TABLE 1 TO § 165.801—SECTOR OHIO VALLEY ANNUAL AND RECURRING SAFETY ZONES—Continued

Date	Sponsor/name	Sector Ohio Valley location	Safety zone
107. 1 day in November	Friends of the Festival/Cheer at the Pier.	Chattanooga, TN	Tennessee River, Miles 462.7–465.2 (Tennessee).

* * * * *

Dated: March 11, 2024.

H.R. Mattern,

Captain, U.S. Coast Guard, Captain of the Port Sector Ohio Valley.

[FR Doc. 2024–05586 Filed 3–14–24; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 535

[NHTSA–2020–0079]

RIN 2127–AM28

Improvements for Heavy-Duty Engine and Vehicle Fuel Efficiency Test Procedures, and Other Technical Amendments

AGENCY: National Highway Traffic Safety Administration.

ACTION: Final rule.

SUMMARY: The National Highway Traffic Safety Administration (NHTSA) is finalizing minor technical amendments to the test procedures for heavy-duty engines and vehicles to improve accuracy and reduce testing burden. These amendments affect the certification procedures for fuel efficiency standards and related requirements. These amendments increase compliance flexibility, harmonize with other requirements, add clarity, correct errors, and streamline the regulations. Given the nature of these changes, NHTSA does not expect either significant environmental impacts or significant economic impacts for any sector.

DATES: This final rule is effective on May 14, 2024.

ADDRESSES: NHTSA has established a docket for this action under Docket ID: NHTSA–2020–0079. For access to the dockets to read background documents or comments received, go to *http://www.regulations.gov,* and/or: Docket Management Facility, M–30, U.S. Department of Transportation, West Building, Ground Floor, Rm. W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590. The DOT Docket Management Facility is open between 9 a.m. and 5 p.m. Eastern Standard Time (EST), Monday through Friday, except Federal holidays. Please call ahead if you plan to drop off or pick up a document to ensure someone is available to assist you. The Docket Management Facility can be reached at (202) 366–9826 or (202) 366–9317 to arrange a drop off/pick up.

FOR FURTHER INFORMATION CONTACT: Seiar Zia, Deputy Division Chief, Fuel Economy Division, Office of Rulemaking, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590; email: *seiar.zia@dot.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

I. General Information

A. Does this action apply to me?

This action will affect companies that manufacture, sell, or import into the United States new heavy-duty engines and new Class 2b through 8 trucks, including combination tractors, buses, vocational vehicles including municipal, commercial, recreational vehicles, and ¾-ton and 1-ton pickup trucks and vans. The heavy-duty category incorporates all motor vehicles with a gross vehicle weight rating of 8,501 lbs. or greater, and the engines that power them, except for medium-duty passenger vehicles covered by the corporate average fuel economy standards and greenhouse gas standards issued for light-duty vehicles. The regulations for the Medium- and Heavy-Duty Vehicle Fuel Efficiency Program are found at 49 CFR part 535.

Regulated categories and entities include the following:

Category	NAICS codes [1]	Examples of potentially regulated entities
Industry	333618, 336111, 336112, 336120, 336211, 336212, 336611, 336911, 336999.	Motor vehicle manufacturers and engine manufacturers.

[1] North American Industry Classification System (NAICS).

Category	NAICS codes [1]	Examples of potentially regulated entities
Industry	811111, 811112, 811198, 423110	Commercial importers of vehicles and vehicle components.
Industry	335312, 811198	Alternative fuel vehicle converters.
Industry	326199, 332431	Portable fuel container manufacturers.

This list is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

B. What action is the Agency taking?

This action finalizes amendments to the regulations that implement NHTSA's fuel efficiency standards for medium-duty and heavy-duty engines and vehicles. These amendments are technical in nature and include corrections and clarifications to a variety of existing regulatory provisions to improve consistency with related EPA standards and with NHTSA's original intent for those provisions. In other words, this final rule comprises a variety of small changes for multiple types of engines and vehicles.

These amendments parallel similar ones in a rulemaking conducted by the EPA under RIN 2060–AU62.[2] These technical amendments are intended to maintain alignment between EPA's Medium and Heavy-Duty Vehicle Greenhouse Gas Emissions and NHTSA's Fuel Efficiency Standards. The technical amendments in this final rule are necessary to align with the technical amendments finalized by EPA under the parallel rulemaking referenced in this paragraph.

Most of the amendments being finalized in this rule will modify existing test procedures for medium- and heavy-duty engines and vehicles. These test procedure changes will improve accuracy, and in some cases, reduce test burden.

Other amendments will update NHTSA's regulations to enhance the implementation of existing fuel efficiency standards. For example, some changes will reduce the likelihood that manufacturers will need to conduct unique certification testing for compliance with Canadian and CARB standards, in addition to NHTSA's standards. Some amendments will make it easier for manufacturers to more fully account for the fuel efficiency benefits of advanced fuel efficiency improving technology, which could provide them the opportunity to generate additional fuel consumption improvement values for compliance. These amendments are described in II.

Additionally, as a matter of housekeeping, NHTSA is removing portions of its regulations that were vacated by the United States Court of Appeals for the District of Columbia Circuit. In November 2021, that Court ''vacate[d] all portions of the [2016 joint NHTSA and EPA] rule that apply to trailers.'' *Truck Trailer Mfrs. Ass'n, Inc.* v. *EPA,* 17 F.4th 1198, 1200 (D.C. Cir. 2021). The underlying statute authorizes NHTSA to examine the fuel efficiency of and prescribe fuel economy standards for ''commercial medium-duty [and/or] heavy-duty on-highway vehicles.'' 49 U.S.C. 32902(b)(1)(C); 49 U.S.C. 32902(k)(2). The Court reasoned that trailers do not qualify as ''vehicles'' when that term is used in the fuel economy context because trailers are motorless and use no fuel. *Truck Trailer Mfrs. Ass'n, Inc.,* 17 F.4th at 1200, 1204–08. Accordingly, the Court held that NHTSA does not have the authority to regulate the fuel economy of trailers. *Id.* at 1208.[3] As a result, NHTSA is removing the vacated trailer provisions from its regulations.

NHTSA, is however, keeping its definition of standard trailer as well as other specific types of trailers in 49 CFR 535.4 to assist manufacturers in determining tractor performance in the Greenhouse Gas Emissions Model (GEM). In October 2016, NHTSA and EPA issued its Phase 2 Heavy-Duty (HD) National Program final rule that increased efficiency standards beginning in model year (MY) 2021.[4] As part of the 2016 rulemaking, NHTSA and EPA adopted provisions such that tractor performance in GEM is determined by assuming the tractor is pulling a ''standard'' trailer. The specific characteristics of a standard trailer are dependent upon the type of tractor. 40 CFR 1037.501(g) provides the specific criteria a standard trailer must meet for specific types of trailers. In addition to measurement criteria, some standard trailers must be of a specific type (*e.g.,* tank trailer, flatbed trailer). Therefore, while NHTSA is removing the requirements for trailers, NHTSA is keeping its definition of standard trailer as well as other specific types of trailers in 49 CFR 535.4 to assist manufacturers in determining tractor performance in GEM.

C. What are the incremental costs and benefits of this action?

This action is limited in scope and is not intended to include amendments that will have significant economic or environmental impacts. NHTSA has therefore not estimated the potential costs or benefits of this final rule.

II. Medium and Heavy-Duty Fuel Efficiency Program Technical Amendments

A. Overview of the Medium and Heavy-Duty Fuel Efficiency Program

In September 2011, NHTSA and EPA finalized Phase 1 of the Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles.[5] The Phase 1 program covered new commercial heavy-duty vehicles and work trucks manufactured in model years 2014 through 2020, with unique standards for combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles, as well as separate standards for engines in tractors and vocational vehicles. NHTSA and EPA finalized Phase 2 of the standards in October 2016.[6] In addition to more stringent standards, the Phase 2 program also incorporated enhanced test procedures that (among other things) allow individual drivetrain and powertrain performance to be reflected in the vehicle certification process; and included an expanded and improved compliance simulation model.

Since the promulgation of the Phase 2 regulations, manufacturers have been revising their internal test procedures for compliance with the new

[2] NPRM published on May 12, 2020 (85 FR 28140); final rule published on June 29, 2021 (86 FR 34308), as corrected by notices published on September 23, 2021 (86 FR 52833) and October 26, 2022 (87 FR 64864).

[3] For similar reasons, the Court also held that the statute authorizing EPA to regulate the emissions of ''motor vehicles'' does not encompass trailers. *Id.* at 1200–03. The Court affirmed, however, that both agencies still ''can regulate *tractors* based on the *trailers* they pull.'' *Id.* at 1208. Moreover, NHTSA is still authorized to regulate trailers in other contexts, such as under 49 U.S.C. chapter 301. *See* 49 U.S.C. 30102(a)(7) (defining ''motor vehicle'' to include ''a vehicle . . . drawn by mechanical power''); *Truck Trailer Mfrs. Ass'n, Inc.,* 17 F.4th at 1207 (''A trailer is 'drawn by mechanical power.' '').

[4] 81 FR 73478, October 25, 2016.

[5] 76 FR 57106, September 15, 2011.

[6] 81 FR 73478, October 25, 2016.

requirements that began for model year 2021. While doing so, they have made the agencies aware of several areas in which the test procedure regulations could be improved (in terms of overall accuracy, repeatability, and clarity) without changing the effective stringency of the standards.

In its May 12, 2020 NPRM, EPA proposed numerous changes to the test procedure regulations to address manufacturers' concerns in addition to other issues it had identified.[7] EPA sought comment on those changes and issued a final rule on June 29, 2021 responding to the comments and adjusting the regulatory changes as appropriate.[8] After carefully reviewing all technical amendments in the EPA proposal, public comments to EPA's proposal, and the technical amendments that EPA finalized, NHTSA published a NPRM proposing technical amendments to its regulations that parallel the technical amendments that EPA has finalized.[9] After providing opportunity for public comment, NHTSA is now finalizing its proposed technical amendments. NHTSA's regulatory changes described below consist primarily of references and definitions contained in NHTSA regulations which were impacted by the technical amendments finalized by the EPA. This final rule also includes various minor editorial changes to NHTSA's regulations that simply correct typographical/formatting errors or revise NHTSA's regulatory text to improve clarity or to update references to EPA regulations that have changed as a result of the EPA technical amendments.

B. Public Participation Opportunities and Summary of Comments

NHTSA published the NPRM on September 13, 2022, and provided a 60-day comment period. The agency left the docket open with the intention to consider late comments to the extent practicable. NHTSA's docket received two comments from individual members of the public [10] [11] and one comment from a stakeholder organization,[12] for an overall total of three comment submissions. The two comments from members of the public were outside the scope of the proposal.

The stakeholder organization, Allison Transmission (Allison), commented on the current version of the Greenhouse Gas Emissions Model (GEM). Allison commented that ''while the current version of GEM offers adequate modeling of emissions in vehicles, Allison believes that some future changes to GEM could prove to be beneficial in improving the overall accuracy of the model.'' Allison then recommended five changes to GEM that it believes ''would promote further adoption of current vehicle technologies and strategies that improve fuel economy (FE) . . . as well as continue to enhance the accuracy of the modeled vs actual FE performance.''

NHTSA appreciates the comment from Allison. However, changes to the GEM are beyond the scope of this rulemaking. Although NHTSA relies on outputs from GEM to generate emissions and fuel consumption performance results and allows manufacturers to use GEM for compliance purposes, GEM was developed by EPA, who continues to maintain and update it. Accordingly, while NHTSA provides input to EPA regarding GEM and conducts its own analysis when deciding the appropriateness of using GEM in its fuel efficiency program, comments requesting changes to GEM are more appropriately addressed to EPA.

In conjunction with its final rule issued on June 29, 2021, EPA issued a notice of proposed rulemaking (NPRM) proposing further revisions to GEM.[13] In the NPRM, EPA proposed to revise GEM after consideration of comments solicited and received on its technical amendments NPRM. EPA issued a final rule on July 28, 2022 (87 FR 45257) that included corrections, clarifications, additional flexibilities, and adjustment factors to improve the GEM compliance tool.[14]

While none of the comments NHTSA received were within the scope of the proposal, the agency appreciates the information and opinions provided.

C. Overview of the Final Rule

NHTSA is largely finalizing the requirements proposed in the NPRM. Although NHTSA is not making any changes based on the comments received, NHTSA is making minor changes to better align NHTSA with the changes EPA finalized regarding updates to the GEM as well as other minor technical amendments. The changes NHTSA is finalizing are described in more detail below.

D. Authority Citation for Part 535

NHTSA is amending the citation for part 535 to remove reference to 49 U.S.C. 30101 because the provision does not pertain to NHTSA's authority to establish a fuel efficiency program for medium- and heavy-duty vehicles and engines.

E. 49 CFR 535.1 Scope

NHTSA is amending § 535.1 by removing the reference to trailers from the scope section of MDHD Fuel Efficiency Program regulation, consistent with the 2021 D.C. Circuit decision discussed above.

F. 49 CFR 535.3 Applicability

1. Section 535.3(a) Enforcement Action Related to Compliance With NHTSA Standards

While NHTSA proposed amending § 535.3(a) to clarify the applicability and compliance provisions of its MDHD Fuel Efficiency Program, NHTSA no longer believes the proposed changes are appropriate. Accordingly, NHTSA is not finalizing any changes to § 535.3(a).

2. Section 535.3(c) Applicable Vehicle and Engine Manufacturers

NHTSA is revising § 535.3(c) by removing an outdated reference to 40 CFR part 86 and adding the specific subpart references for 40 CFR parts 1036 and 1037, such that the regulation will now reference 40 CFR part 1036, subpart C and 40 CFR part 1037, subpart C.

3. Section 535.3(d)(5) Exclusion of Heavy-Duty Trailers

NHTSA is removing paragraph (d)(5) from § 535.3, consistent with the 2021 D.C. Circuit decision discussed above, and reserving it for future use.

4. Section 535.3(e)(1) Off-Road Vocational Vehicle Exemption

NHTSA is revising § 535.3(e)(1) by removing details regarding exemptions and just referencing NHTSA's provision at § 535.5(b)(9) that provides complete details about off-road exemptions. This change is intended to reduce confusion by providing details in only one location in NHTSA's regulations. Although NHTSA proposed adding additional details to paragraph (e)(1) to

[7] 85 FR 28140.

[8] 86 FR 34308, as corrected by documents published on September 23, 2021 (86 FR 52833) and October 26, 2022 (87 FR 64864).

[9] 87 FR 56156, September 13, 2022.

[10] Docket ID: NHTSA–2020–0079–0002 commenter recommended stop engine testing and allowing unrestricted engines to be produced for all diesel vehicles.

[11] Docket ID: NHTSA–2020–0079–0004 commenter recommended including ''off-road'' vehicles in these regulations and reduce the emissions of on-road vehicles.

[12] Docket ID: NHTSA–2020–0079–003 Allison Transmission commented on the current version of the Greenhouse Gas Emissions Model and recommended five future changes to it.

[13] 86 FR 34189.

[14] Additional information can be found on EPA's website. ''Greenhouse Gas Emissions Model (GEM) for Medium- and Heavy-Duty Vehicle Compliance.'' (n.d.). *https://www.epa.gov/regulations-emissions-vehicles-and-engines/greenhouse-gas-emissions-model-gem-medium-and-heavy-duty.* Accessed July 2, 2023.

better align with EPA's provision, NHTSA now believes those details would be more appropriately placed in § 535.5(b)(9). As discussed below, NHTSA is finalizing a technical amendment to add language to § 535.5(b)(9) that allows vocational vehicles with a date of manufacture before January 1, 2021, to automatically qualify for an exemption under § 535.5(b)(9) if the tires installed on the vehicle have a maximum speed rating at or below 55 miles per hour. This new provision, found at 49 CFR 535.5(b)(9)(i), reflects the intention of the NPRM and achieves consistency with 40 CFR 1037.150(h).

