff Meeting March 6, 2019



Agenda

- What's Happening?
- Summary of Major Changes
 - HD Vehicle GHG
 - HD Engines
- Proposed Schedule
- Testing Information
- Resources
- Questions



What's Happening?

- Phase II regulations are in place for certification of HD Engines and HD Vehicles, with major portions of the rules becoming mandatory for the 2021 Model Year.
- The HD Engines and HD Vehicle GHG Certification Modules of EV-CIS are being revised to accommodate Phase II while continuing to support Phase I.
- EPA is making an effort to make the transition from Phase I to Phase II as intuitive and seamless as possible.



Summary of Major Changes HD Vehicle GHG (1 of 4)

- New emissions standards for Model Year 2021+ tractors, vocational vehicles, custom chassis vocational vehicles, and heavy-haul tractors
- New regulatory sub-categories for SI, CI, and custom chassis vocational vehicles, and new Class 8 tractor and vocational vehicle sub-categories
- New averaging sets for custom chassis vocational vehicles
- Incorporation of optional design (non-GEM) standards for select custom chassis vocational vehicles



Summary of Major Changes HD Vehicle GHG (2 of 4)

- Collection of Phase II-specific CdA Coastdown data.
- Collection of transmission data obtained following the procedures outlined in 1037.535
- Collection of powertrain test data obtained following the procedures outlined in 1037.550
- Collection of axle data obtained following the procedures outlined in 1037.560



Summary of Major Changes HD Vehicle GHG (3 of 4)

- Accommodation of provisions for small businesses (including delay of standards for alt fuels), use of special vocational credits, specialty vehicles, and certification to a higher vehicle service class
- Accommodation of new credits, including Off-Cycle Weight-Reduction, Vocational Vehicle Off-Cycle Delta CdA, and intelligent controls



Summary of Major Changes HD Vehicle GHG (4 of 4)

- Revision of Tire Data template to include Tire Revolutions Per Mile for Phase II (optional for Phase I)
- New Weight Reduction values for 2021 and later Model Years
- New Non-Wheel Weight Reduction values for LHD, MHD, and HHD Model Year 2021 and later vocational vehicles



Summary of Major Changes HD Engines

- New emissions standards for Model Year 2021+ gasoline and diesel engines
- Separation of parent rating from sub-family ratings and the ability to optionally certify below the CO2 Parent Rating to different CO2 FELs
- Requirement of CO2 IRAFs for Model Year 2021+ gasoline and diesel engines
- Accommodation of early certification using Phase II interim provisions of 1036.150(p)
- Increase of LHD full useful life
- Collection of engine fuel map data per 1036.510



Proposed Schedule

- EPA is targeting **Fall 2019** for a production deployment of both the HD Vehicles and HD Engines Certification Modules.
- Timing of the testing periods is **TBD**, but the HD Vehicles Certification Module would be available for manufacturer testing first, followed by the HD Engines Certification Module.
- Webinars will be conducted as needed to kickoff testing activities.



Testing Information

- We strongly encourage manufacturers to participate in system testing
- If interested in participating in HD Phase II testing, send an email to <u>verify@epa.gov</u> with the following information:
 - Email Subject: Heavy-Duty Phase II System Testing
 - Submit your completed user registration form found at: <u>https://www.epa.gov/sites/production/files/2018-04/ev-cis-user-registration-information-spreadsheet-2018-04.xlsx</u>
- If you have questions regarding testing—
 - Contact Sandra Somoza at <u>Somoza.Sandra@epa.gov</u> or Darryl Moses at <u>Moses.Darryl@epa.gov</u>.



Resources for Phase II

- Draft versions of the Data Requirements and Business Rules for HD Vehicles with proposed changes for Phase II are currently available online at:
 - <u>https://www.epa.gov/vehicle-and-engine-certification/system-</u> <u>documentation-onroad-heavy-duty-vehicles-engines-and</u>
- Draft versions of the HD Engines documentation with proposed changes for Phase II will be available at a later date.



General Resources

- EV-CIS Website
 - https://www.epa.gov/vehicles-and-engines
- EV-CIS Listserver
 - <u>https://lists.epa.gov/read/all_forums/subscribe?name=verify</u>
- Guidance Letters
 - https://www.epa.gov/dis



Questions