hardware or software differences related to measured or modeled emissions or fuel consumption can be included in the same vehicle configuration. Note that vehicles with hardware or software differences related to measured or modeled emissions or fuel consumption are considered to be different configurations even if they have the same GEM inputs and FEL. Vehicles within a vehicle configuration differ only with respect to normal production variability or factors unrelated to measured or modeled emissions and fuel consumption for EPA and NHTSA.

Vehicle family has the meaning given in 40 CFR 1037.230.

Vehicle service class has the meaning for vehicles as specified in the 40 CFR 1037.801.

Vocational tractor has the meaning given in 40 CFR 1037.630.

Zero emissions vehicle means an electric vehicle or a fuel cell vehicle.

§ 535.5 Standards.

(a) *Heavy-duty pickup trucks and vans.* Each manufacturer of a fleet of heavy-duty pickup trucks and vans shall comply with the fuel consumption standards in this paragraph (a) expressed in gallons per 100 miles. If the manufacturer's fleet includes conventional vehicles (gasoline, diesel and alternative fueled vehicles) and advanced technology vehicles (hybrids with regenerative braking, vehicles equipped with Rankine-cycle engines, electric and fuel cell vehicles), it should divide its fleet into two separate fleets each with its own separate fleet average fuel consumption standard which a manufacturer must comply with the requirements of this paragraph (a).

(1) *Mandatory standards.* For model years 2016 and later, each manufacturer must comply with the fleet average standard derived from the unique subconfiguration target standards (or groups of subconfigurations approved by EPA in accordance with 40 CFR 1037.104) of the model types that make up the manufacturer's fleet in a given model year. Each subconfiguration has a unique attribute-based target standard, defined by each group of vehicles having the same payload, towing capacity and whether the vehicles are equipped with a 2-wheel or 4-wheel drive configuration.

(2) *Subconfiguration target standards.* (i) Two alternatives exist for determining the subconfiguration target standards for model years 2016 and later. For each alternative, separate standards exist for compression-ignition and spark-ignition vehicles:

(A) The first alternative allows manufacturers to determine a fixed fuel consumption standard that is constant over the model years; and

(B) The second alternative allows manufacturers to determine standards that are phased-in gradually each year.

(ii) Calculate the subconfiguration target standards as specified in this paragraph (a)(2)(ii), using the appropriate coefficients from Table 1 choosing between the alternatives in paragraphs (a)(2)(i)(A) and (B) of this section. For electric or fuel cell heavy-duty vehicles, use compression-ignition vehicle coefficients ''c'' and ''d'' and for hybrid (including plug-in hybrid), dedicated and dual-fueled vehicles, use coefficients ''c'' and ''d'' appropriate for the engine type used. Round each standard to the nearest 0.01 gallons per 100 miles and specify all weights in pounds rounded to the nearest pound. Calculate the subconfiguration target standards using the following equation:

Subconfiguration Target Standard (gallons per 100 miles) = [c × (WF)] + d

Where:

WF = Work Factor = [0.75 × (Payload Capacity + Xwd)] + [0.25 × Towing Capacity]

Xwd = 4wd Adjustment = 500 lbs if the vehicle group is equipped with 4wd and all-wheel drive, otherwise equals 0 lbs for 2wd.

Payload Capacity = GVWR (lbs) − Curb Weight (lbs) (for each vehicle group)

Towing Capacity = GCWR (lbs) − GVWR (lbs) (for each vehicle group)

TABLE 1—EQUATION COEFFICIENTS FOR SUBCONFIGURATION TARGET STANDARDS

Model year	c	d
Alternative 1—Fixed Target Standards		
Compression-ignition Vehicle Coefficients for Model Years 2016 and later		
2016–2018	0.000432	3.33
2019 and later	0.000409	3.14

TABLE 1—EQUATION COEFFICIENTS FOR SUBCONFIGURATION TARGET STANDARDS—Continued

Model year	c	d
Spark-ignition Vehicle Coefficients for Model Years 2016 and later		
2016–2018	0.000513	3.96
2019 and later	0.000495	3.81
Alternative 2—Phased-in Target Standards		
Compression-ignition Vehicle Coefficients for Model Years 2016 and later		
2016	0.000452	3.48
2017	0.000437	3.37
2018 and later	0.000409	3.14
-Spark-ignition Vehicle Coefficients for Model Years 2016 and later		
2016	0.000528	4.07
2017	0.000518	3.98
2018 and later	0.000495	3.81