5. Section 535.3(e)(2)(ii)(A) and (B) Early Certification for Small Manufacturers

In the NPRM, NHTSA proposed adding paragraphs (A) and (B) to § 535.3(e)(2)(ii) to discuss two flexibilities to NHTSA's compliance provisions for small manufacturers. While, NHTSA is not finalizing the exact language proposed, NHTSA is finalizing the substance of the proposed change. Vehicle manufacturers that qualify as small businesses are exempt from the Phase 1 standards but must meet the Phase 2 standards beginning January 1, 2022. However, some vehicle families have been certified voluntarily to Phase 1 standards by small manufacturers. To encourage more voluntary early certification to Phase 1 standards, EPA finalized a new interim provision in 40 CFR 1037.150(c)(4) for small manufacturers that certify their entire U.S.-directed production volume to the Phase 1 standards for calendar year 2021 (*see* 86 FR 34337). These small manufacturers will be allowed to certify to the Phase 1 standards for model year 2022, instead of the otherwise applicable Phase 2 standards. The agencies believe that early compliance with the Phase 1 standards should more than offset any reduction in benefits that will otherwise be achieved from meeting Phase 2 standards starting January 1, 2022.[15] NHTSA is finalizing this change at § 535.3(e)(2)(ii)(B) and has shifted some existing language from § 535.3(e)(2)(ii) into a new subparagraph (A).

NHTSA also proposed allowing Phase 1 compliance credits that small manufacturers generate from model years 2018 through 2022 for vocational vehicles to be used through model year 2027. In the NPRM, NHTSA cited EPA's rationale for making its corresponding change. In its final rule, EPA stated that the agencies believe that the limit on credit life can be problematic for small manufacturers because their limited product lines provide them with less flexibility when averaging their fleets. EPA also stated that the agencies believe the longer credit life will provide small manufacturers with additional flexibility to ensure all their products are fully compliant by the time the Phase 2 standards are fully phased-in for model year 2027. NHTSA continues to believe that the rationale for these changes is valid. However, the scope of the change is smaller than NHTSA recognized when proposing the additional flexibility for small manufacturers. NHTSA's rationale in adopting EPA's reasoning was predicated on an incorrect understanding of the regulation. In proposing the technical amendment, NHTSA believed that all credit carry forwards for vocational vehicles between Phase 1 and Phase 2 were limited by the five-year credit life. This is incorrect. Under the existing regulations, fuel consumption credits a manufacturer generates for light and medium heavy-duty vocational vehicles in model years 2018 through 2021 may be used through model year 2027, instead of being limited to a five-year credit life. These credits, generated under the Phase 1 program, can be used for compliance in the Phase 2 averaging, banking, and trading program. The existing regulations limit the use of fuel consumption credits generated for heavy heavy-duty vocational to a five-year credit life. Therefore, the proposed change would only extend the credit flexibility to heavy heavy-duty vocational vehicles produced by small manufacturers.

As EPA stated in its final rule, the agencies believe that the limit on credit life can be problematic for small manufacturers because their limited product lines provide them with less flexibility when averaging their fleets. The agencies believe the longer credit life will provide small manufacturers with additional flexibility to ensure all their products are fully compliant by the time the Phase 2 standards are fully phased-in for model year 2027. Therefore, NHTSA will finalize an amendment, harmonizing with EPA's regulations, to allow fuel consumption credits generated for heavy heavy-duty vocational vehicles produced by small manufacturers in model years 2018 through 2021 to be used through 2027, instead of being limited to a five-year credit life. This provision, however, is being more appropriately added to § 535.7(a)(8), which includes provisions for credit transfers between Phase 1 and Phase 2.

Additionally, NHTSA is finalizing an amendment to address credit carry forwards for small manufacturers that certify 2022 vehicles to Phase 1 standards if the manufacturer voluntarily certified its entire U.S.-directed production volume to the Phase 1 standards for calendar year 2021. Specifically, NHTSA is adding a provision stating that fuel consumption credits that a small manufacturer generates for vocational vehicles in model year 2022 that are certified to Phase 1 standards as permitted under § 535.3(e)(2)(ii)(B) may be used through model year 2027. This provision is also being more appropriately added to § 535.7(a)(8), which includes provisions for credit transfers between Phase 1 and Phase 2. Although NHTSA's rationale for making this change varies slightly from EPA, the changes themselves maintain program alignment across both agencies.

6. Section 535.3(e)(3) Transitional Allowance for Trailers

NHTSA is removing 535.3(e)(3) from its regulations, consistent with the 2021 D.C. Circuit decision discussed above, and reserving it for future use.

Section 535.3(j) Potential Enforcement Actions for Incomplete, Incorrect or Fraudulent Information

In the NPRM, NHTSA proposed adding paragraph (j) to § 535.3. The new paragraph was intended outline eligibility determinations and potential enforcement actions under the NHTSA fuel efficiency program if EPA denies, suspends or revokes, a manufacturer's certificate of conformity in accordance with 40 CFR 1036.255 or 1037.255, due to incomplete, incorrect or fraudulent information. However, NHTSA has decided not to finalize the provision because the agency no longer believes it is necessary. Manufacturers that submit fraudulent information may be subject to enforcement action under 18 U.S.C. 1001. Additionally, there is already an existing provision at § 535.8(a)(3) explaining that manufacturers providing incomplete information may be subject to civil penalties in accordance with 49 U.S.C. 32912 and a provision at § 535.9(a)(10) indicating actions NHTSA may take if EPA suspends or revokes a certificate of conformity.

G. 49 CFR 535.4 Definitions

NHTSA is adding several new terms to its list of definitions and modifying the definitions of several existing terms

[15] EPA stated that it believed that the magnitude of any impact on air quality would be small because of the low production volumes from these small business manufacturers.

on the list to clarify the meaning of those terms. Almost all these definitions reference EPA regulatory definitions to ensure alignment of the NHTSA and EPA programs.

1. Introductory Text

NHTSA is amending the introductory text by updating the statutory reference for the definitions of the terms *manufacture* and *manufacturer* to reference 49 U.S.C. 32901.

2. Act

NHTSA is removing the term *Act* because it is no longer used in part 535.

3. Adjustable Parameter

NHTSA is adding the term *adjustable parameter* and defining it as having the same meaning given in 40 CFR 1065.1001. However, while the NPRM proposed only referencing 40 CFR 1037.801, NHTSA now believes it is more appropriate to provide the entire definition and reference 40 CFR 1065.1001, which includes EPA's definition for *adjustable parameter,* and 40 CFR 1068.50, which provides general provisions that apply to adjustable parameters.

4. Advanced Technology

NHTSA is amending the definition of *advanced technology* to remove an outdated reference and to streamline the definition to specify that it is specific vehicle technology for which manufacturers may earn special credits under § 535.6 and § 535.7 (*e.g.,* hybrids with powertrain designs that include energy storage systems, vehicles with waste heat recovery, electric vehicles, and fuel cell vehicles).

5. Alterers

NHTSA is amending the term *alterers* to be *alterer* as the definition refers to a single manufacturer.

6. Alternative Fuel Conversion

Although NHTSA proposed adding the term *alternative fuel conversion* and defining it as having the meaning given for clean alternative fuel conversion in 40 CFR 85.502, the term already appears in the current regulation. Accordingly, NHTSA is not making any changes to the term.

7. Averaging Set

NHTSA is removing the terms ''Long trailers'' and ''Short trailers'' from the definition of *Averaging set,* consistent with the 2021 D.C. Circuit decision.

8. Certificate of Conformity

In its 2021 final rule, EPA amended 40 CFR 1036.225(e) and 1037.225(e) by adding a statement that clarifies the application date for amended applications for the certification of engine and vehicle families submitted to EPA under 40 CFR 1036 subpart C and 1037 subpart C, respectively.[16] In response, NHTSA proposed updating its definition of *Certificate of Conformity* to include the same language finalized by EPA because the clarifications are also applicable to NHTSA's fuel efficiency program. After further consideration, NHTSA determined that no changes were needed to NHTSA's current definition to maintain program alignment across the agencies. Accordingly, NHTSA is not finalizing any change to the definition of *Certificate of Conformity.*

9. Certified Emission Level

NHTSA is finalizing a technical amendment to remove the definition of *certified emission level* because the term is not used within part 535 and to the extent that term is used in EPA's program for engine and vehicle families, the terms are defined in the respective regulations at 40 CFR 1036.801 and 1037.801.

10. Class

NHTSA is removing the reference to trailers from its definition of *class,* consistent with the 2021 D.C. Circuit decision.

11. Defeat Device

NHTSA is adding the term *defeat device* and defining it as having the same meaning given in 40 CFR 86.004–2. The addition will include a full definition of the term and note that the term is also defined in EPA's regulations at 40 CFR 86.004–2.

12. Emission Data Engine

Although NHTSA proposed adding the term *emission data engine* and defining it as having the meaning given in 40 CFR 1036.801, NHTSA has reconsidered. Since the term is not used in part 535, NHTSA does not believe it is necessary or appropriate to define the term at § 535.4.

13. Engine Configuration

NHTSA is adding the term *engine configuration* and defining it as having the same definition as given in 40 CFR 1036.801. However, while the NPRM proposed only referencing 40 CFR 1036.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1036.801.

14. Engine Identification Number

NHTSA is adding the term *engine identification number* and defining it to have the same meaning as given in 40 CFR 1036.801 for *identification number.* This nonsubstantive change is to maintain alignment with EPA's program.

15. Flexible-Fuel

NHTSA is adding the term *flexible-fuel* and defining it as having the same meaning given in 40 CFR 1036.801. However, while the NPRM proposed only referencing 40 CFR 1036.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1036.801.

16. Fuel Type

NHTSA is adding the term *fuel type* and defining it as having the same meaning given in 40 CFR 1036.801. However, while the NPRM proposed only referencing 40 CFR 1036.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1036.801.

17. Gear Ratio

NHTSA is adding the term *gear ratio* or *transmission gear ratio, kg* and defining it as having the same meaning given in 40 CFR 1037.801. However, while the NPRM proposed referencing 40 CFR 1036.801, the correct reference is § 1037.801. Additionally, while NHTSA proposed only referencing EPA's definition, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1037.801.

18. Good Engineering Judgment

NHTSA is amending 535.4 to place the term *good engineering judgement* in the correct alphabetical order.

19. Greenhouse Gas

In the NPRM, NHTSA proposed adding the term *greenhouse gas* and defining it as having the meaning given in 40 CFR 1036.801. However, upon reconsideration NHTSA has determined that it is unnecessary to define it in part 535.

20. Heavy-Duty Engine

NHTSA is adding the term *heavy-duty engine* and defining it as having the meaning given in 49 CFR 523.2. Although NPRM proposed referencing both 40 CFR 1036.801 and 49 CFR 523.2, NHTSA believes it is unnecessary to reference both. Additionally, NHTSA

[16] 86 FR 34308, as corrected by documents published on September 23, 2021 (86 FR 52833) and October 26, 2022 (87 FR 64864).

will reference the specific section, § 523.2, instead of the general part number.

21. Hybrid or Hybrid Vehicle

NHTSA is amending the term *hybrid vehicle* to be *hybrid* or *hybrid vehicle* because part 535 uses *hybrid* as a standalone term to mean hybrid vehicle. The definition of *hybrid* or *hybrid vehicle* will remain the same as the definition of *hybrid vehicle* currently in § 535.4. NHTSA has determined that is not appropriate to reference the definition of *hybrid* in 40 CFR 1036.801 because that term is defined in part as an ''engine or powertrain'' and NHTSA's use of the term *hybrid* as a standalone term in part 535 is to hybrid vehicles, not hybrid engines or powertrains. This definition aligns with the definition for *hybrid vehicle* in 40 CFR 1037.801.

22. Hybrid Engine

To develop consistency with the revised hybrid powertrain test procedures it recently finalized in 40 CFR part 1036, subpart F, EPA has added the term *hybrid engine* along with its definition to 40 CFR 1036.801. To maintain alignment across the agencies, NHTSA is removing the term *hybrid engine or powertrain* and adding the terms *hybrid engine* and *hybrid powertrain* and defining the terms as having the same meanings given in 40 CFR 1036.801. However, while the NPRM proposed only referencing 40 CFR 1036.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1036.801.

23. Hybrid Powertrain

To develop consistency with the revised hybrid powertrain test procedures it recently finalized in 40 CFR part 1036, subpart F, EPA has added the term *hybrid powertrain* along with its definition to 40 CFR 1036.801. To maintain alignment across the agencies, NHTSA is adding the term *hybrid powertrain* and defining it as having the same meaning given in 40 CFR 1036.801. However, while the NPRM proposed only referencing 40 CFR 1036.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1036.801.

24. Manufacturer

In the NPRM, NHTSA proposed adding the term *manufacturer* and defining it as having the meaning given in 40 CFR 1037.801. However, NHTSA is not finalizing this change because the term *manufacturer* is defined in 49 U.S.C. 32901, as stated in the introductory paragraph to 49 CFR 535.4.

25. Model Year

NHTSA is revising its definition for *model year* as it pertains to vehicles and engines. NHTSA is also removing the reference to trailers from its definition of *model year* as it applies to vehicles, consistent with the 2021 D.C. Circuit decision. NHTSA has included the specifications for model year for vehicles and engines into a single definition as the same term is used for both vehicles and engines. The meanings for the vehicle categories and for engines are retained. Additionally, while the NPRM proposed adding details regarding ABT reports into the definition of model year, NHTSA has reconsidered. The details are already found in 49 CFR 535.8 and NHTSA has concluded that it is not appropriate or necessary to include them in the definition section.

26. Motor Vehicle

NHTSA is adding the term *motor vehicle* and defining it as having the meaning given in 49 CFR 523.2. Although the NPRM proposed defining the term as having the meaning in 49 U.S.C. 32901, NHTSA has since realized that the term does not appear in section 32901.

27. Multi-Purpose

NHTSA is adding the term *multi-purpose* and defining it as having the same meaning given in 40 CFR 1037.801. However, while the NPRM proposed only referencing 40 CFR 1037.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1037.801.

28. Neutral-Idle

NHTSA is adding the term *neutral-idle* and defining it as having the same meaning given in 40 CFR 1037.801. However, while the NPRM proposed only referencing 40 CFR 1037.801, NHTSA now believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1037.801.

29. New Vehicles

In the NPRM, NHTSA proposed adding the term *new vehicles* and defining it as having the meaning given to *new motor vehicle* in 40 CFR 1037.801. However, upon reconsideration, NHTSA has determined that is not necessary to define the term in part 535.

30. Percent

NHTSA is adding the term *percent* and defining it as having the same meaning given in 40 CFR 1065.1001, which is the definition referenced in 40 CFR 1037.801. However, while the NPRM proposed only referencing 40 CFR 1037.801, NHTSA believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1037.801 and 40 CFR 1065.1001.

31. Phase 2

NHTSA is removing the reference to trailers from its definition of *Phase 2,* consistent with the 2021 D.C. Circuit decision.

32. Placed Into Service

NHTSA is adding the term *Placed into service* and defining it as having the same meaning given in 40 CFR 1037.801. However, while the NPRM proposed only referencing 40 CFR 1037.801, NHTSA believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1037.801.

33. Primary Intended Service Class

NHTSA is amending the definition of *primary intended service class* to update an incorrect reference in the existing text. The change is nonsubstantive and only changes two references in paragraph (2)(iii).

34. Rechargeable Energy Storage System (RESS)

NHTSA is amending the definition of *rechargeable Energy Storage System (RESS)* to correct a typographical error.

35. Regulatory Subcategory

NHTSA is removing trailer subcategories from its definition of *regulatory subcategory,* consistent with the 2021 D.C. Circuit decision, and reserving the paragraph for future use.

36. Relating To

NHTSA is adding the term *relating to* and defining it as having the same meaning given in 40 CFR 1037.801. However, while the NPRM proposed only referencing 40 CFR 1037.801, NHTSA believes it is more appropriate to provide the entire definition and noting that the definition is also found in 40 CFR 1037.801.

