



Heavy-Duty On-Highway GHG Phase 2

2019 Truck and Engine Manufacturers Association

Compliance Workshop

April 9-10, 2019

California GHG Phase 2 Program

- No “deemed to comply” provisions. Applications evaluated for compliance to GHG Phase 2 by CARB
- Standards applicable to
 - Trailers
 - Medium- and heavy-duty engines
 - Heavy duty vehicles
- CO2 standards stringency progressively increase in MY 2021, 2024, 2027, and later



Trailer Certification – GHG Phase 2

Begins with MY 2020

- Applicable to trailers sold for CA use
- Applications are currently being accepted
- Contact CARB staff at TrailerCert@arb.ca.gov for
 - Guidance and
 - To initiate the application for an Executive Order (EO)
- Trailer Certification Process webinar (March 25, 2019) is available on CARB's website

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Heavy-Duty Highway Trailer Submission Form

User Information **General Information** Component Information Emission Determination

General Information

Process Code:

Trailer Family Name:

Model Year:

Field Edits/Changes/Corrections(1000 characters available):

Trailer Family Subcategory:

Are you combining dissimilar trailer subcategories into a single family according to 1037.230(d)(3)?

Trailer Configuration

Trailer Configuration

Trailer Aerodynamic Category: Trailer Climate Control Type:

For Partial-Aero or Non-Aero Trailers Only

Rear Work Performing Equipment:

Side Work Performing Equipment:

[+ Add](#)

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Heavy-Duty Highway Trailer Submission Form

User Information General Information **Component Information** Emission Determination

Component Information

Emission Control Identifier (Please select all that apply):

Aerodynamic Equipment

Are any aerodynamic improvement devices used on this trailer family?

Tire Pressure Systems

Are there any Tire Pressure Systems installed on this trailer family?

Tire Configurations

Local CSV File: [Browse](#)

You can upload Tire Configurations for your Trailer Family from a properly formatted CSV from your (manufacturer)
WARNING: Tire Configurations uploaded from this file will replace any tire configurations you may have already entered.

Selected <input type="checkbox"/>	Tire Manufacturer	Tire Model	Tire Size
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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Heavy-Duty Highway Trailer Submission Form

User Information General Information Component Information **Emission Determination**

Emission Determination

CO2 Trailer Configuration Type	Lowest Projected CO2 Trailer Configuration	Highest Projected CO2 Trailer Configuration	Highest Projected Sales Volume CO2 Trailer Configuration
Tire Crr (kg/metric ton)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Configuration Aerodynamic Improvement Indicator	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>
Configuration Composite Delta CdA (m2)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Weight Reduction (lbs)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tire Pressure System	<input type="text"/>	<input type="text"/>	<input type="text"/>
Configuration Off-Cycle Improvement Factor	<input type="text"/>	<input type="text"/>	<input type="text"/>
Off-Cycle Separate Credit Amount (g CO2/ton-mile)	<input type="text"/>	<input type="text"/>	<input type="text"/>

Note: Only the worst case (Highest Projected CO2 Trailer Configuration) needs to be filled out until 2027.



California GHG Phase 2 Program


- Largely harmonized with U.S. EPA's Phase 2 GHG program
 - Same structure and stringency levels
 - GHG standards, corresponding service class/subcategory
 - Same timing (except CA trailer standards)
 - Would allow CARB to certify engines/vehicles and enforce Phase 2 in California

California GHG Phase 2 Program

- Some distinctions to credit, labeling, and reporting provisions
 - Additional credits for low-global warming potential refrigerants for medium and HD vehicles
 - Detailed description of the air conditioning system
 - List of emission control identifiers (ECI) that should be included on labels

California GHG Phase 2 Program (cont'd)

- Additional incentive for zero-emission buses
 - Transit bus manufacturers required to certify to the more stringent primary standards or surrender federal emission credits
 - Required to produce a certain percentage of the CA sold transit buses as zero-emission busses
- Production report for HD vehicles will include the engine families used in the vehicles and VIN numbers
- Applications submitted in DMS now
- Applications will be submitted to E-Cert

Three large, red, 3D question marks are positioned around the central text. One is on the left, one is on the right, and one is centered below the word 'Questions'.

Questions