(3) *Fleet average fuel consumption standard.* (i) Calculate each manufacturer's fleet average fuel consumption standard for conventional and advanced technology fleets separately based on the subconfiguration target standards specified in paragraph (a)(2) of this section, weighted to production volumes and averaged using the following equation combining all the applicable vehicles in a manufacturer's U.S. directed fleet (compression-ignition, spark-ignition and advanced technology vehicles) for a given model year, rounded to the nearest 0.01 gallons per 100 miles:

$$\text{Fleet Average Standard} = \frac{\sum[\text{Subconfiguration Target Standard}_i \times \text{Volume}_i]}{\sum[\text{Volume}_i]}$$

Where:

Subconfiguration Target Standard$_i$ = fuel consumption standard for each group of vehicles with same payload, towing capacity and drive configuration (gallons per 100 miles).

Volume$_i$ = production volume of each unique subconfiguration of a model type based upon payload, towing capacity and drive configuration.

(A) A manufacturer may group together subconfigurations that have the same test weight (ETW), GVWR, and GCWR. Calculate work factor and target value assuming a curb weight equal to two times ETW minus GVWR.

(B) A manufacturer may group together other subconfigurations if it uses the lowest target value calculated for any of the subconfigurations.

(C) The fleet average shall also be derived in accordance with 40 CFR 86.1865 and 40 CFR 1037.104(d).

(ii) A manufacturer complies with the requirements of this part if it provides reports, as specified in § 535.8, by the required deadlines and meets one of the following conditions:

(A) The manufacturer's fleet average performance, as determined in § 535.6, is less than the fleet average standard; or

(B) The manufacturer uses one or more of the credit flexibilities provided under NHTSA's Averaging, Banking and Trading Program, as specified in § 535.7, to comply with standards.

(iii) Manufacturers must select an alternative for subconfiguration target standards at the same time they submit the model year 2016 Pre-Model year Report, specified in § 535.8. Once selected, the decision cannot be reversed and the manufacturer must continue to comply with the same alternative for subsequent model years.

(iv) A manufacturer failing to comply with the provisions specified in paragraph (a)(3)(ii) of this section is liable to pay civil penalties in accordance with § 535.9.

(4) *Voluntary standards.* (i) Manufacturers may choose voluntarily to comply early with fuel consumption standards for model years 2013 through 2015, as determined in paragraphs (a)(4)(iii) and (iv) of this section, for example, in order to begin accumulating credits

through over-compliance with the applicable standard. A manufacturer choosing early compliance must comply with all the vehicles and engines it manufactures in each regulatory category for a given model year.

(ii) A manufacturer must declare its intent to voluntarily comply with fuel consumption standards at the same time it submits a Pre-Model Report, prior to the compliance model year beginning as specified in § 535.8; and, once selected, the decision cannot be reversed and the manufacturer must continue to comply for each subsequent model year for all the vehicles and engines it manufactures in each regulatory category for a given model year.

(iii) Calculate separate subconfiguration target standards for compression-ignition and spark-ignition vehicles for model years 2013 through 2015 using the equation in paragraph (a)(2)(ii) of this section, substituting the appropriate values for the coefficients in Table 2 of this section as appropriate.

TABLE 2—VOLUNTARY COMPLIANCE EQUATION COEFFICIENTS FOR VEHICLE FUEL CONSUMPTION STANDARDS

Model Year	c	d
Compression-ignition Vehicle Coefficients for Voluntary Compliance in Model Years 2013 through 2015		
2013 and 14	0.000470	3.61
2015	0.000466	3.60
Spark-ignition Vehicle Coefficients for Voluntary Compliance in Model Years 2013 through 2015		
2013 and 14	0.000542	4.17
2015	0.000539	4.15

(iv) Calculate the fleet average fuel consumption standards for model years 2013 through 2015 using the equation in paragraph (a)(3) of this section.

(5) *Exclusion of vehicles not certified as complete vehicles.* The vehicle standards § 535.5(a) do not apply for vehicles that are chassis-certified with respect to EPA's criteria pollutant test procedure in 40 CFR part 86, subpart S. Any chassis-certified vehicles must comply with the vehicle standards and requirements of § 535.5(b) and the engine standards of § 535.5(d) for engines used in these vehicles. A vehicle manufacturer choosing to comply with this paragraph and that is not the engine manufacturer is required to notify the engine manufacturers that their engines are subject to § 535.5(d) and that it intends to use their engines in excluded vehicles.