37. Round

NHTSA is adding the term *round* and defining it as having the same meaning given in 40 CFR 1065.1001. However, while the NPRM proposed only referencing 40 CFR 1065.1001, NHTSA believes it is more appropriate to

provide the entire definition and noting that the definition is also found in 40 CFR 1065.1001.

38. Standard Payload

NHTSA is removing paragraph (3), which includes defined standard payloads for trailers, from its definition of *standard payload.* This change is consistent with the 2021 D.C. Circuit decision.

39. Standard Tractor

In the NPRM, NHTSA proposed amending the definition of *standard tractor* by defining it as having the meaning given in 40 CFR 1037.801 not 40 CFR 1037.501, which is how it's currently defined. However, upon reconsideration, NHTSA determined that it was not necessary to define the term in part 535. Accordingly, NHTSA is removing the term *standard tractor* from the definitions section.

40. Standard Trailer

NHTSA is amending the definition for *standard trailer* by defining it as having the same meaning given in 40 CFR 1037.801 not 40 CFR 1037.501, which is how it's currently defined. However, while the NPRM proposed only referencing 40 CFR 1037.501, NHTSA now believes it is more appropriate to provide the entire definition and note that the definition is also found in 40 CFR 1037.801.

41. Stop-Start

NHTSA is adding the term *stop-start* and defining it to have the same meaning as given for *stop-start* in 40 CFR 1037.801. However, while the proposed regulatory text in the NPRM only included a reference to 40 CFR 1037.801, NHTSA now believes it is more appropriate to include the entire definition and note that the definition is also found in 40 CFR 1037.801.

42. Suspend

In the NPRM, NHTSA proposed adding the term *Suspend* and defining it as having the meaning given in 40 CFR 1037.801. However, NHTSA has now concluded that the proposed definition is neither necessary nor appropriate at it applies to NHTSA's use of the term *suspend* in part 535. Accordingly, NHTSA is not adding the term to the definition section of part 535.

43. Vehicle Identification Number

In the NPRM, NHTSA proposed adding the term *identification number* and defining it as having the meaning given in 40 CFR 1037.801. However, upon reconsideration, NHTSA realized that the term *identification number* is defined in both 40 CFR part 1037 and 40 CFR part 1036, with one term applying to vehicles and one applying to engines. To reduce confusion, NHTSA is finalizing amendments to add two new terms, *vehicle identification number* and *engine identification number.* Because NHTSA establishes requirements for vehicles to be assigned unique vehicle identification numbers, or VINs, NHTSA is defining *vehicle identification number* for purposes of part 535 as having the same meaning as *VIN* in 49 CFR 565.12.

44. Vehicle Service Class

NHTSA is revising the definition of *vehicle service class* to align with the changes EPA to their definition given in 40 CFR 1037.140. Although the NPRM proposed only referencing EPA's definition in 40 CFR 1037.140, NHTSA has concluded that it is important to maintain the entire definition as there are some important terminology differences between EPA's definition and NHTSA's that should be retained. However, even with these differences, the terms are aligned.

The recent EPA technical amendments clarify that the classification for tractors, where provisions are the same as vocational vehicles, are applicable to both hybrid and non-hybrid vehicles. The amendments also clarify that Class 8 hybrid and electric vehicles are considered heavy heavy-duty ''HHD'' vehicles while all other vehicles are classified by GVWR classes.

EPA explained in its final rule that prior to these revisions, manufacturers had expressed concern that the Phase 2 regulations were not specific enough regarding how to classify hybrid vocational vehicles, because vocational vehicles are generally classified by the class of the engines (as opposed to tractors, which are classified based on GVW), which was not applicable to electrically driven vehicles that have no engine.

To address these problems, EPA proposed changes to § 1037.140(g)(1) to clarify that the classification for tractors where provisions are the same as vocational vehicles applies for hybrid and non-hybrid vehicles, and paragraph (g)(4) to clarify that Class 8 hybrid and electric vehicles are Heavy HHVs and all other vehicles are classified by GVWR classes. The changes we are finalizing maintain alignment with EPA's changes.

45. Void

In the NPRM, NHTSA proposed adding the term *void* and defining it as having the meaning given in 40 CFR 1037.801. However, NHTSA has now concluded that the addition of the term is not necessary as the only use of the term in part 535 is in reference to an EPA action, and EPA provides its own definition for the term.

H. 49 CFR 535.5 Standards

1. Section 535.5(a) Introductory Text

NHTSA is amending § 535.5(a) introductory text to clarify its regulatory standards relating to heavy-duty pickup trucks and vans. More specifically, the agency is adding language that ensures that manufacturers use the same options for purposes of grouping vehicles and/or engines for applying target standards and determining compliance for both EPA's and NHTSA's programs. NHTSA is also adding clarifying language explaining that engines installed in vehicles that are subject to the standards in paragraph (a) are not subject to the standards in paragraph (d) of this section and may not optionally comply with paragraph (d).

2. Section 535.5(a)(1)

NHTSA is amending § 535.5(a)(1) to update an outdated cross reference, such that the reference to 40 CFR 86.1819 now reads ''40 CFR 86.1819–14''.

3. Section 535.5(b) Introductory Text

NHTSA is amending the introductory text of § 535.5(b) to clarify its regulatory standards relating to heavy-duty vocational vehicles. More specifically, the agency is adding language that ensures manufacturers use the same options for purposes of grouping vehicles and/or engines for applying standards and determining compliance for both EPA's and NHTSA's programs.

4. Section 535.5(b)(1)(iii)(B)

NHTSA is removing paragraph (B) from § 535.5(b)(1)(iii) and reserving it for future use. This change removes the requirement for heavy-duty vocational vehicles that meet the requirement in § 535.5(b)(1)(iii)(A) by being equipped with tire pressure monitoring systems to use low pressure warning and malfunction telltales in clear view of the driver as specified in S4.3 and S4.4 of 49 CFR 571.138. The revision, however, does not remove the requirements in § 535.5(b)(6)(vi)(C) for motorhomes that comply with § 535.5(b)(6)(vi)(B) by having a TPMS.

5. Section 535.5(b)(4)

NHTSA is correcting the Vocational HHD Vehicle Regional compression ignition (CI) standards. The current published standard for this vehicle class

is incorrect and does not align with EPA GHG standards for this vehicle type. The incorrect values resulted from an incorrect calculation during the Phase 2 rulemaking which intended to maintain alignment of the NHTSA and EPA standards. The corrected value for this regulatory class is 20.1375 gallons per 1000 ton-miles not 20.2358 gallons per 1000 ton-miles, which is the currently published standard.

6. Section 535.5(b)(9)(i) Introductory Text

NHTSA is amending the introductory text of § 535.5(b)(9)(i) to align with EPA's technical amendments by adding an exemption provision for vocational vehicles with a date of manufacture before January 1, 2021. With this provision, vocational vehicles automatically qualify for an exemption under § 535.5(b)(9), if the tires installed on the vehicle have a maximum speed rating at or below 55 miles per hour.

7. Section 535.5(c) Introductory Text

NHTSA is amending the introductory text of § 535.5(c) to clarify its regulatory standards relating to truck tractors. More specifically, the agency is adding language that ensures manufacturer options (in terms of grouping vehicles and/or engines for purposes of applying standards and determining compliance) for EPA and NHTSA vehicle standards are aligned across both agencies.

8. Section 535.5(c)(5)

NHTSA is revising its Alternate Fuel Consumption Standards for Tractors above 120,000 pounds GCWR for model year 2021 and later. The revised standards are directly aligned with the revised GHG standards for this class of vehicles proposed and finalized by EPA as part of its technical amendment rulemaking.[17] The revised standards provide additional clarity on this vehicle class along with fuel efficiency standards that increase in three increments, model years 2021 through 2023, model years 2024 through 2026, and model years 2027 and later.

As described in EPA's final rulemaking action, the agencies originally defined these alternate fuel consumption and greenhouse-gas standards during the Phase 2 rulemaking, to enable Environment and Climate Change Canada (ECCC) to fully harmonize with the U.S.'s HD Phase 2 standards.

In the interim, ECCC has since adopted final standards for these 120,000- to 140,000-pound GCWR tractors, which differ from the optional standards finalized in Phase 2.[18] Since the purpose of these standards was to facilitate certification of vehicles intended for Canada, EPA proposed optional standards in 40 CFR 1037.670 that would be the same as the final ECCC standards, and did not receive any adverse comments regarding that proposal. NHTSA is adopting these alternative standards, in gallons per 1,000 ton-miles, for 120,000- to 140,000-pound GCWR tractors that are equivalent to the EPA and ECCC standards. This maintains harmonization across the programs for all three agencies.

9. Section 535.5(d) Introductory Text

NHTSA is clarifying the introductory text of 49 CFR 535.5(d) to expand its regulatory provision to optionally accommodate powertrain families and subfamilies added by EPA in 40 CFR 1036.108(a), and 1036.230(d), and 1036.230(f). The EPA provisions allow manufacturers to apply CO_2 standards to powertrain families and subfamilies. They also allow manufacturers to optionally certify powertrains using the engine testing provisions in 40 CFR part 1036 instead of part 1037. Manufacturers may choose to include electric powertrain and hybrid electric powertrain emissions in their engine families or subfamilies under 40 CFR part 1036 instead of (or in addition to) the otherwise applicable engine fuel maps. Doing so provides the same compliance options for manufacturers under the EPA and NHTSA programs. NHTSA is finalizing a similar amendment to § 535.6(d).

NHTSA is also amending the introductory text of § 535.5(d) to add language that ensures manufacturer options (in terms of grouping engines for purposes of applying standards and determining compliance) for EPA and NHTSA standards are aligned across both agencies.

10. Section 535.5(d)(3)

NHTSA is correcting the Heavy-Duty Engine Fuel Consumption Standards for Phase 1 MHD and HHD compression ignition (CI) tractor engines. The current published standards for these engine classes are incorrect, and do not align with EPA GHG standards for these engine types. The incorrect values resulted from an incorrect calculation during the Phase 2 rulemaking which intended to maintain alignment of the NHTSA and EPA standards. The corrected values for these regulatory classes are 4.7839 gallons per 100 hp-hr for MHD CI tractor engines and 4.5187 gallons per 100 hp-hr for HHD CI tractor engines.

11. Section 535.5(d)(11)(i)(A) and (C)

NHTSA is correcting the *Alternate transition option for Phase 2 engine standards* (i)(A) and (C). The current published standards for these engine standards are incorrect, and do not align with current EPA GHG standards for these engine types. The incorrect values resulted from an incorrect calculation during the Phase 2 rulemaking which intended to maintain alignment for the NHTSA and EPA standards. The corrected values for these regulatory classes are 5.3241 gallons per 100 hp-hr for MHD vocational vehicle engines and 5.0098 gallons per 100 hp-hr for HHD vocational engines.

12. Section 535.5(e)

NHTSA is removing paragraph (e) from § 535.3, which removes the Heavy-duty Trailer standards, consistent with the 2021 D.C. Circuit decision, discussed above.

I. 49 CFR 535.6 Measurement and Calculation Procedures

1. Section 535.6(b)(1)

NHTSA is amending § 535.6(b)(1) by adding a reference to EPA's finalized regulation at 40 CFR 1037.150. This added reference will provide clear guidance that will be used to determine the proper vehicle and vehicle family to select when determining a manufacturer's regulatory subcategories for vocational vehicles and tractors. The addition also maintains program alignment across the agencies.

2. Section 535.6(b)(4)(ii)

NHTSA is amending § 535.6(b)(4)(ii) by adding references to EPA's finalized regulations at 40 CFR 1037.525, 1037.527, and 1037.528. These added references clarify how to determine a high-roof tractor's aerodynamic performance. EPA finalized this revision to more clearly relate the drag areas to

[17] In December 2020, EPA proposed further revisions to the Phase 2 GEM Simulation Model in the December 2020 Notice of Proposed Rulemaking (NRPM) for technical amendments to the GHG Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles and is soliciting comments on these revisions. S. The latest EPA's GEM model is released and can be found *https://www.epa.gov/regulations-emissions-vehicles-and-engines/greenhouse-gas-emissions-model-gem-medium-and-heavy-duty* which incorporates the revisions being considered.'' (last accessed: May 11, 2022)

[18] Regulations Amending the Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations and Other Regulations Made Under the Canadian Environmental Protection Act, 1999: SOR/2018–98, Canada Gazette, Part II, Volume 152, Number 11, May 16, 2018.

the defined effective yaw variable, as recommended by EMA as a comment to the EPA proposal.[19] NHTSA is adopting this same measurement schema to keep programs aligned across the agencies. NHTSA is also amending § 535.6(b)(4)(ii) to provide manufacturers with an alternate compliance approach for determining coefficient of aerodynamic drag values in GEM.

3. Section 535.6(b)(5)(i)

NHTSA is revising § 535.6(b)(5)(i) to change the reference to an EPA regulation from 40 CFR 1036.510 to 1036.503. This revision aligns the NHTSA regulations to the revised and finalized EPA regulations, which also keeps the agencies' programs aligned.

4. Section 535.6(b)(5)(v)(E)(3)

NHTSA is adding paragraph *(3)* to § 535.6(b)(5)(v)(E), which allows manufacturers to characterize torque converters to determine their own torque converter capacity factor instead of using the default value provided in GEM. This change aligns with EPA provisions in 40 CFR 1037.570 and maintains program alignment across both agencies.

5. Section 535.6(b)(5)(v)(E)(*4*)

NHTSA is adding paragraph (*4*) to § 535.6(b)(5)(v)(E), which allows vocational vehicles to input a value for neutral coasting in GEM as a compliance option for its fuel consumption program. This revision aligns the NHTSA regulations with the EPA regulations in 40 CFR 1037.520 and keep both agencies aligned for program compliance.

6. Section 535.6(d) Introductory Text

Like § 535.5(d), NHTSA is amending the introductory text of § 535.6(d) by adding clarifications to § 535.6(d) to expand its regulatory provision to optionally accommodate powertrain families and subfamilies added by EPA in 40 CFR 1036.108(a), and 1036.230(d), and 1036.230(f). The EPA provisions allow manufacturers to apply CO_2 standards to powertrain families and subfamilies. They also allow manufacturers to optionally certify powertrains using the engine testing provisions in 40 CFR part 1036 instead of part 1037. Manufacturers may choose to include electric powertrain and hybrid electric powertrain emissions in their engine families or subfamilies under 40 CFR part 1036 instead of (or in addition to) the otherwise applicable engine fuel maps. Doing so provides the same compliance options for manufacturers under the EPA and NHTSA programs.

7. Section 535.6(d)(1)

NHTSA is updating paragraph (d)(1) to reference to EPA regulation 40 CFR 1036.501 for engines in heavy-duty truck tractors and vocational vehicles that make up each of the manufacturer's regulatory subcategories. This replaces the reference to 40 CFR part 86 and 40 CFR 1036.235. This change maintains alignment across the NHTSA and EPA programs.

8. Section 535.6(d)(2) Introductory Text

NHTSA is amending the introductory text of paragraph (d)(2) to align with the EPA regulation 40 CFR 1036.230(f) by expanding this regulatory provision to accommodate powertrains other than engines and to also include sub-families.

9. Section 535.6(d)(3) Introductory Text

NHTSA is amending § 535.6(d)(3) introductory text by replacing the existing provision with the prescribed emissions tests required for medium HD and heavy HD engines certified as a tractor and other long-haul engine family as well as those certified as a tractor and vocational engine family. In the same paragraph, NHTSA also prescribes the emissions test required for all other engines. These amendments are being made to align with EPA's technical amendments and to provide greater clarity to manufacturers about how compliance must be determined for the different types of engines.

10. Section 535.6(d)(3)(ii)

NHTSA is expanding the provisions of § 535.6(d)(3)(ii) to powertrains other than engines and subfamilies in addition to families. This change is being made to maintain alignment with EPA's technical amendments.

11. Section 535.6(e)

NHTSA is removing paragraph (e) from § 535.6, which removes heavy-duty trailers from its measurement and calculation procedures, consistent with the 2021 D.C. Circuit decision.

J. 49 CFR 535.7 Averaging, Banking, and Trading (ABT) Credit Program

1. Section 535.7(a) Introductory Text

NHTSA is removing the references to trailer manufacturers and trailers from the introductory text of § 535.7(a), consistent with the 2021 D.C. Circuit decision.

2. Section 535.7(a)(2)(v)

NHTSA is removing the reference to the application of banked or traded credits to trailers from § 535.7(a)(2)(v), consistent with the 2021 D.C. Circuit decision.

3. Section 535.7(a)(3)(v)

NHTSA is removing paragraph (v) from § 535.7(a)(3), consistent with the 2021 D.C. Circuit decision, and reserving it for future use.

4. Section 535.7(a)(4) Introductory Text

NHTSA is amending the introductory text of paragraph (a)(4) to remove reference to trailers, consistent with the 2021 D.C. Circuit decision.

5. Section 535.7(a)(4)(v)

NHTSA is removing paragraph (v) from § 535.7(a), consistent with the 2021 D.C. Circuit decision, and reserving it for future use.

6. Section 535.7(a)(8)(i)

As discussed above, NHTSA is finalizing two amendments to provide greater flexibility to small manufacturers of vocational vehicles. First, NHTSA is finalizing an amendment such that fuel consumption credits a small manufacturer generates for heavy heavy-duty vocational vehicles in model years 2018 through 2021 may be used through 2027, instead of being limited to a five-year credit life (this flexibility is already provided for fuel consumption credits any manufacturer generates for light and medium heavy-duty vocational vehicles in model years 2018 through 2021). Second, as discussed above, NHTSA is finalizing an amendment to address credit carry forwards for small manufacturers that certify 2022 vehicles to Phase 1 standards if the manufacturer voluntarily certified its entire U.S.-directed production volume to the Phase 1 standards for calendar year 2021. Specifically, NHTSA is adding a provision stating that fuel consumption credits that a small manufacturer generates for vocational vehicles in model year 2022 that are certified to Phase 1 standards as permitted under § 535.3(e)(2)(ii)(B) may be used through model year 2027.

7. Section 535.7(a)(9)(iv)(B)

NHTSA is amending § 535.7(a)(9)(iv)(B) by adding clarifying details regarding corporate relationship status as it relates to production limits for generating credits for drayage tractors under the custom chassis allowance. In the NPRM, NHTSA proposed language such that the limit would apply with respect to vehicles

[19] The variables $C_dA_{effective\text{-}yaw\text{-}coastdown}$ and $C_dA_{effective\text{-}yaw\text{-}alt}$ are now $C_dA_{coastdown}(\psi_{eff})$ and $C_dA_{alt}(\psi_{eff})$, respectively.

produced by the parent manufacturer and its owned subordinate companies. However, to better align with existing regulations, NHTSA is finalizing language that specifies that the limit applies with respect to vehicles produced by manufactures within a control relationship as defined in § 534.3.

8. Section 535.7(a)(11)

NHTSA is adding paragraph (11) to § 535.7(a), which is a provision that prevents manufacturers from generating fuel consumption credits more than once for compliance. NHTSA has updated the text that was proposed in the NPRM to provide greater clarity and to reduce ambiguity.

9. Section 535.7(b)(1)

NHTSA is amending § 535.7(b)(1) to correct the Total MY Fleet FCC equation for HDPUVs.

10. Section 535.7(c)(1) Introductory Text

NHTSA is amending the introductory text § 535.7(c)(1) to correct the Vehicle Family FCC equation for vocational vehicle and tractor families and subfamilies.

11. Section 535.7(d)(1) Introductory Text

NHTSA is amending the introductory text of § 535.7(d)(1) to correct the Engine Family FCC equation for heavy-duty engine families and subfamilies.

12. Section 535.7(d)(7)

NHTSA is amending § 535.7(d)(7) by removing the conditions for when engine credits generated for compression-ignition engines in model year 2020 and earlier can be used in model year 2021 and later and adding them to new lower-level paragraphs in this section.

13. Section 535.7(d)(7)(i)

NHTSA is adding paragraph (i) to § 535.7(d)(7), which states that engine credits generated for compression-ignition engines certified to the tractor engine standards in § 535.5(d) in model year 2020 and earlier can be used in model year 2021 and later. This provision was in the existing regulation and is just being moved down to a lower-level paragraph.

14. Section 535.7(d)(7)(ii)

NHTSA is also amending § 535.7(d)(7) by removing the provision that manufacturers may otherwise use fuel consumption credits generated in one model year for certifying vehicles in a later model year without adjustment, even if the consumption standards are different. In its place, NHTSA is adding paragraph (ii) to § 535.7(d)(7), stipulating that fuel consumption credits generated for compression-ignition engines certified to the vocational engine standards in § 535.5(d) in MY 2020 and earlier can be used in MY 2021 and later in accordance with specific requirements. Specifically, the fuel consumption credits may only be used in later years relative to specified family certification levels (FCLs), consistent with EPA's regulations.

15. Section 535.7(d)(7)(ii)(A)

NHTSA is adding paragraph (A) to § 535.7(d)(7)(ii), which is the FCL manufacturers should use to calculate credits for compression-ignition medium HD engines certified to the vocational vehicle standards in § 535.5(d) in MY 2020 and earlier and will be used in MY 2021 and later.

16. Section 535.7(d)(7)(ii)(B)

NHTSA is adding paragraph (B) to § 535.7(d)(7)(ii), which is the FCL manufacturers should use to calculate credits for compression-ignition heavy HD engines certified to the vocational vehicle standards in § 535.5(d) in MY 2020 and earlier and will be used in MY 2021 and later.

17. Section 535.7(d)(7)(ii)(C)

NHTSA is adding paragraph (C) to § 535.7(d)(7)(ii), which is the provision that provides instructions on how to use the FCLs in paragraphs (A) and (B) of this section to recalculate engine credits for compression-ignition engines certified to the vocational vehicle standards in § 535.5(d) that have been generated in Phase 1 but used in Phase 2 of the program.

18. Section 535.7(e)

NHTSA is removing paragraph (e) from § 535.7, which removes the ABT provisions for trailers, consistent with the 2021 D.C. Circuit decision, discussed above, and reserving it for future use.

19. Section 535.7(f)(1)(ii) Introductory Text

NHTSA is amending § 535.7(f)(1)(ii) to clarify the final model year in which manufacturers may use the advanced technology credit multipliers to increase the credits they earn for advanced technology vehicles in Phase 2. In the Phase 2 final rule for the Heavy-Duty National Program, NHTSA and EPA jointly explained that we were adopting advanced technology credit multipliers for three types of advanced technologies. As described in the final rule, there will be a multiplier of 3.5 for advanced technology credits for plug-in hybrid vehicles, a multiplier of 4.5 for advanced technology credits for all-electric vehicles, and a multiplier of 5.5 for advanced technology credits for fuel cell vehicles. The agencies stated that their intention in adopting these multipliers was to create a meaningful incentive to manufacturers considering adopting these technologies in their vehicles. The agencies further noted that the adoption rates for these advanced technologies in heavy vehicles was essentially non-existent at the time the final rule was issued and seemed unlikely to grow significantly within the next decade without additional incentives. Because of their large size, the agencies decided to adopt them as an interim program that will continue through model year 2027. These changes, however, were not accurately reflected in the regulatory changes made by the Phase 2 final rule. NHTSA is now amending the introductory text of § 535.7(f)(1)(ii) to clarify that for Phase 2, advanced technology credits may be increased by the applicable multiplier through model year 2027.

20. Section 535.7(f)(1)(ii)(G)

NHTSA is adding paragraph (G) to § 535.7(f)(1)(ii) to add a provision clarifying that advanced technology credits increased with a multiplier in Phase 2 cannot be used across averaging sets. In the Phase 2 final rule, the agencies explained that because of the adoption of the large multipliers, the agencies were discontinuing the allowance to use advanced technology credits across averaging sets. This change was not accurately reflected in the regulatory changes made by the Phase 2 final rule; therefore, NHTSA is adding the provision as § 535.7(f)(1)(ii)(G).

21. Section 535.7(f)(2)(v)

NHTSA is removing paragraph (v) from § 535.7(f)(2), which removes the provision that provides manufacturers with the ability to apply the off-cycle provisions of § 535.7(f)(2) and 40 CFR 1037.610 to trailers, consistent with the 2021 D.C. Circuit decision discussed above, and reserving it for future use.

K. 49 CFR 535.8 Reporting and Recordkeeping Requirements

1. Section 535.8(a)(6)

NHTSA is amending § 535.8(a)(6) to correct the mailing address for NHTSA to 1200 New Jersey Avenue SE, NVS–200, Office W45–306, Washington, DC 20590.

2. Section 535.8(g)(11)(i)(C)

Like § 535.6(d)(3)(ii), NHTSA is expanding the provisions of § 535.8(g)(11)(i)(C) to broaden the language to provide clarity that the provision is referring to ''engine and powertrain families and subfamilies'' as opposed to just ''engine families.''

3. Section 535.8(g)(12)

NHTSA is amending § 535.8(g)(12) by removing all references to trailers and trailer manufacturers from its production reporting requirements, consistent with the 2021 D.C. Circuit decision, discussed above.

4. Section 535.8(i)

NHTSA is amending § 535.8(i) to include a statement reminding manufacturers that providing false, fictitious, or fraudulent information may subject them to penalties under 18 U.S.C. 1001.

L. 49 CFR 535.9 Enforcement Approach

1. Section 535.9(a)(1)(i)

NHTSA is amending § 535.9(a)(1)(i) by adding additional language and clarifications that NHTSA may conduct audits or perform confirmatory testing on any configuration. Any such testing would be performed as specified in EPA's regulations and NHTSA will collaborate with EPA regarding any potential issues with testing results.

2. Section 535.9(a)(1)(v)

NHTSA is adding paragraph (v) to § 535.9(a)(1) to add a provision stating that NHTSA may require a manufacturer to perform selective enforcement audits with respect to any GEM inputs in its application for certification or in the end of the year ABT final reports. The provision further specifies that any such selective enforcement audit would be required to be conducted in a manner consistent with EPA's corresponding provisions for selective enforcement audits.

M. Section 535.10 How do manufacturers comply with fuel consumption standards?

1. Section 535.10(a)(3)

NHTSA is removing (a)(3) and reserving it for future use. Although the NPRM proposed clarifying that EPA's compliance requirements 40 CFR 1037.601 and 40 CFR part 1068 apply similarly to NHTSA's fuel consumption program, except for the warranty provisions in 40 CFR 1037.601(a)(5), NHTSA has now concluded that it is not appropriate for NHTSA to incorporate by reference EPA's general compliance provisions for regulations issued under 40 CFR parts 1037 and 1068. Accordingly, NHTSA is removing the provisions at (a)(3) and reserving it for future use.

2. Section 535.10(a)(6)

NHTSA is amending § 535.10(a)(6) by clarifying that vehicles required to meet the fuel consumption standards of this part must also comply with the same requirements as specified in 40 CFR 1037.115(a) and (d). However, while the NPRM proposed only referencing 40 CFR 1037.115, NHTSA has now concluded that it would be more appropriate to place the entirety of the substantive requirements into part 535 and note that the requirements are consistent with 40 CFR 1037.115(a) and (d).

3. Section 535.10(c)(2)

NHTSA is amending § 535.10(c)(2) by removing the reference to box trailers, consistent with the 2021 D.C. Circuit decision, discussed above.

4. Section 535.10(c)(3)

NHTSA is removing § 535.10(c)(3), consistent with the 2021 D.C. Circuit decision discussed above, and reserving it for future use.

III. Statutory Authority and Executive Order Reviews

A. Executive Order 12866, Executive Order 14094, Executive Order 13563, and DOT Regulatory Policies and Procedures

We have considered the potential impact of this proposed rule under Executive Order 12866, Executive Order 14094, Executive Order 13563, and DOT Order 2100.6A. The Office of Management and Budget (OMB) has determined that this rule is not a significant regulatory action and, therefore, was not submitted to OMB for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control numbers 2060–0104, 2060–0287, 2060–0338, 2060–0545, 2060–0641. This rule clarifies and simplifies procedures without affecting information collection requirements.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant economic impact on small entities. This action is designed to reduce testing burdens, increase compliance flexibility, and make various corrections and adjustments to compliance provisions. We therefore anticipate no costs and no regulatory burden associated with this rule. We further do not believe the benefits of this rule would result in significant economic impact to regulated small entities. Accordingly, we have concluded that this action will have no significant economic impact on regulated small entities.

D. Unfunded Mandates Reform Act (UMRA)

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, requires Federal agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or Tribal governments, in the aggregate, or by the private sector, of more than $100 million annually (adjusted for inflation with base year of 1995). Adjusting this amount by the implicit gross domestic product price deflator for the year 2010 results in $136 million (110.993/81.606 = 1.36). This rule will not result in a cost of $136 million or more to either State, local, or Tribal governments, in the aggregate, or the private sector or uniquely affect small governments. Thus, this rule is not subject to the requirements of sections 202 of the UMRA.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the Federal government and the States, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have Tribal implications as specified in Executive Order 13175. This rule will be implemented at the Federal level and affects engine and vehicle manufacturers. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not

economically significant as defined in Executive Order 12866, and because there are no environmental health or safety risks created by this action that could present a disproportionate risk to children.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. We have concluded that this action is not likely to have any adverse energy effects because it is designed merely to reduce testing burdens, increase compliance flexibility, and make various corrections and adjustments to compliance provisions.

I. National Technology Transfer and Advancement Act (NTTAA)

Under the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104–113), all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments. Voluntary consensus standards are technical standards (*e.g.,* material specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as the International Organization for Standardization (ISO) and the SAE International (SAE). The NTTAA directs agencies to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards. NHTSA searched for but did not find voluntary consensus standards directly applicable to the amendments in this final rule.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

NHTSA believes this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). Due to the lack of environmental impact, these regulatory changes will not have a disproportionate adverse effect on minority populations, low-income populations, or indigenous peoples.

List of Subjects in 49 CFR Part 535

Fuel economy, Reporting and recordkeeping requirements.

Regulatory Text

For the reasons discussed in the preamble, NHTSA is amending 49 CFR part 535 as set forth below:

PART 535—MEDIUM- AND HEAVY-DUTY VEHICLE FUEL EFFICIENCY PROGRAM

■ 1. The authority citation for part 535 is revised to read as follows:

Authority: 49 U.S.C. 32902*;* delegation of authority at 49 CFR 1.95.

■ 2. Revise § 535.1 to read as follows:

§ 535.1 Scope.

This part establishes fuel consumption standards pursuant to 49 U.S.C. 32902(k) for work trucks and commercial medium- and heavy-duty on-highway vehicles (hereafter referenced as heavy-duty vehicles), and engines manufactured for sale in the United States. This part establishes a credit program that manufacturers may use to comply with standards and requirements for manufacturers to provide reports to the National Highway Traffic Safety Administration regarding their efforts to reduce the fuel consumption of heavy-duty vehicles and engines.

■ 3. Amend § 535.3 by revising paragraph (c), removing and reserving paragraph (d)(5), and revising paragraph (e).

The revisions read as follows:

§ 535.3 Applicability.

* * * * *

(c) Vehicle and engine manufacturers that must comply with this part include manufacturers required to have approved certificates of conformity from EPA as specified in subparts C in 40 CFR parts 1036 and 1037.

* * * * *

(e) The following heavy-duty vehicles and engines are exempted from the requirements of this part:

(1) *Off-road vehicles.* Vocational vehicles intended for off-road use are exempt with or without request, subject to the provisions of § 535.5(b)(9).

(2) *Small business manufacturers.* (i) For Phase 1, small business manufacturers are exempted from the vehicle and engine standards of § 535.5 but must comply with the reporting requirements of § 535.8(g).

(ii) For Phase 2, fuel consumption standards apply on a delayed schedule for manufacturers meeting the small business criteria specified in 13 CFR 121.201 and in 40 CFR 86.1819–14(k)(5), 1036.150, and 1037.150.