(6) *Optional certification under this section.* Manufacturers may certify any complete or cab-complete Class 2b through 5 vehicles weighing at or below 19,500 pounds GVWR and any incomplete vehicles approved by EPA for inclusion under this paragraph to the same testing and standard that applies to a comparable complete sister vehicles as determined in accordance in 40 CFR 1037.150(l). Calculate the target standard value under paragraph (a)(2) of this section based on the same work factor value that applies for the complete sister vehicle.

(7) *Loose engines.* This paragraph applies for spark-ignition engines identical to engines used in vehicles certified to the standards of this section § 535.5(a), where manufacturers sell such engines as loose engines or installed in incomplete vehicles that are not cab-complete vehicles in accordance with 40 CFR 1037.150(m). A manufacturer's engines are deemed to have fuel consumption target values and test results based upon the complete vehicle in the applicable test group with the highest equivalent test weight in accordance with 40 CFR 1037.150(m). The fuel consumption subconfiguration standard for a loose engines equals the test group result of the complete vehicle as specified in 40 CFR 1037.150(m)(6) multiplied by 1.10 and rounded to the nearest 0.01 gallon per 100 miles. The U.S.-directed production volume of engines manufactured for sale as loose engines or installed in incomplete heavy-duty vehicles that are not cab-complete vehicles in any given model year may not exceed ten percent of the total U.S-directed production volume of engines of that design that the manufacturer produces for heavy-duty applications for that model year, including engines the manufacturer produces for complete vehicles, cab-complete vehicles, and other incomplete vehicles. The total number of engines a manufacturer may certify under this paragraph (a)(7), of all engine designs, may not exceed 15,000 in any model year as specified in 40 CFR 1037.150(m). Engines

produced in excess of the number cannot be certified to the standard in this paragraph (a)(7).

(b) *Heavy-duty vocational vehicles.* Each chassis manufacturer of heavy-duty vocational vehicles shall comply with the fuel consumption standards in this paragraph (b) expressed in gallons per 1,000 ton-miles. Manufacturers of engines used in heavy-duty vocational vehicles shall comply with the standards in paragraph (d) of this section.

(1) Mandatory standards. For model years 2016 and later, each chassis manufacturer of heavy-duty vocational vehicles must comply with the fuel consumption standards in paragraph (b)(3) of this section.

(i) The heavy-duty vocational vehicle chassis category is subdivided by GVWR into three regulatory subcategories as defined in § 535.4, each with its own assigned standard.

(ii) For purposes of certifying vehicles to fuel consumption standards, manufacturers must divide their product lines into vehicle families that have similar emissions and fuel consumption features, as specified by EPA in 40 CFR part 1037, subpart C, and these families will be subject to the applicable standards. Each vehicle family is limited to a single model year.

(iii) A manufacturer complies with the requirements of this part, if it provides information as specified in § 535.8, by the required deadlines and meets one of the following conditions:

(A) The manufacturer's fuel consumption performance for each vehicle family, as determined in § 535.6, is lower than the applicable standard; or

(B) The manufacturer uses one or more of the credit flexibilities provided under NHTSA's Averaging, Banking and Trading Program, specified in § 535.7, to comply with standards.

(iv) A manufacturer failing to comply with the provisions specified in paragraph (b)(1)(iii) of this section is liable to pay civil penalties in accordance with § 535.9.

(2) *Voluntary compliance.* (i) For model years 2013 through 2015, a manufacturer may choose voluntarily to comply early with the fuel consumption standards provided in paragraph (b)(3) of this section. For example, a manufacturer may choose to comply early in order to begin accumulating credits through over-compliance with the applicable standards. A manufacturer choosing early compliance must comply with all the vehicles and engines it manufacturers in each regulatory category for a given model year.

(ii) A manufacturer must declare its intent to voluntarily comply with fuel consumption standards and identify its plans to comply before it submits its first application for a certificate of conformity for the respective model year as specified in § 535.8; and, once selected, the decision cannot be reversed and the manufacturer must continue to comply for each subsequent model year for all the vehicles and engines it manufacturers in each regulatory category for a given model year.