(A) Qualifying manufacturers of truck tractors, vocational vehicles, heavy duty pickups and vans, and engines are not subject to the fuel consumption standards for vehicles built before January 1, 2022, and engines (such as those engines built by small alternative fuel engine converters) with a date of manufacturer on or after November 14, 2011, and before January 1, 2022. Qualifying manufacturers may choose to voluntarily comply early.

(B) Small manufacturers that certify their entire U.S.-directed production volume to the Phase 1 standards for calendar year 2021 may certify to the Phase 1 standards for model year 2022 (instead of the otherwise applicable Phase 2 standards).

(iii) Small business manufacturers producing vehicles and engines that run on any fuel other than gasoline, E85, or diesel fuel meeting the criteria specified in 13 CFR 121.201 and in 40 CFR 86.1819–14(k)(5), 1036.150, and 1037.150 may delay complying with every new mandatory standard under this part by one model year.

(3) [Reserved]

(4) *Engines for specialty vehicles.* Engines certified to the alternative standards specified in 40 CFR 86.007–11 and 86.008–10 for use in specialty vehicles as described in 40 CFR 1037.605. Compliance with the vehicle provisions in 40 CFR 1037.605 satisfies compliance for NHTSA under this part.

* * * * *

■ 4. Revise § 535.4 to read as follows:

§ 535.4 Definitions.

The terms *manufacture, manufacturer, commercial medium and heavy-duty on-highway vehicle, fuel,* and *work truck* are used as defined in 49 U.S.C. 32901. See 49 CFR 523.2 for general definitions related to NHTSA's fuel efficiency programs.

Adjustable parameter means any device, system, or element of design that someone can adjust (including those which are difficult to access) and that, if adjusted, may affect measured or modeled emissions (as applicable). In some cases, this may exclude a parameter that is difficult to access if it cannot be adjusted to affect emissions without significantly degrading engine performance, or if it will not be adjusted in a way that affects emissions during in-use operation. (See 40 CFR 1065.1001 and 40 CFR 1068.50).

Administrator means the Administrator of the National Highway

Traffic Safety Administration (NHTSA) or the Administrator's delegate.

Advanced technology means specific vehicle technology for which manufacturers may earn special credits under §§ 535.6 and 535.7 (*e.g.,* hybrids with powertrain designs that include energy storage systems, vehicles with waste heat recovery, electric vehicles, and fuel cell vehicles).

Alterer means a manufacturer that modifies an altered vehicle as defined in 49 CFR 567.3

Alternative fuel conversion has the meaning given for clean alternative fuel conversion in 40 CFR 85.502

A to B testing has the meaning given in 40 CFR 1037.801.

Automated manual transmission has the meaning given in 40 CFR 1037.801.

Automatic tire inflation system has the meaning given in 40 CFR 1037.801.

Automatic transmission (AT) has the meaning given in 40 CFR 1037.801.

Auxiliary power unit has the meaning given in 40 CFR 1037.801.

Averaging set means, a set of engines or vehicles in which fuel consumption credits may be exchanged. Credits generated by one engine or vehicle family may only be used by other respective engine or vehicle families in the same averaging set as specified in § 535.7. Note that an averaging set may comprise more than one regulatory subcategory. The averaging sets for this HD program are defined as follows:

(1) Heavy-duty pickup trucks and vans.

(2) Light heavy-duty (LHD) vehicles.

(3) Medium heavy-duty (MHD) vehicles.

(4) Heavy heavy-duty (HHD) vehicles.

(5) Light heavy-duty engines subject to compression-ignition standards.

(6) Medium heavy-duty engines subject to compression-ignition standards.

(7) Heavy heavy-duty engines subject to compression-ignition standards.

(8) Engines subject to spark-ignition standards.

(9) Vehicle types certifying to optional custom chassis standards as specified in § 535.5(b)(6) form separate averaging sets for each vehicle type as specified in § 535.7(c).

Axle ratio or Drive axle ratio, ka has the meaning given in 40 CFR 1037.801.

Basic vehicle frontal area has the meaning given in 40 CFR 1037.801.

Cab-complete vehicle has the meaning given in 49 CFR 523.2.

Carryover has the meaning given in 40 CFR 1037.801.

Certificate holder means the manufacturer who holds the certificate of conformity for the vehicle or engine and that assigns the model year based on the date when its manufacturing operations are completed relative to its annual model year period.

Certificate of Conformity means an approval document granted by EPA to a manufacturer that submits an application for a vehicle or engine emissions family in 40 CFR 1036.205 and 1037.205. A certificate of conformity is valid from the indicated effective date until December 31 of the model year for which it is issued. The certificate must be renewed annually for any vehicle a manufacturer continues to produce.

Certification has the meaning given in 40 CFR 1037.801.

Chassis-cab means the incomplete part of a vehicle that includes a frame, a completed occupant compartment and that requires only the addition of cargo-carrying, work-performing, or load-bearing components to perform its intended functions.

Chief Counsel means the NHTSA Chief Counsel, or his or her designee.

Class means relating to GVWR classes for vehicles, as follows:

(1) *Class 2b vehicles* are vehicles with a gross vehicle weight rating (GVWR) ranging from 8,501 to 10,000 pounds.

(2) *Class 3 through Class 8 vehicles* are vehicles with a gross vehicle weight rating (GVWR) of 10,001 pounds or more as defined in 49 CFR 565.15.

Complete sister vehicle is a complete vehicle of the same configuration as a cab-complete vehicle.

Complete vehicle has the meaning given in 49 CFR part 523.

Compression-ignition (CI) means relating to a type of reciprocating, internal-combustion engine, such as a diesel engine, that is not a spark-ignition engine. Note, in accordance with 40 CFR 1036.1, gas turbine engines and other engines not meeting the definition of compression-ignition are deemed to be compression-ignition engines for complying with fuel consumption standards.

Configuration means a subclassification within a test group for passenger cars, light trucks and medium-duty passenger vehicles and heavy-duty pickup trucks and vans which is based on basic engine, engine code, transmission type and gear ratios, and final drive ratio.

Container chassis trailer has the same meaning as container chassis in 40 CFR 1037.801.

Curb weight has the meaning given in 40 CFR 86.1803.

Custom chassis vehicle means a vocational vehicle that is a motor home, school bus, refuse hauler, concrete mixer, emergency vehicle, mixed-use vehicle or other buses that are not school buses or motor coaches. These vehicle types are defined in 49 CFR 523.3. A ''mixed-use vehicle'' is one that meets at least one of the criteria specified in 40 CFR 1037.631(a)(1) or at least one of the criteria in 40 CFR 1037.631(a)(2), but not both.

Date of manufacture means the date on which the certifying vehicle manufacturer completes its manufacturing operations, except as follows:

(1) Where the certificate holder is an engine manufacturer that does not manufacture the complete or incomplete vehicle, the date of manufacture of the vehicle is based on the date assembly of the vehicle is completed.

(2) EPA and NHTSA may approve an alternate date of manufacture based on the date on which the certifying (or primary) vehicle manufacturer completes assembly at the place of main assembly, consistent with the provisions of 40 CFR 1037.601 and 49 CFR 567.4.

(3) A vehicle manufacturer that completes assembly of a vehicle at two or more facilities may ask to use as the month and year of manufacture, for that vehicle, the month and year in which manufacturing is completed at the place of main assembly, consistent with provisions of 49 CFR 567.4, as the model year. Note that such staged assembly is subject to the provisions of 40 CFR 1068.260(c). NHTSA's allowance of this provision is effective when EPA approves the manufacturer's certificates of conformity for these vehicles.

Day cab has the meaning given in 40 CFR 1037.801.

Defeat device means, consistent with 40 CFR 86.004–2, an auxiliary emission control device (AECD) that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless:

(1) Such conditions are substantially included in the applicable Federal emission test procedure for heavy-duty vehicles and heavy-duty engines described in subpart N of this part;

(2) The need for the AECD is justified in terms of protecting the vehicle against damage or accident;

(3) The AECD does not go beyond the requirements of engine starting; or

(4) The AECD applies only for engines that will be installed in emergency vehicles, and the need is justified in terms of preventing the engine from losing speed, torque, or power due abnormal conditions of the emission control system, or in terms of preventing such abnormal conditions from occurring, during operation related to

emergency response. Examples of such abnormal conditions may include excessive exhaust backpressure from an overloaded particulate trap, and running out of diesel exhaust fluid for engines that rely on urea-based selective catalytic reduction.

Drayage tractor has the meaning given in 40 CFR 1037.801.

Dual-clutch transmission (DCT) means a transmission has the meaning given in 40 CFR 1037.801.

Dual-fuel has the meaning given in 40 CFR 1037.801.

Electric vehicle has the meaning given in 40 CFR 1037.801.

Emergency vehicle means a vehicle that meets one of the criteria in 40 CFR 1037.801.

Engine configuration means a unique combination of engine hardware and calibration (related to the emission standards) within an engine family, which would include hybrid components for engines certified as hybrid engines and hybrid powertrains. Engines within a single engine configuration differ only with respect to normal production variability or factors unrelated to compliance with emission standards. (See 40 CFR 1036.801).

Engine family has the meaning given in 40 CFR 1036.230. Manufacturers designate families in accordance with EPA provisions and may not choose different families between the NHTSA and EPA programs.

Engine identification number means a unique specification (for example, a model number/serial number combination) that allows someone to distinguish a particular engine from other similar engines. (See the definition of *identification number* in 40 CFR 1036.801).

Excluded means a vehicle or engine manufacturer or component is not required to comply with any aspects with the NHTSA fuel consumption program.

Exempted means a vehicle or engine manufacturer or component is not required to comply with certain provisions of the NHTSA fuel consumption program.

Family certification level (FCL) has the meaning given in 40 CFR 1036.801.

Family emission limit (FEL) has the meaning given in 40 CFR 1037.801.

Final drive ratio has the meaning given in 40 CFR 1037.801.

Final-stage manufacturer has the meaning given in 49 CFR 567.3 and includes secondary vehicle manufacturers as defined in 40 CFR 1037.801.

Flatbed trailer has the meaning given in 40 CFR 1037.801.

Fleet in this part means all the heavy-duty vehicles or engines within each of the regulatory sub- categories that are manufactured by a manufacturer in a particular model year and that are subject to fuel consumption standards under § 535.5.

Fleet average fuel consumption is the calculated average fuel consumption performance value for a manufacturer's fleet derived from the production weighted fuel consumption values of the unique vehicle configurations within 'ach vehicle model type that makes up that manufacturer's vehicle fleet in a given model year. In this part, the fleet average fuel consumption value is determined for each manufacturer's fleet of heavy-duty pickup trucks and vans.

Fleet average fuel consumption standard is the actual average fuel consumption standard for a manufacturer's fleet derived from the production weighted fuel consumption standards of each unique vehicle configuration, based on payload, tow capacity and drive configuration (2, 4 or all-wheel drive), of the model types that makes up that manufacturer's vehicle fleet in a given model year. In this part, the fleet average fuel consumption standard is determined for each manufacturer's fleet of heavy-duty pickup trucks and vans.

Flexible-fuel means relating to an engine designed for operation on any mixture of two or more different types of fuels. (See 40 CFR 1036.801).

Fuel cell means an electrochemical cell that produces electricity via the non-combustion reaction of a consumable fuel, typically hydrogen.

Fuel cell electric vehicle means a motor vehicle propelled solely by an electric motor where energy for the motor is supplied by a fuel cell.

Fuel efficiency means the amount of work performed for each gallon of fuel consumed.

Fuel type means a general category of fuels such as diesel fuel, gasoline, or natural gas. There can be multiple grades within a single fuel type, such as premium gasoline, regular gasoline, or gasoline with 10 percent ethanol. (See 40 CFR 1037.801).

Gaseous fuel has the meaning given in 40 CFR 1037.801.

Gear ratio or *Transmission gear ratio,* kg, means the dimensionless number representing the angular speed of the transmission's input shaft divided by the angular speed of the transmission's output shaft when the transmission is operating in a specific gear. (See 40 CFR 1037.801).

Good engineering judgment has the meaning given in 40 CFR 1068.30. See 40 CFR 1068.5 for the administrative process used to evaluate good engineering judgement.

Greenhouse gas Emissions Model (GEM) has the meaning given in 40 CFR 1037.801.

Gross axle weight rating (GAWR) has the meaning given in 49 CFR 571.3.

Gross combination weight rating (GCWR) has the meaning given in 49 CFR 571.3.

Gross vehicle weight rating (GVWR) has the meaning given in 49 CFR 571.3.

Heavy-duty engine has the meaning given in 49 CFR part 523.2.

Heavy-duty off-road vehicle means a heavy-duty vocational vehicle or vocational tractor that is intended for off-road use.

Heavy-duty vehicle has the meaning given in 49 CFR part 523.

Heavy-haul tractor has the meaning given in 40 CFR 1037.801.

Heavy heavy-duty (HHD) vehicle has the meaning given in vehicle service class.

Hybrid or *Hybrid vehicle* means a vehicle that includes energy storage features (other than a conventional battery system or conventional flywheel) in addition to an internal combustion engine or other engine using consumable chemical fuel. Supplemental electrical batteries and hydraulic accumulators are examples of hybrid energy storage systems. Note that certain provisions in this part treat hybrid vehicles that include regenerative braking different than those that do not include regenerative braking.

Hybrid engine means a hybrid system with features for storing and recovering energy that are integral to the engine or are otherwise upstream of the vehicle's transmission other than a conventional battery system or conventional flywheel. Supplemental electrical batteries and hydraulic accumulators are examples of hybrid energy storage systems. Examples of hybrids that could be considered hybrid engines are P0, P1, and P2 hybrids where hybrid features are connected to the front end of the engine, at the crankshaft, or connected between the clutch and the transmission where the clutch upstream of the hybrid feature is in addition to the transmission clutch(s), respectively. Note other examples of systems that qualify as hybrid engines are systems that recover kinetic energy and use it to power an electric heater in the aftertreatment. (See 40 CFR 1036.801).

Hybrid powertrain means a powertrain that includes energy storage features other than a conventional battery system or conventional flywheel. Supplemental electrical batteries and hydraulic accumulators are examples of hybrid energy storage systems. Note

other examples of systems that qualify as hybrid powertrains are systems that recover kinetic energy and use it to power an electric heater in the aftertreatment. (See 40 CFR 1037.801).

Idle operation has the meaning given in 40 CFR 1037.801.

Incomplete vehicle has the meaning given in 49 CFR part 523. For the purpose of this regulation, a manufacturer may request EPA and NHTSA to allow the certification of a vehicle as an incomplete vehicle if it manufactures the engine and sells the unassembled chassis components, provided it does not produce and sell the body components necessary to complete the vehicle.

Innovative technology means technology certified under § 535.7 and by EPA under 40 CFR 86.1819–14(d)(13), 1036.610, and 1037.610 in the Phase 1 program.

Intermediate manufacturer has the meaning given in 49 CFR 567.3.

Light heavy-duty (LHD) vehicle has the meaning given in vehicle service class.

Liquefied petroleum gas (LPG) has the meaning given in 40 CFR 1036.801.

Low rolling resistance tire means a tire on a vocational vehicle with a tire rolling resistance level (TRRL) of 7.7 kg/metric ton or lower, a steer tire on a tractor with a TRRL of 7.7 kg/metric ton or lower, or a drive tire on a tractor with a TRRL of 8.1 kg/metric ton or lower.

Manual transmission (MT) has the meaning given in 40 CFR 1037.801.

Medium heavy-duty (MHD) vehicle has the meaning given in vehicle service class.

Model type has the meaning given in 40 CFR 600.002.

Model year means one of the following for compliance with this part. Note that manufacturers may have other model year designations for the same vehicle for compliance with other requirements or for other purposes:

(1) For tractors and vocational vehicles with a date of manufacture on or after January 1, 2021, the vehicle's *model year* is the calendar year corresponding to the date of manufacture; however, the vehicle's model year may be designated to be the year before the calendar year corresponding to the date of manufacture if the engine's model year is also from an earlier year. Note that paragraph (2) of this definition limits the extent to which vehicle manufacturers may install engines built in earlier calendar years. Note that 40 CFR 1037.601(a)(2) limits the extent to which vehicle manufacturers may install engines built in earlier calendar years.

(2) For Phase 1 tractors and vocational vehicles with a date of manufacture before January 1, 2021, *model year* means the manufacturer's annual new model production period, except as restricted under this definition. It must include January 1 of the calendar year for which the model year is named, may not begin before January 2 of the previous calendar year, and it must end by December 31 of the named calendar year. The model year may be set to match the calendar year corresponding to the date of manufacture.

(i) The manufacturer who holds the certificate of conformity for the vehicle must assign the model year based on the date when its manufacturing operations are completed relative to its annual model year period. In unusual circumstances where completion of your assembly is delayed, we may allow you to assign a model year one year earlier, provided it does not affect which regulatory requirements will apply.

(ii) Unless a vehicle is being shipped to a secondary manufacturer that will hold the certificate of conformity, the model year must be assigned prior to introduction of the vehicle into U.S. commerce. The certifying manufacturer must re-designate the model year if it does not complete its manufacturing operations within the originally identified model year. A vehicle introduced into U.S. commerce without a model year is deemed to have a model year equal to the calendar year of its introduction into U.S. commerce unless the certifying manufacturer assigns a later date.

(3) For engines, *model year* means the manufacturer's annual new model production period, except as restricted under this definition. It must include January 1 of the calendar year for which the model year is named, may not begin before January 2 of the previous calendar year, and it must end by December 31 of the named calendar year. Manufacturers may not adjust model years to circumvent or delay compliance with emission standards or to avoid the obligation to certify annually.

Motor Vehicle has the meaning given in 49 CFR 523.2.

Multi-purpose means relating to the Multi-Purpose duty cycle as specified in 40 CFR 1037.510. (See 40 CFR 1037.801).

Natural gas has the meaning given in 40 CFR 1036.801. Vehicles that use a pilot-ignited natural gas engine (which uses a small diesel fuel ignition system), are still considered natural gas vehicles.

NHTSA Enforcement means the NHTSA Associate Administrator for Enforcement, or his or her designee.

Neutral coasting has the meaning given in 40 CFR 1037.801.

Neutral idle means a vehicle technology that automatically puts the transmission in neutral when the vehicle is stopped, as described in 40 CFR 1037.660(a). (See 40 CFR 1037.801).

Off-cycle technology means technology certified under § 535.7 and by EPA under 40 CFR 86.1819–14(d)(13), 1036.610, and 1037.610 in the Phase 2 program.

Party means the person alleged to have committed a violation of § 535.9, and includes manufacturers of vehicles and manufacturers of engines.

Payload means in this part the resultant of subtracting the curb weight from the gross vehicle weight rating.

Percent (%) means a representation of exactly 0.01. Numbers expressed as percentages in this part (such as a tolerance of ±2%) have infinite precision, so 2% and 2.000000000% have the same meaning. This means that where we specify some percentage of a total value, the calculated value has the same number of significant digits as the total value. For example, 2% of a span value where the span value is 101.3302 is 2.026604. (See 40 CFR 1037.801 and 40 CFR 1065.1001.

Petroleum has the meaning given in 40 CFR 1037.801.

Phase 1 means the joint NHTSA and EPA program established in 2011 for fuel efficiency standards and greenhouse gas emissions standards regulating medium- and heavy-duty engines and vehicles. See § 535.5 for the specific model years that standards apply to vehicles and engines.

Phase 2 means the joint NHTSA and EPA program established in 2016 for fuel efficiency standards and greenhouse gas emissions standards regulating medium- and heavy-duty vehicles and engines. See § 535.5 for the specific model years that standards apply to vehicles and engines.

Pickup truck has the meaning given in 49 CFR part 523.

Placed into service means put into initial use for its intended purpose, excluding incidental use by the manufacturer or a dealer. (See 40 CFR 1037.801).

Plug-in hybrid electric vehicle (PHEV) means a hybrid electric vehicle that has the capability to charge the battery or batteries used for vehicle propulsion from an off-vehicle electric source, such that the off-vehicle source cannot be connected to the vehicle while the vehicle is in motion.

Power take-off (PTO) means a secondary engine shaft or other system on a vehicle that provides substantial auxiliary power for purposes unrelated to vehicle propulsion or normal vehicle accessories such as air conditioning, power steering, and basic electrical accessories. A typical PTO uses a secondary shaft on the engine to transmit power to a hydraulic pump that powers auxiliary equipment such as a boom on a bucket truck.

Powertrain family has the meaning given in 40 CFR 1037.231. Manufacturers choosing to perform powertrain testing as specified in 40 CFR 1037.550, divide product lines into powertrain families that are expected to have similar fuel consumptions and CO_2 emission characteristics throughout the useful life.

Preliminary approval means approval granted by an authorized EPA representative prior to submission of an application for certification, consistent with the provisions of 40 CFR 1037.210. For requirements involving NHTSA, EPA will ensure decisions are jointly made and will convey the decision to the manufacturer.

Primary intended service class has the same meaning for engines as specified in 40 CFR 1036.140. Manufacturers must identify a single primary intended service class for each engine family that best describes vehicles for which it designs and markets the engine, as follows:

(1) Divide compression-ignition engines into primary intended service classes based on the following engine and vehicle characteristics:

(i) Light heavy-duty ''LHD'' engines usually are not designed for rebuild and do not have cylinder liners. Vehicle body types in this group might include any heavy-duty vehicle built from a light-duty truck chassis, van trucks, multi-stop vans, and some straight trucks with a single rear axle. Typical applications will include personal transportation, light-load commercial delivery, passenger service, agriculture, and construction. The GVWR of these vehicles is normally below 19,500 pounds.

(ii) Medium heavy-duty ''MHD'' engines may be designed for rebuild and may have cylinder liners. Vehicle body types in this group will typically include school buses, straight trucks with single rear axles, city tractors, and a variety of special purpose vehicles such as small dump trucks, and refuse trucks. Typical applications will include commercial short haul and intra-city delivery and pickup. Engines in this group are normally used in vehicles whose GVWR ranges from 19,500 to 33,000 pounds.

(iii) Heavy heavy-duty ''HHD'' engines are designed for multiple rebuilds and have cylinder liners. Vehicles in this group are normally tractors, trucks, straight trucks with dual rear axles, and buses used in inter-city, long-haul applications. These vehicles normally exceed 33,000 pounds GVWR.

(2) Divide spark-ignition engines into primary intended service classes as follows:

(i) Spark-ignition engines that are best characterized by paragraph (1)(i) or (ii) of this section are in a separate ''spark-ignition'' primary intended service class.

(ii) Spark-ignition engines that are best characterized by paragraph (1)(iii) of this section share a primary intended service class with compression-ignition heavy heavy-duty engines. Gasoline-fueled engines are presumed not to be characterized by paragraph (1)(iii) of this section; for example, vehicle manufacturers may install some number of gasoline-fueled engines in Class 8 trucks without causing the engine manufacturer to consider those to be heavy heavy-duty engines.

(iii) References to ''spark-ignition standards'' in this part relate only to the spark-ignition engines identified in paragraph (2)(i) of this definition. References to ''compression-ignition standards'' in this part relate to compression-ignition engines, to spark-ignition engines optionally certified to standards that apply to compression-ignition engines, and to all engines identified under paragraph (2)(ii) of this definition as heavy heavy-duty engines.

Rechargeable Energy Storage System (RESS) means the component(s) of a hybrid engine or vehicle that store recovered energy for later use, such as the battery system in an electric hybrid vehicle.

Refuse hauler has the meaning given in 40 CFR 1037.801.

Regional has the meaning relating to the Regional duty cycle as specified in 40 CFR 1037.510.

Regulatory category means each of the four types of heavy-duty vehicles defined in 49 CFR 523.6 and the heavy-duty engines used in these heavy-duty vehicles.

Regulatory subcategory means the sub-groups in each regulatory category to which mandatory fuel consumption standards and requirements apply as specified in 40 CFR 1036.230 and 1037.230 and are defined as follows:

(1) Heavy-duty pick-up trucks and vans.

(2) Vocational vehicle subcategories have 18 separate vehicle service classes as shown in paragraphs (2)(i) and (ii) of this definition and include vocational tractors. Paragraph (2)(i) of this definition includes vehicles complying with Phase 1 standards. Phase 2 vehicles are included in paragraph (2)(ii) of this definition which have separate subcategories to account for engine characteristics, GVWR, and the selection of duty cycle for vocational vehicles as specified in 40 CFR 1037.510; vehicles may additionally fall into one of the subcategories defined by the custom-chassis standards in § 535.5(b)(6) and 40 CFR 1037.105(h). Manufacturers using the alternate standards in § 535.5(b)(6) and 40 CFR 1037.105(h) should treat each vehicle type as a separate vehicle subcategory.

(i) *Phase 1 Vocational Vehicle Subcategories.* (A) Vocational LHD vehicles.

(B) Vocational MHD vehicles.

(C) Vocational HHD vehicles.

(ii) *Phase 2 vocational vehicle subcategories.*

Engine type	Vocational LHD vehicles	Vocational MHD vehicles	Vocational HHD vehicles
CI	Urban	Urban	Urban.
CI	Multi-Purpose	Multi-Purpose	Multi-Purpose.
CI	Regional	Regional	Regional.
SI	Urban	Urban	N/A.
SI	Multi-Purpose	Multi-Purpose	N/A.
SI	Regional	Regional	N/A.

(3) Tractor subcategories are shown in paragraph (3)(i) of this definition for Phase 1 and 2. Paragraph (3)(i) includes 10 separate subcategories for tractors complying with Phase 1 and 2 standards. The heavy-haul tractor subcategory only applies for Phase 2.

(i) *Phase 1 and 2 truck tractor subcategories.*

Class 7	Class 8 day cabs	Class 8 sleeper cabs
Low-roof tractors	Low-roof day cab tractors	Low-roof sleeper cab tractors.
Mid-roof tractors	Mid-roof day cab tractors	Mid-roof sleeper cab tractors.
High-roof tractors	High-roof day cab Tractors	High-roof sleeper cab tractors.
N/A	Heavy-haul tractors (applies only to Phase 2 program).	

(ii) [Reserved]

(4) [Reserved]

(5) Engine subcategories are shown for each primary intended service class in paragraph (5)(i) of this definition. Paragraph (5)(i) includes 6 separate subcategories for engines which are the same for Phase 1 and 2 standards.

(i) *Engine subcategories.*

LHD engines	MHD engines	HHD engines
CI engines for vocational vehicles	CI engines for vocational vehicles	CI engines for vocational vehicles.
N/A	CI engines for truck Tractors	CI engines for truck tractors.
All spark-ignition engines		N/A.

(ii) [Reserved]

Relating to as used in this section means relating to something in a specific, direct manner. This expression is used in this section only to define terms as adjectives and not to broaden the meaning of the terms. (See 40 CFR 1037.801).

Revoke has the same meaning given in 40 CFR 1068.30.

Roof height means the maximum height of a vehicle (rounded to the nearest inch), excluding narrow accessories such as exhaust pipes and antennas, but including any wide accessories such as roof fairings. Measure roof height of the vehicle configured to have its maximum height that will occur during actual use, with properly inflated tires and no driver, passengers, or cargo onboard. Determine the base roof height on fully inflated tires having a static loaded radius equal to the arithmetic mean of the largest and smallest static loaded radius of tires a manufacturer offers or a standard tire EPA approves. If a vehicle is equipped with an adjustable roof fairing, measure the roof height with the fairing in its lowest setting. Once the maximum height is determined, roof heights are divided into the following categories:

(1) Low-roof means a vehicle with a roof height of 120 inches or less.

(2) Mid-roof means a vehicle with a roof height between 121 and 147 inches.

(3) High-roof means a vehicle with a roof height of 148 inches or more.

Round means to apply the rounding convention specified in 40 CFR 1065.20(e), unless otherwise specified. (See 40 CFR 1065.1001).

Secondary vehicle manufacturer has the same meaning as final-stage manufacturer in 49 CFR part 567.

Service class group means a group of engine and vehicle averaging sets defined as follows:

(1) Spark-ignition engines, light heavy-duty compression-ignition engines, light heavy-duty vocational vehicles and heavy-duty pickup trucks and vans.

(2) Medium heavy-duty compression-ignition engines and medium heavy-duty vocational vehicles and tractors.

(3) Heavy heavy-duty compression-ignition engines and heavy heavy-duty vocational vehicles and tractors.

Sleeper cab means a type of truck cab that has a compartment behind the driver's seat intended to be used by the driver for sleeping. This includes both cabs accessible from the driver's compartment and those accessible from outside the vehicle.

Small business manufacturer means a manufacturer meeting the criteria specified in 13 CFR 121.201. For manufacturers owned by a parent company, the employee and revenue limits apply to the total number employees and total revenue of the parent company and all its subsidiaries.

Spark-ignition (SI) means relating to a gasoline-fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark-ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Note that some spark-ignition engines are subject to requirements that apply for compression-ignition engines as described in 40 CFR 1036.140.

Standard payload means the payload assumed for each vehicle, in tons, for modeling and calculating emission credits, as follows:

(1) For vocational vehicles:

(i) 2.85 tons for light heavy-duty vehicles.

(ii) 5.6 tons for medium heavy-duty vehicles.

(iii) 7.5 tons for heavy heavy-duty vocational vehicles.

(2) For tractors:

(i) 12.5 tons for Class 7.

(ii) 19 tons for Class 8.

(iii) 43 tons for heavy-haul tractors.

Standard trailer means a trailer that meets the applicable criteria found in 40 CFR 1037.501(g). (See 40 CFR 1037.801).

Stop-start means a vehicle technology that automatically turns the engine off when the vehicle is stopped, as described in 40 CFR 1037.660(a). (See the definition for *stop-start* in 40 CFR 1037.801)

Subconfiguration means a unique combination within a vehicle configuration of equivalent test weight, road-load horsepower, and any other operational characteristics or parameters that EPA determines may significantly affect CO_2 emissions within a vehicle configuration as defined in 40 CFR 600.002.

Tank trailer has the meaning given in 40 CFR 1037.801.

Test group means the multiple vehicle lines and model types that share critical emissions and fuel consumption related features and that are certified as a group by a common certificate of conformity issued by EPA and is used collectively with other test groups within an averaging set or regulatory subcategory and is used by NHTSA for determining the fleet average fuel consumption.

The agencies means the National Highway Traffic Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) in this part.

Tire pressure monitoring system (TPMS) has the meaning given in section S3 of 49 CFR 571.138.

Tire rolling resistance level (TRRL) means a value with units of kg/metric ton that represents that rolling resistance of a tire configuration. TRRLs are used as inputs to the GEM model under 40 CFR 1037.520. Note that a manufacturer may assign a value higher than a measured rolling resistance of a tire configuration.

Towing capacity in this part is equal to the resultant of subtracting the gross vehicle weight rating from the gross combined weight rating.

Trade means to exchange fuel consumption credits, either as a buyer or a seller.

U.S.-directed production volume means the number of vehicle units, subject to the requirements of this part, produced by a manufacturer for which the manufacturer has a reasonable assurance that sale was or will be made to ultimate purchasers in the United States.

Useful life has the meaning given in 40 CFR 1036.801 and 1037.801.

Vehicle configuration means a unique combination of vehicle hardware and calibration (related to measured or modeled emissions) within a vehicle family as specified in 40 CFR 1037.801. Vehicles with hardware or software differences, but that have no 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. Manufacturers designate families in accordance with EPA provisions and may not choose different families between the NHTSA and EPA programs. If a manufacturer is certifying vehicles within a vehicle family to more than one FEL, it must subdivide its greenhouse gas and fuel consumption vehicle families into subfamilies that include vehicles with identical FELs. Note that a manufacturer may add subfamilies at any time during the model year.