(3) *Regulatory subcategory standards.* The fuel consumption standards for heavy-duty vocational vehicles are given in the following table:

TABLE 3—HEAVY-DUTY VOCATIONAL VEHICLE FUEL CONSUMPTION STANDARDS

Regulatory subcategories	Light Heavy vehicles Class 2b–5	Medium heavy vehicles Class 6—7	Heavy heavy vehicles Class 8
Fuel Consumption Mandatory Standards (gallons per 1,000 ton-miles) Effective for Model Years 2017 and later			
Fuel Consumption Standard	36.7	22.1	21.8
Effective for Model Years 2016			
Fuel Consumption Standard	38.1	23.0	22.2
Fuel Consumption Voluntary Standards (gallons per 1,000 ton-miles) Effective for Model Years 2013 to 2015			
Fuel Consumption Standard	38.1	23.0	22.2

(4) *Certifying across service classes.* A manufacturer may optionally certify a vocational vehicle to the standards and

useful life applicable to a higher vehicle service class (or regulatory subcategory changes such as complying with the heavy heavy-duty standard instead of medium heavy-duty standard), provided the manufacturer does not generate credits with the vehicle. If a manufacturer includes smaller vehicles in a credit-generating subfamily (with an FEL below the standard), exclude their production volume from the credit calculation.

(5) *Off-road operation.* Heavy-duty vocational vehicles including vocational tractors meeting the off-road criteria in 49 CFR 523.2 are exempted from the requirements in this paragraph (b), but the engines in these vehicles must meet the requirements of paragraph (d) of this section.

(c) *Truck tractors.* Each manufacturer of truck tractors, except vocational tractors, with a GVWR above 26,000 pounds shall comply with the fuel consumption standards in this paragraph (c) expressed in gallons per 1,000 ton-miles.

(1) *Mandatory standards.* For model years 2016 and later, each manufacturer of truck tractors must comply with the fuel consumption standards in paragraph (c)(3) of this section.

(i) The truck tractor category is subdivided by roof height and cab design into nine regulatory subcategories as shown in Table 4 of this section, each with its own assigned standard.

(ii) For purposes of certifying vehicles to fuel consumption standards, manufacturers must divide their product lines into vehicles families that have similar emissions and fuel consumption features, as specified by EPA in 40 CFR part 1037, subpart C, and these families will be subject to the applicable standards. Each vehicle family is limited to a single model year.

(iii) Standards for truck tractor engines are given in paragraph (d) of this section.

(iv) A manufacturer complies with the requirements of this part, if at the end of the model year, it provides reports, as specified in § 535.8, by the required deadlines and meets one of the following conditions:

(A) The manufacturer's fuel consumption performance for each vehicle family, as determined in § 535.6, is lower than the applicable standard; or

(B) The manufacturer uses one or more of the credit flexibilities provided under NHTSA's Averaging, Banking and Trading Program, specified in § 535.7, to comply with standards.

(v) A manufacturer failing to comply with the provisions specified in paragraph (c)(1)(iv) of this section is liable to pay civil penalties in accordance with § 535.9.

(2) *Voluntary compliance.* (i) For model years 2013 through 2015, a manufacturer may choose voluntarily to comply early with the fuel consumption standards provided in paragraph (c)(3) of this section. For example, a manufacturer may choose to comply early in order to begin accumulating credits through over-compliance with the applicable standards. A manufacturer choosing early compliance must comply with all the vehicles and engines it manufacturers in each regulatory category for a given model year.

(ii) A manufacturer must declare its intent to voluntarily comply with fuel consumption standards and identify its plans to comply before it submits its first application for a certificate of conformity for the respective model year as specified in § 535.8; and, once selected, the decision cannot be reversed and the manufacturer must continue to comply for each subsequent model year for all the vehicles and engines it manufacturers in each regulatory category for a given model year.

(3) *Regulatory subcategory standards.* The fuel consumption standards for truck tractors, except for vocational tractors, are given in the following table:

TABLE 4—TRUCK TRACTOR FUEL CONSUMPTION STANDARDS

Regulatory subcategories	Day cab		Sleeper cab
	Class 7	Class 8	Class 8
Fuel Consumption Mandatory Standards (gallons per 1,000 ton-miles) Effective for Model Years 2017 and later			
Low Roof	10.2	7.8	6.5

TABLE 4—TRUCK TRACTOR FUEL CONSUMPTION STANDARDS—Continued

Regulatory subcategories	Day cab		Sleeper cab
	Class 7	Class 8	Class 8
Mid Roof	11.3	8.4	7.2
High Roof	11.8	8.7	7.1
Effective for Model Years 2016			
Low Roof	10.5	8.0	6.7
Mid Roof	11.7	8.7	7.4
High Roof	12.2	9.0	7.3
Fuel Consumption Voluntary Standards (gallons per 1,000 ton-miles) Effective for Model Years 2013 to 2015			
Low Roof	10.5	8.0	6.7
Mid Roof	11.7	8.7	7.4
High Roof	12.2	9.0	7.3

(4) *Certifying across service classes.* A manufacturer may optionally certify a tractor to the standards and useful life applicable to a higher vehicle service class (or regulatory subcategory changes such as complying with the Class 8 day-cab tractor standard instead of Class 7 day-cab tractor), provided the manufacturer does not generate credits with the vehicle. If a manufacturer includes smaller vehicles in a credit-generating subfamily (with an FEL below the standard), exclude their production volume from the credit calculation.

(5) *Vocational tractors.* Tractors meeting the definition of vocational tractors in 49 CFR 523.2 must comply with requirements for heavy-duty vocational vehicles specified in paragraphs (b) and (d) of this section. Class 7 and Class 8 tractors certified or exempted as vocational tractors are limited in production to no more than 21,000 vehicles in any three consecutive model years. If a manufacturer is determined as not applying this allowance in good faith by the EPA in its applications for certification in accordance with 40 CFR 1037.205 and 1037.610, a manufacturer must comply with the tractor fuel consumption standards in paragraph (c)(3) of this section.

(d) *Heavy-duty engines.* Each manufacturer of heavy-duty engines shall comply with the fuel consumption standards in this paragraph (d) expressed in gallons per 100 brake-horsepower-hours. Each engine must be certified to the primary intended service class that it is designed for in accordance with 40 CFR 1036.108;

(1) *Mandatory standards.* Each manufacturer must comply with the fuel consumption standard in paragraph (d)(3) of this section for model years 2017 and later compression-ignition engines and for model years 2016 and later spark-ignition engines.

(i) The heavy-duty engine regulatory category is divided into six regulatory subcategories, five compression-ignition subcategories and one spark-ignition subcategory, as shown in Table 5 of this section.

(ii) Separate standards exist for engines manufactured for use in heavy-duty vocational vehicles and in truck tractors.

(iii) For purposes of certifying engines to fuel consumption standards, manufacturers must divide their product lines into engine families that have similar fuel consumption features, as specified by EPA in 40 CFR part 1036, subpart C, and these families will be subject to the same standards. Each engine family is limited to a single model year.

(iv) A manufacturer complies with the requirements of this part, if at the end of the model year, it provides reports, as specified in § 535.8, by the required deadlines and meets one of the following conditions:

(A) The manufacturer's fuel consumption performance of each engine family as determined in § 535.6 is less than the applicable standard; or

(B) The manufacturer uses one or more of the flexibilities provided under

NHTSA's Averaging, Banking and Trading Program, specified in § 535.7, to comply with standards.

(v) A manufacturer failing to comply with the provisions specified in paragraph (d)(1)(iv) of this section is liable to pay civil penalties in accordance with § 535.9.

(2) *Voluntary compliance.* (i) For model years 2013 through 2016 for compression-ignition engines, and for model year 2015 for spark-ignition engines, a manufacturer may choose voluntarily to comply with the fuel consumption standards provided in paragraph (d)(3) through (5) of this section. For example, a manufacturer may choose to comply early in order to begin accumulating credits through over-compliance with the applicable standards. A manufacturer choosing early compliance must comply with all the vehicles and engines it manufacturers in each regulatory category for a given model year except in model year 2013 the manufacturer may comply with individual engine families as specified in 40 CFR 1036.150(a)(2).

(ii) A manufacturer must declare its intent to voluntarily comply with fuel consumption standards and identify its plans to comply before it submits its first application for a certificate of conformity for the respective model year as specified in § 535.8; and, once selected, the decision cannot be reversed and the manufacturer must continue to comply for each subsequent model year for all the vehicles and engines it manufacturers in each regulatory category for a given model year.