Vehicle identification number has the meaning given in 49 CFR 565.12 for *VIN.*

Vehicle service class means classes of vehicles, generally based on a vehicle's weight class, that are used for purposes of determining applicable requirements. The *vehicle service classes* defined here for use in this part align with the *vehicle service classes* specified in 40 CFR 1037.140(g). Fuel consumption standards and other provisions of this part apply to specific vehicle service classes for tractors and vocational vehicles as follows:

(1) Phase 1 and Phase 2 tractors are divided based on GVWR into Class 7 tractors and Class 8 tractors. Where provisions apply to both tractors and vocational vehicles, Class 7 tractors are considered medium heavy-duty ''MHD'' vehicles and Class 8 tractors are considered heavy heavy-duty ''HHD'' vehicles. This paragraph applies for both hybrid and non-hybrid vehicles.

(2) Phase 1 vocational vehicles are divided based on GVWR. Light heavy-duty ''LHD'' vehicles includes Class 2b through Class 5 vehicles; medium heavy-duty ''MHD'' vehicles includes Class 6 and Class 7 vehicles; and heavy heavy-duty ''HHD'' vehicles includes Class 8 vehicles.

(3) Phase 2 vocational vehicles with spark-ignition engines are divided based on GVWR. Light heavy-duty ''LHD'' vehicles includes Class 2b through Class 5 vehicles, and medium heavy-duty ''MHD'' vehicles includes Class 6 through Class 8 vehicles.

(4) Phase 2 vocational vehicles with compression-ignition engines are divided as follows:

(i) Class 2b through Class 5 vehicles are considered light heavy-duty ''LHD'' vehicles.

(ii) Class 6 through 8 vehicles are considered heavy heavy-duty ''HHD'' vehicles if the installed engine's primary intended service class is heavy heavy-duty (see 40 CFR 1036.140), except that Class 8 hybrid vehicles are considered heavy heavy-duty ''HHD'' vehicles regardless of the engine's primary intended service class. All other Class 6 through Class 8 vehicles are considered medium heavy-duty ''MHD'' vehicles.

(5) Heavy-duty vehicles with no installed propulsion engine, such as electric vehicles, are divided as follows:

(i) Class 2b through Class 5 vehicles are considered light heavy-duty ''LHD'' vehicles.

(ii) Class 6 and 7 vehicles are considered medium heavy-duty ''MHD'' vehicles.

(iii) Class 8 vehicles are considered heavy heavy-duty ''HHD'' vehicles.

(6) In certain circumstances, manufacturers may certify vehicles to standards that apply for a different vehicle service class such as allowed in § 535.5(b)(6) and (c)(7). If manufacturers optionally certify vehicles to different standards, those vehicles are subject to all the regulatory requirements as if the standards were mandatory.

Vehicle subfamily or subfamily means a subset of a vehicle family including vehicles subject to the same FEL(s).

Vocational tractor has the meaning given in 40 CFR 1037.801.

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

■ 5. Amend § 535.5 by:
■ a. Revising paragraphs (a) introductory text, (a)(1), and (b) introductory text;
■ b. Removing and reserving paragraph (b)(1)(iii)(B);
■ c. Revising paragraphs (b)(4), (b)(9)(i) introductory text, (c) introductory text, (c)(5), (d) introductory text, (d)(3), and (d)(11)(i)(A) and (C); and
■ d. Removing paragraph (e).

The revisions read as follows:

§ 535.5 Standards.

(a) *Heavy-duty pickup trucks and vans.* Each manufacturer's 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. Each vehicle must be manufactured to comply for its full useful life. For the Phase 1 program, if the manufacturer's fleet includes conventional vehicles (gasoline, diesel and alternative fueled vehicles) and advanced technology vehicles (hybrids with powertrain designs that include energy storage systems, vehicles with waste heat recovery, electric vehicles and fuel cell vehicles), it may divide its fleet into two separate fleets each with its own separate fleet average fuel consumption standard which the manufacturer must comply with the requirements of this paragraph (a). For Phase 2, manufacturers may calculate their fleet average fuel consumption standard for a conventional fleet and multiple advanced technology vehicle fleets. Advanced technology vehicle fleets should be separated into plug-in hybrid electric vehicles, electric vehicles, and fuel cell vehicles. The standards in this paragraph (a) correspond to EPA requirements specified in 40 CFR 86.1819–14. When applying the fuel consumption standards in this paragraph (a), manufacturers must use the same options they use to comply with EPA in 40 CFR part 86, subpart S in terms of grouping vehicles and/or engines for purposes of determining

applicable standards and determining compliance (*i.e.,* the vehicles and/or engines and must be grouped in the same way for purposes of this paragraph (a) as they are grouped for compliance with EPA's requirements in 40 CFR part 86, subpart S). Engines that are installed in vehicles that are subject to the standards in this paragraph are not subject to the standards in paragraph (d) of this section and may not optionally comply with paragraph (d).

(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 86.1819–14) 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. Phase 1 target standards apply for model years 2016 through 2020. Phase 2 target standards apply for model year 2021 and afterwards.

* * * * *

(b) *Heavy-duty vocational vehicles.* Each manufacturer building complete or incomplete heavy-duty vocational vehicles shall comply with the fuel consumption standards in this paragraph (b) expressed in gallons per 1,000 ton-miles. When applying the fuel consumption standards in this paragraph (b), manufacturers must use the same options they use to comply with EPA in 40 CFR 1037.105 in terms of grouping vehicles and/or engines for purposes of determining applicable standards and determining compliance (*i.e.,* the vehicles and/or engines and must be grouped in the same way for purposes of this paragraph (b) as they are grouped for compliance with EPA's requirements in 40 CFR 1037.105). Engines used in heavy-duty vocational vehicles shall comply with the standards in paragraph (d) of this section. Each vehicle must be manufactured to comply for its full useful life. Standards apply to the vehicle subfamilies based upon the vehicle service classes within each of the vocational vehicle regulatory subcategories in accordance with § 535.4 and based upon the applicable modeling and testing specified in § 535.6. Determine the duty cycles that apply to vocational vehicles according to 40 CFR 1037.140 and 1037.150(z).

* * * * *

(4) *Regulatory subcategory standards for model years 2021 and later.* The mandatory fuel consumption standards for heavy-duty vocational vehicles are given in the following table:

TABLE 9 TO PARAGRAPH (b)(4)—PHASE 2 VOCATIONAL VEHICLE FUEL CONSUMPTION STANDARDS

[Gallons per 1,000 ton-miles]

Model Years 2021 through 2023 Standards for CI Vehicles

Duty cycle	LHD vocational vehicles	MHD vocational vehicles	Vocational HHD vehicles
Urban	41.6503	29.0766	30.2554
Multi-Purpose	36.6405	26.0314	25.6385
Regional	30.5501	22.9862	20.1375

Model Years 2021 through 2023 Standards for SI Vehicles

Duty cycle	LHD vocational vehicles	MHD and HHD vocational vehicles	N/A
Urban	51.8735	36.9078	N/A
Multi-Purpose	45.7972	32.9695	N/A
Regional	37.6955	29.3687	N/A

Model Years 2024 through 2026 Standards for CI Vehicles

Duty cycle	Vocational LHD vehicles	Vocational MHD vehicles	Vocational HHD vehicles
Urban	37.8193	26.6208	27.7996
Multi-Purpose	33.7917	24.1650	23.7721
Regional	29.0766	21.7092	19.0570

Model Years 2024 through 2026 Standards for SI Vehicles

Duty cycle	Vocational LHD vehicles	Vocational MHD and HHD vehicles	N/A
Urban	48.6103	34.8824	N/A
Multi-Purpose	43.3217	31.3942	N/A
Regional	36.4577	28.2435	N/A

Model Years 2027 and later Standards for CI Vehicles

Duty cycle	Vocational LHD vehicles	Vocational MHD vehicles	Vocational HHD vehicles
Urban	36.0511	25.3438	26.4244
Multi-Purpose	32.4165	23.0845	22.5933
Regional	28.5855	21.4145	18.5658

TABLE 9 TO PARAGRAPH (b)(4)—PHASE 2 VOCATIONAL VEHICLE FUEL CONSUMPTION STANDARDS—Continued

[Gallons per 1,000 ton-miles]

Duty cycle			
Model Years 2027 and later Standards for SI Vehicles			
Duty cycle	Vocational LHD vehicles	Vocational MHD and HHD vehicles	N/A
Urban	46.4724	33.4196	N/A
Multi-Purpose	41.8589	30.1564	N/A
Regional	35.8951	27.7934	N/A

* * * * *

(9) * * *

(i) *Qualifying criteria.* Vocational vehicles with a date of manufacture before January 1, 2021 automatically qualify for an exemption under this paragraph (b)(9) if the tires installed on the vehicle have a maximum speed rating at or below 55 miles per hour. Vocational vehicles intended for off-road use are exempt without request, subject to the provisions of this section, if they are primarily designed to perform work off-road (such as in oil fields, mining, forests, or construction sites), and they meet at least one of the criteria of paragraph (b)(9)(i)(A) of this section and at least one of the criteria of paragraph (b)(9)(i)(B) of this section. See paragraph (b)(6) of this section for alternate standards that apply for vehicles meeting only one of these sets of criteria.

* * * * *

(c) *Truck tractors.* Each manufacturer building truck tractors, except vocational tractors or vehicle constructed in accordance with 49 CFR 571.7(e), 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. When applying the fuel consumption standards in this paragraph (c), manufacturers must use the same options they use to comply with EPA in 40 CFR 1037.106 in terms of grouping vehicles and/or engines for purposes of determining applicable standards and determining compliance (*i.e.,* the vehicles and/or engines and must be grouped in the same way for purposes of this paragraph (c) as they are grouped for compliance with EPA's requirements in 40 CFR 1037.106). Engines used in heavy-duty truck tractors vehicles shall comply with the standards in paragraph (d) of this section. Each vehicle must be manufactured to comply for its full useful life. Standards apply to the vehicle subfamilies within each of the tractor vehicle regulatory subcategories in accordance with § 535.4 and 40 CFR 1037.230 and based upon the applicable modeling and testing specified in § 535.6. Determine the vehicles in each regulatory subcategory in accordance with 40 CFR 1037.140.

* * * * *

(5) *Alternate standards for tractors at or above 120,000 pounds GCWR.* Manufacturers may certify tractors at or above 120,000 pounds GCWR to the following fuel consumption standards in the following table:

TABLE 12 TO PARAGRAPH (c)(5)—ALTERNATE FUEL CONSUMPTION STANDARDS FOR TRACTORS ABOVE 120,000 POUNDS GCWR FOR 2021 MY AND LATER

[Gallons per 1,000 ton-miles]

Regulatory subcategory	Model years 2021 through 2023	Model years 2024 through 2026	Model years 2027 and later
Heavy Class 8 Low-Roof Day Cab	5.25540	4.99018	4.80354
Heavy Class 8 Low-Roof Sleeper Cab	4.62672	4.37132	4.16503
Heavy Class 8 Mid-Roof Day Cab	5.46169	5.18664	4.99018
Heavy Class 8 Mid-Roof Sleeper Cab	4.87230	4.60707	4.39096
Heavy Class 8 High-Roof Day Cab	5.35363	5.04912	4.77407
Heavy Class 8 High-Roof Sleeper Cab	4.62672	4.34185	4.02750

* * * * *

(d) *Heavy-duty engines.* Each manufacturer of heavy-duty engines shall comply with the fuel consumption standards in this paragraph (d) of this section expressed in gallons per 100 horsepower-hour. When applying the fuel consumption standards in this paragraph (d), manufacturers must use the same options they use to comply with EPA in 40 CFR 1036.108 in terms of grouping engines for purposes of determining applicable standards and determining compliance (*i.e.,* the engines must be grouped in the same way for part 535.5(d) purposes as they are grouped for compliance with EPA's requirements in 40 CFR 1036.108). Each engine must be manufactured to comply for its full useful life, expressed in service miles, operating hours, or calendar years, whatever comes first. The provisions of this part apply to all new 2014 model year and later heavy-duty engines fueled by conventional and alternative fuels and manufactured for use in heavy-duty tractors or vocational vehicles. Standards apply to the engine and powertrain families and sub-families based upon the primary intended service classes within each of the engine regulatory subcategories as described in § 535.4 and based upon the applicable modeling and testing specified in § 535.6.

* * * * *

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

TABLE 13 TO PARAGRAPH (d)(3)—PRIMARY HEAVY-DUTY ENGINE FUEL CONSUMPTION STANDARDS
[Gallons per 100 hp-hr]

Phase 1—Voluntary Standards						
Regulatory subcategory	CI LHD engines and all other engines	CI MHD engines and all other engines		HHD CI engines and all other engines		SI engines
Application	Vocational	Vocational	Tractor	Vocational	Tractor	All
2015						7.0552
2013 through 2016	5.8939	5.8939	4.9312	5.5697	4.666	

Phase 1—Mandatory Standards						
Regulatory subcategory	CI LHD engines and all other engines	CI MHD engines and all other engines		CI HHD engines and all other engines		SI engines
Application	Vocational	Vocational	Tractor	Vocational	Tractor	All
2016						7.0552
2017 through 2020	5.6582	5.6582	4.7839	5.4519	4.5187	7.0552

Phase 2—Mandatory Standards						
Regulatory subcategory	CI LHD engines and all other engines	CI MHD engines and all other engines		CI HHD engines and all other engines		SI engines (except HHD engines)
Application	Vocational	Vocational	Tractor	Vocational	Tractor	All
2021 through 2023	5.5305	5.3536	4.6464	5.0393	4.3910	7.0552
2024 through 2026	5.4519	5.2849	4.5285	4.9705	4.2829	7.0552
2027 and Later	5.4224	5.2554	4.4892	4.9411	4.2436	7.0552

* * * * *

(11) * * *

(i) * * *

(A) 5.3241 gallons per 100 hp-hr for MHD vocational vehicle engines.

* * * * *

(C) 5.0098 gallons per 100 hp-hr for HHD vocational vehicle engines.

* * * * *

■ 6. Amend § 535.6 by:

■ a. Revising paragraphs (b)(1), (b)(4)(ii), and (b)(5)(i);

■ b. Adding paragraphs (b)(5)(v)(E)(*3*) and (*4*)

■ c. Revising paragraphs (d) introductory text, (d)(1), (d)(2) introductory text, and (d)(3) introductory text, and (d)(3)(ii) introductory text; and

■ d. Removing paragraph (e).

The revisions and additions read as follows:

§ 535.6 Measurement and calculation procedures.

* * * * *

(b) * * *

(1) Select vehicles and vehicle family configurations as specified in 40 CFR 1037.150 and 1037.230 for vehicles that make up each of the manufacturer's regulatory subcategories of vocational vehicles and tractors. For the Phase 2 program, select powertrain, axle and transmission families in accordance with 40 CFR 1037.231 and 1037.232.

* * * * *

(4) * * *

(ii) Coefficient of aerodynamic drag (C_dA) or drag area, as described in 40 CFR 1037.520(b), 1037.525, 1037.527, and 1037.528. Alternatively, manufacturers may use C_dA values as specified in 40 CFR 1037.530, 1037.532, or 1037.534 if used for determining CO_2 compliance for EPA. Manufacturers must use the same compliance approach for determining C_dA values in GEM for the NHTSA and EPA programs.

* * * * *

(5) * * *

(i) *Engine characteristics.* Enter information from the engine manufacturer to describe the installed engine and its operating parameters as described in 40 CFR 1036.503 and 1037.520(f).

* * * * *

(v) * * *

(E) * * *

(*3*) Manufacturers may use values to characterize torque converters as inputs to GEM as specified in the procedure defined in 40 CFR 1037.570.

(*4*) Vocational vehicle manufacturers may optionally use values for neutral coasting in GEM as specified in 40 CFR 1037.520

* * * * *

(d) *Heavy-duty engines.* This section describes the method for determining equivalent fuel consumption family certification level (FCL) values for engine and powertrain families and subfamilies of heavy-duty truck tractors and vocational vehicles. The NHTSA heavy-duty engine fuel consumption FCLs are determined from the EPA FCLs tested in accordance with 40 CFR part 1036, subpart F. Each engine and powertrain family must use the same primary intended service class as designated for EPA in accordance with 40 CFR 1036.140.