(3) *Regulatory subcategory standards.* The fuel consumption standards for heavy-duty engines are given in the following:

TABLE 5—PRIMARY HEAVY-DUTY ENGINE STANDARDS

Fuel Consumption Mandatory Standards (gallons per 100 bhp-hr)						
Regulatory Subcategory	Light Heavy-Duty Compression-Ignition Engine	Medium Heavy-Duty Compression-Ignition Engine		Heavy Heavy-Duty Compression-Ignition Engine		Spark-Ignition Engines
Truck Application	Vocational	Vocational	Tractor	Vocational	Tractor	All
Effective Model Years.	2017 and later					2016 and later
Fuel Consumption Standard.	5.66	5.66	4.78	5.45	4.52	7.06
Fuel Consumption Standards for Voluntary Compliance (gallons per100 bhp-hr)						
Regulatory Subcategory.	Light Heavy-Duty Compression-Ignition Engine	Medium Heavy-Duty Compression-Ignition Engine		Heavy Heavy-Duty Compression-Ignition Engine		Spark-ignition Engine
Truck Application	Vocational	Vocational	Tractor	Vocational	Tractor	All
Effective Model Years.	2013 through 2016					2015
Voluntary Fuel Consumption Standard.	5.89	5.89	4.93	5.57	4.67	7.06

(4) *Alternate subcategory standards.* The alternative fuel consumption standards for heavy-duty compression-ignition engines are as follows:

(i) Manufacturers entering the voluntary program in model years 2014 through 2016, may choose to certify compression-ignition engine families unable to meet standards provided in paragraph (d)(3) of this section to the alternative fuel consumption standards of this paragraph (d)(4).

(ii) Manufacturers may not certify engines to these alternate standards if they are part of an averaging set in which they carry a balance of banked credits. For purposes of this section, manufacturers are deemed to carry credits in an averaging set if they carry credits from advance technology that are allowed to be used in that averaging set in accordance with § 535.7(d)(12).

(iii) The emission standards of this section are determined as specified in EPA 40 CFR 1036.620(a) through (c) and should be converted to equivalent fuel consumption values.

(5) *Alternate Phase-In Standards.* Manufacturers have the option to comply with EPA emissions standards for compression-ignition engines using an alternative phase-in schedule that correlates with the EPA OBD standards. If a manufacturer chooses to use the alternative phase-in schedule for meeting EPA standards and optionally chooses to comply early with the NHTSA fuel consumption program, it must use the same phase-in schedule beginning in model year 2013 for fuel consumption standards and must remain in the program for each model year thereafter. The fuel consumption standard for each model year of the alternative phase-in schedule is provided in Table 6 of this section. Note that engines certified to these standards are not eligible for early credits under § 535.7.

TABLE 6—ALTERNATIVE PHASE-IN COMPRESSION IGNITION ENGINE STANDARDS

Tractors	LHD Engines	MHD Engines	HHD Engines
Model Years 2013–2015	NA	5.03 gals/100 hp-hr	4.76 gals./100 hp-hr
Model Years 2016 and later†	NA	4.78 gals./100 hp-hr	4.52 gals/100 hp-hr
Vocational	LHD Engines	MHD Engines	HHD Engines
Model Years 2013–2015	6.07 gals/100 hp-hr	6.07 gals/100 hp-hr	5.67 gals/100 hp-hr
Model Years 2016 and later†	5.66 gals/100 hp-hr	5.66 gals/100 hp-hr	5.45 gals/100 hp-hr

†**Note:** these alternate standards for 2016 and later are the same as the otherwise applicable standards for 2017 and later.

§ 535.6 Measurement and calculation procedures.

(a) *Heavy-duty pickup trucks and vans.* This section describes the testing a manufacturer must perform for each model year and the method for determining the fleet fuel consumption performance to show compliance with the fleet average fuel consumption standard for heavy-duty pickup trucks and vans in § 535.5(a).

(1) For each model year, the heavy-duty pickup trucks and vans selected by a manufacturer to comply with fuel consumption standards in § 535.5(a) must be used to determine the manufacturer's fleet average fuel consumption performance. If the manufacturer's fleet includes conventional and advanced technology heavy-duty pickup trucks and vans, the fleet should be sub-divided into two separate vehicle fleets, with all of the conventional vehicles in one fleet and all of the advanced technology vehicles in the other fleet.

(2) Vehicles in each fleet should be divided into test groups or subconfigurations according to EPA in 40 CFR part 86, subpart S, and 40 CFR 1037.104.

(3) Test and measure the CO_2 emissions test results for the selected vehicles and determine the CO_2 emissions test group result, in grams per mile in accordance with 40 CFR part 86, subpart S.

(i) Perform exhaust testing on vehicles fueled by conventional and alternative fuels, including dedicated and dual fueled (multi-fueled and flexible fueled) vehicles and measure the CO_2 emissions test result.

(ii) Adjust the CO_2 emissions test result of dual fueled vehicles using a