(1) Manufacturers must select emission-data engines representing the tested configuration of each engine family specified in 40 CFR 1036.501 for engines in heavy-duty truck tractors and vocational vehicles that make up each of the manufacturer's regulatory subcategories.

(2) Standards in § 535.5(d) apply to the CO2 emissions rates for each emissions-data engine in an engine or powertrain family or sub-family subject to the procedures and equipment specified in 40 CFR part 1036, subpart F. Determine equivalent fuel consumptions rates using CO2 emissions rates in grams per hp-hr measured to at least one more decimal place than that of the applicable EPA standard in 40 CFR 1036.108.

* * * * *

(3) For medium HD and heavy HD engines certified as tractor and other long-haul engine families, use the CO2 emissions test results from the steady-state duty cycle, which is referred to as the Supplemental Emission Test (SET), as specified in 40 CFR 1036.510 for each model year; for medium HD and heavy HD engines certified as tractor and vocational engine families, use the CO2 test results from the transient duty

cycle, which is referred to as the Federal Test Procedure (FTP) duty cycle, as specified in 40 CFR 1036.512 for each model year; for all other engines (including those certifying to SI standards) use the CO2 emissions test results from the appropriate duty cycle, as specified in 40 CFR 1036.501 for each model year.

* * * * *

(ii) The following engines are excluded from the engine and powertrain families and subfamilies used to determine fuel consumption FCL values and the benefit for these engines is determined as an advanced technology credit under the ABT provisions provided in § 535.7(e); these provisions apply only for the Phase 1 program:

* * * * *

■ 7. Amend § 535.7 by:
■ a. Revising paragraphs (a) introductory text and (a)(2)(v);
■ b. Removing paragraph (a)(3)(v);
■ c. Revising paragraph (a)(4) introductory text;
■ d. Removing and reserving paragraph (a)(4)(v);
■ e. Revising paragraphs (a)(8)(i) and (a)(9)(iv)(B);
■ f. Adding paragraph (a)(11);
■ g. Revising paragraphs (b)(1), (c)(1) introductory text, (d)(1) introductory text, and (d)(7);
■ h. Removing and reserving paragraph (e);
■ i. Revising paragraph (f)(1)(ii) introductory text;
■ j. Adding paragraph (f)(1)(ii)(G); and
■ k. Removing and reserving paragraph (f)(2)(v).

The revisions and additions read as follows:

§ 535.7 Averaging, banking, and trading (ABT) credit program.

(a) *General provisions.* After the end of each model year, manufacturers must comply with the fuel consumption standards in § 535.5 for averaging, banking and trading credits. Manufacturers comply with standards if the sum of averaged, banked and traded credits generate a ''zero'' credit balance or a credit surplus within an averaging set of vehicles or engines. Manufacturers fail to comply with standards if the sum of the credit flexibilities generate a credit deficit (or shortfall) in an averaging set. Credit shortfalls must be offset by banked or traded credits within three model years after the shortfall is incurred. These processes are hereafter referenced as the NHTSA ABT credit program. The following provisions apply to all fuel consumption credits.

* * * * *

(2) * * *

(v) If a manufacturer certifies a vehicle family to an FEL that exceeds the otherwise applicable standard, it must obtain enough FCC to offset the vehicle family's deficit by the due date of its final report required in § 535.8. The emission credits used to address the deficit may come from other vehicle families that generate FCCs in the same model year (or from the next three subsequent model years), from banked FCCs from previous model years, or from FCCs generated in the same or previous model years that it obtained through trading.

* * * * *

(4) *Trading.* Trading is a transaction that transfers banked family regulatory subcategory or averaging set fuel consumption credits. Tractor, vocational vehicle and engine manufacturers may trade credits generated for vehicle or engine families or subfamilies while manufacturers of heavy-duty pickup trucks and vans certified as complete vehicles may trade credit credits generated for averaging sets. A manufacturer may use traded FCCs for averaging, banking, or further trading transactions.

(8) * * *

(i) Fuel consumption credits a manufacturer generates for light and medium heavy-duty vocational vehicles in model years 2018 through 2021 may be used through model year 2027, instead of being limited to a five-year credit life as specified in this part. Fuel consumption credits that small manufacturers generate for heavy heavy-duty vocational vehicles in model years 2018 through may be used through model year 2027, instead of being limited to a five-year credit life as specified in this part. Fuel consumption credits that a small manufacturer generates for vocational vehicles in model year 2022 that are certified to Phase 1 standards as permitted under § 535.3(e)(2)(ii)(B) may be used through model year 2027.

* * * * *

(9) * * *

(iv) * * *

(B) Manufacturers may produce up to 200 drayage tractors in a given model year to the standards described in § 535.5(b)(6) for ''other buses''. Treat these drayage tractors as being in their own averaging set. This limit applies with respect to vehicles produced by manufacturers within a control relationship as defined § 534.3.

* * * * *

(11) Fuel consumption credits may not be generated more than once. This means that fuel consumption credits may only be generated once for a given engine or vehicle and fuel consumption credits may not be generated for both a given engine and the vehicle in which the engine is installed. For example, if a manufacturer generates fuel consumption credits for a given hybrid vehicle under this part, no one may generate fuel consumption credits for the associated hybrid engine. This provision, however, does not prevent manufacturers from generating fuel consumption credits for engines that are identical to the given engine in the example if those engines are installed in vehicles for which fuel consumption credits are not generated. This provision does not impact any adjustment factor or multiplier that is applied to the fuel consumption credits as specified or permitted by this part.

(b) * * *

(1) Calculate fuel consumption credits in a model year for one fleet of conventional heavy-duty pickup trucks and vans and if designated by the manufacturer another consisting of advance technology vehicles for the averaging set as defined in § 535.4. Calculate credits for each fleet separately using the following equation:

$$\text{Total MY Fleet FCC (gallons)} = (\text{Std} - \text{Act}) \times (\text{Volume}) \times (\text{UL}) \times (10^2)$$

Where:

Std = Fleet average fuel consumption standard (gal/100 mile).
Act = Fleet average actual fuel consumption value (gal/100 mile).
Volume = the total U.S.-directed production of vehicles in the regulatory subcategory.
UL = the useful life for the regulatory subcategory. The useful life value for heavy- pickup trucks and vans manufactured for model years 2013 through 2020 is equal to the 120,000 miles. The useful life for model years 2021 and later is equal to 150,000 miles.

* * * * *

(c) * * *

(1) Calculate the fuel consumption credits in a model year for each participating family or subfamily consisting of conventional vehicles in each averaging set (as defined in § 535.4) using the equation in this section. Each designated vehicle family or subfamily has a ''family emissions limit'' (FEL) that is compared to the associated regulatory subcategory standard. An FEL that falls below the regulatory subcategory standard creates ''positive credits,'' while fuel consumption level of a family group above the standard creates a ''negative credits.'' The value of credits generated for each family or subfamily in a model year is calculated as follows and must be rounded to nearest whole number:

Vehicle Family FCC (gallons) = (Std − FEL) × (Payload) × (Volume) × (UL) × (10^3)

Where:

Std = the standard for the respective vehicle family regulatory subcategory (gal/1,000 ton-mile).

FEL = family emissions limit for the vehicle family (gal/1,000 ton-mile).

Payload = the prescribed payload in tons for each regulatory subcategory as shown in the following table:

TABLE 1 TO PARAGRAPH (c)(1) INTRODUCTORY TEXT

Regulatory subcategory	Payload (tons)
Vocational LHD Vehicles	2.85
Vocational MHD Vehicles	5.60
Vocational HHD Vehicles	7.5
MDH MHD Tractors	12.50
HHD Tractors, other than heavy-haul Tractors	19.00
Heavy-haul Tractors	43.00

Volume = the number of U.S.-directed production volume of vehicles in the corresponding vehicle family.

UL = the useful life for the regulatory subcategory (miles) as shown in the following table:

TABLE 2 TO PARAGRAPH (c)(1) INTRODUCTORY TEXT

Regulatory subcategory	UL (miles)
LHD Vehicles	110,000 (Phase 1);150,000 (Phase 2).
Vocational MHD Vehicles and tractors at or below 33,000 pounds GVWR	185,000.
Vocational HHD Vehicles and tractors at or above 33,000 pounds GVWR	435,000.

* * * * *

(d) * * *

(1) Calculate the fuel consumption credits in a model year for each participating family or subfamily consisting of engines in each averaging set (as defined in § 535.4) using the equation in this section. Each designated engine family has a ''family certification level'' (FCL) which is compared to the associated regulatory subcategory standard. A FCL that falls below the regulatory subcategory standard creates ''positive credits,'' while fuel consumption level of a family group above the standard creates a ''credit shortfall.'' The value of credits generated in a model year for each engine family or subfamily is calculated as follows and must be rounded to nearest whole number:

Engine Family FCC (gallons) = (Std − FCL) × (CF) ×(Volume) × (UL) × (10^2)

Where:

Std = the standard for the respective engine regulatory subcategory (gal/100 hp-hr).

FCL = family certification level for the engine family (gal/100 hp-hr).

CF= a transient cycle conversion factor in hp-hr/mile which is the integrated total cycle horsepower-hour divided by the equivalent mileage of the applicable test cycle. For engines subject to spark-ignition heavy-duty standards, the equivalent mileage is 6.3 miles. For engines subject to compression-ignition heavy-duty standards, the equivalent mileage is 6.5 miles.

Volume = the number of engines in the corresponding engine family.

UL = the useful life of the given engine family (miles) as shown in the following table:

TABLE 3 TO PARAGRAPH (d)(1) INTRODUCTORY TEXT

Regulatory Subcategory	UL (miles)
SI and CI LHD Engines	120,000 (Phase 1); 150,000 (Phase 2).
CI MHD Engines	185,000.
CI HHD Engines	435,000.

* * * * *

(7) Engine credits generated for compression-ignition engines in model year 2020 and earlier may be used in model year 2021 and later as follows:

(i) For credit-generating engines certified to the tractor engine standards in § 535.5(d), you may use credits calculated relative to the tractor engine standards.

(ii) For credit-generating engines certified to the vocational engine standards in § 535.5(d), you may use credits calculated relative to the following family certification levels (FCLs):

(A) Medium Heavy-Duty Engines = 5.4813 gallons/100 hp-hr

(B) Heavy Heavy-Duty Engines = 5.1572 gallons/100 hp-hr

(C) To transfer Phase 1 credits for use in the Phase 2 fuel consumption program, manufacturers must recalculate credit values for the Phase 1 model years by substituting the FCLs in paragraph (d)(1) of this section with the those in paragraphs (d)(7)(ii)(A) and (B) of this section.

* * * * *

(f) * * *

(1) * * *

(ii) There are no separate credit allowances for advanced technology vehicles in the Phase 2 program. Instead, through model year 2027, vehicle families containing plug-in battery electric hybrids, all-electric, and fuel cell vehicles certifying to Phase 2 vocational and tractor standards may multiply credits by a multiplier of:

* * * * *

(G) Advanced technology credits increased with a multiplier in Phase 2,

in accordance with § 535.7(f)(1)(ii), cannot be used across averaging sets.

* * * * *

■ 8. Amend § 535.8 by revising paragraphs (a)(6), (g)(11)(i)(C), (g)(12), and (i) to read as follows:

§ 535.8 Reporting and recordkeeping requirements.

(a) * * *

(6) Any information that must be sent directly to NHTSA. In instances in which EPA has not created an electronic pathway to receive the information, the information should be sent through an electronic portal identified by NHTSA or through the NHTSA CAFE database (*i.e.,* information on fuel consumption credit transactions). If hardcopy documents must be sent, the information should be sent to the Associate Administrator of Enforcement at 1200 New Jersey Avenue SE, NVS–200, Office W45–306, Washington, DC 20590.

* * * * *

(g) * * *

(11) * * *

(i) * * *

(C) The averaging set corresponding to the engine and powertrain families and subfamilies that generated fuel consumption credits for the trade, including the number of fuel consumption credits from each averaging set.

* * * * *

(12) *Production reports.* Within 90 days after the end of the model year and no later than March 31st, manufacturers participating and not-participating in the ABT program must send to EPA and NHTSA a report including the total U.S.-directed production volume of vehicles it produced in each vehicle and engine family during the model year (based on information available at the time of the report) as required by 40 CFR 1036.250 and 1037.250. Each manufacturer shall report by vehicle or engine identification number and by configuration and identify the subfamily identifier. Report uncertified vehicles sold to secondary vehicle manufacturers. Small business manufacturers may omit reporting. Identify any differences between volumes included for EPA but excluded for NHTSA.

* * * * *

(i) *Information received from EPA.* NHTSA will receive information from EPA as specified in 40 CFR 1036.755 and 1037.755. The knowing and willful submission of false, fictitious or fraudulent information under this part will subject a manufacturer to the civil and criminal penalties of 18 U.S.C. 1001.

* * * * *

■ 9. Amend § 535.9 by revising paragraph (a)(1)(i) and adding paragraph (a)(1)(v) to read as follows:

§ 535.9 Enforcement approach.

(a) * * *

(1) * * *

(i) NHTSA may conduct audits or confirmatory testing on any configuration prior to first sale throughout a given model year or after the model year in order to validate data received from manufacturers and will discuss any potential issues with EPA and the manufacturer. NHTSA may perform confirmatory testing. Any such testing would be performed as specified in EPA's regulations at 40 CFR part 1037. Audits may periodically be performed to confirm manufacturers' credit balances, or other credit transactions or other information submitted to EPA and NHTSA.

* * * * *

(v) NHTSA may require a manufacturer to perform selective enforcement audits with respect to any GEM inputs in its application for certification or in the end of the year ABT final reports. Any required selective enforcement audits would be required to be conducted in a manner consistent with EPA's corresponding provisions at 40 CFR 1037.301, 1037.305, and 1037.320.

* * * * *

■ 10. Amend § 535.10 by:

■ a. Removing and reserving paragraph (a)(3);

■ b. Revising paragraphs (a)(6) and (c)(2); and

■ c. Removing and reserving paragraph (c)(3).

The revisions read as follows:

§ 535.10 How do manufacturers comply with fuel consumption standards?

(a) * * *

(6) Manufacturers apply the fuel consumption standards specified in § 535.5 to vehicles, engines and components that represent production units and components for vehicle and engine families, subfamilies and configurations consistent with the EPA specifications in 40 CFR 86.1819, 1036.230, and 1037.230. Vehicles required to meet the fuel consumption standards of this part must also comply with the following additional requirements, consistent with CFR 1037.115(a) and (d):

(i) *Adjustable parameters.* Vehicles that have adjustable parameters must meet all the requirements of this part for any adjustment in the practically adjustable range. We may require that you set adjustable parameters to any specification within the practically adjustable range during any testing. See 40 CFR 1068.50 for general provisions related to adjustable parameters. You must ensure safe vehicle operation throughout the practically adjustable range of each adjustable parameter, including consideration of production tolerances. Note that adjustable roof fairings and trailer rear fairings are deemed not to be adjustable parameters.

(ii) *Defeat devices.* Consistent with 40 CFR 1068.101, the use of defeat devices is prohibited.

* * * * *

(c) * * *

(2) For truck tractors, vocational vehicles, and engines the manufacturer's fuel consumption performance for each vehicle or engine family (or subfamily), as determined in § 535.6, is lower than the applicable regulatory subcategory standards in § 535.5.

* * * * *

Issued in Washington, DC, under authority delegated in 49 CFR 1.95 and 501.5.

Sophie Shulman,

Deputy Administrator.

[FR Doc. 2024–05010 Filed 3–14–24; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 648

[Docket No. 231215–0305; RTID 0648–XD808]

Fisheries of the Northeastern United States; Summer Flounder Fishery; Quota Transfer From Virginia to New Jersey

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; quota transfer.

SUMMARY: NMFS announces that the Commonwealth of Virginia is transferring a portion of its 2024 commercial summer flounder quota to the State of New Jersey. This adjustment to the 2024 fishing year quota is necessary to comply with the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP) quota transfer provisions. This announcement informs the public of the revised 2024