EPA does not interpret the statute as allowing the EPA to consider future air quality in the initial designations process, and the D.C. Circuit has upheld this interpretation as reasonable.8 The record for the Round 2 Supplement explains, and the EPA maintains, that both air quality modeling and ambient monitoring are appropriate tools for characterizing ambient air quality for purposes of informing decisions to implement the SO<sub>2</sub> NAAQS, including designation determinations.9 The EPA's reliance on modeling to assess SO<sub>2</sub> air quality, even in the face of conflicting monitoring, where appropriate, has been judicially affirmed. See, e.g., Montana Sulphur & Chemical Company v. EPA, 666 F.3d 1174, 1185 (9th Cir. 2012)

In the Round 2 Supplement for these three areas, the EPA considered Texas's recommendations but appropriately modified the recommendations, per CAA section 107(d)(1)(B)(2), because they were not supported by currently available information. Specifically, the EPA's assessment of Sierra Club's modeling was that currently available information showed violations of the 2010 SO<sub>2</sub> NAAQS. At the time of the EPA's final nonattainment designations for portions of Freestone and Anderson Counties, Rusk and Panola Counties, and Titus County, although Texas preferred that the EPA designate the areas based on proposed future monitoring data rather than on existing submitted modeling, there were no representative monitoring data 10 or other reliable modeling demonstrations available to refute Sierra Club's information demonstrating violations of the 2010 SO<sub>2</sub> NAAQS, as explained in

the EPA's final designations TSD.<sup>11</sup> The absence of available monitoring data at that time did not relieve the EPA of its obligation to issue designations for these areas by the court-ordered deadline. Furthermore, at the time of the final designations, the Agency did not have the discretion to await the results of 3 years of ambient air monitoring data (i.e., 2018–2020) from Texas's proposed (but not yet established) monitoring sites before taking final action due to the court's order to designate certain areas in Texas. There was, however, as explained previously and in the EPA's final designations TSD, valid modeling submitted by the Sierra Club based on the then-most recent actual emissions demonstrating that the areas were violating the 2010 SO<sub>2</sub> NAAQS. As explained earlier, the EPA no longer believes there were errors in our Round 2 Supplement's analysis that Sierra Club submitted valid, representative modeling (based on the then-most recent actual SO<sub>2</sub> emissions) that demonstrated that the areas were violating the 2010 SO<sub>2</sub> NAAQS, or that further refining the modeling would result in modeled values near or below the standard. Therefore, even though the EPA considered Texas's preference for monitoring, given that the statute requires that the EPA consider available information, Texas's preference for reliance on monitoring information when there were no such monitoring data available at the time of the EPA's final designations in December 2016 did not and could not rebut Sierra Club's modeling showing violations of the 2010 SO<sub>2</sub> NAAQS.<sup>12</sup>

### III. Purpose of This Action

In the 2019 Proposed Error Correction, the EPA proposed that our relying on the Sierra Club modeling along with our not giving greater weight to Texas' preference for monitoring, represented an insufficient basis for the EPA's initial nonattainment designations. For the reasons discussed previously, the EPA no longer believes it has a basis under these reasons individually or collectively to propose to or conclude that we made errors in our nonattainment designations of these areas, and, therefore, no longer believes

that we have a basis to conclude that the EPA could not determine, based on available information at the time of issuing the designation, whether the three Texas areas that are the subject of this proposed action were meeting or not meeting the 2010 SO<sub>2</sub> NAAQS (*i.e.*, the conclusion necessary to correct the designations to unclassifiable). Therefore, the EPA is withdrawing the Proposed Error Correction.

### IV. Statutory and Executive Order Reviews

This withdrawal of a proposed rule does not establish new regulatory requirements. Hence, the requirements of other regulatory statutes and Executive Orders that generally apply to rulemakings (e.g., the Regulatory Flexibility Act) do not apply to this action.

### List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, Sulfur dioxide.

### Michael S. Regan,

Administrator.

[FR Doc. 2021–13696 Filed 6–28–21; 8:45 am]  ${\tt BILLING\ CODE\ 6560–50–P}$ 

### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Parts 1036 and 1037

[EPA-HQ-OAR-2019-0307; FRL-10018-51-OAR]

### Improvements for Heavy-Duty Engine and Vehicle Test Procedures

**AGENCY:** Environmental Protection

Agency (EPA).

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** This notice of proposed rulemaking includes corrections, clarifications, additional flexibilities, and adjustment factors to improve the Greenhouse gas Emissions Model (GEM) compliance tool for heavy-duty vehicles while more closely matching the outputs produced by the original GEM version 3.0 that was used to establish the CO2 standards for Model Years 2021 and later in the 2016 Heavy-duty Phase 2 final rule. This document supplements the proposed rule published on May 12, 2020, which included a larger set of proposed revisions to modify and improve GEM. Most of the proposed revisions from that notice of proposed rulemaking are addressed in a final rulemaking published elsewhere in the Final Rules section of this issue of the Federal Register. Given the nature of this proposal, there will be neither

<sup>&</sup>lt;sup>8</sup> See Miss. Comm'n on Envtl. Quality v. EPA, 790 F.3d 138, 156 (D.C. Cir. 2015); Catawba County v. EPA, 571 F.3d 20, 43-44 (D.C. Cir. 2009). The 2015 decision upheld the EPA's designations issued just days before new certified air quality data became available showing more areas violating the 2008 ozone NAAQS than the EPA designated as nonattainment. See also State of Texas v. EPA, 983 F.3d 826, 837-838 (5th Cir. 2020) (holding that the EPA's nonattainment designation, which modified the state's recommendation, was not arbitrary and capricious because the county was not compliant with the ozone NAAQS when the EPA promulgated its designation and the CAA uses concrete terms such that a county either does or does not meet the NAAOS)

<sup>&</sup>lt;sup>9</sup>Round 2 Supplement Reponses to Comments, Page 13. Available in the public docket and at https://www.epa.gov/sites/production/files/2016-11/documents/rtc\_so2\_comments\_received\_ document\_4\_tx\_sources\_final\_0.pdf.

 $<sup>^{10}\,\</sup>mathrm{As}$  explained in the EPA's intended and final designations TSDs and the responses to comments document that accompanied the Round 2 Supplement, at the time of the EPA's final designations on December 13, 2016, there were no SO\_2 monitors sited in the areas of maximum concentration to properly characterize the air quality around the Martin Lake, Big Brown, or Monticello areas, nor were there SO\_2 monitors in the same counties as the facilities.

<sup>&</sup>lt;sup>11</sup>The EPA received a comment from the Utility Air Regulatory Group on the Round 2 Supplement suggesting that the EPA wait for the future completion of three years of monitoring before designating certain Round 2 areas. In the Round 2 Supplement Responses to Comments (page 14), the EPA responded that the Agency does not have the discretion to await the results of future monitoring because of the court order to designate certain areas by the July 2, 2016, deadline.

 $<sup>^{12}\,</sup>See\,State\,of\,Texas$  v.  $EPA,\,983$  F.3d 826, 836–838 (5th Cir. 2020).

significant environmental impacts nor significant economic impacts for any sector.

#### DATES:

Comments: Comments must be received on or before August 30, 2021.

Public Hearing: If anyone contacts us requesting a public hearing on or before July 6, 2021, we will hold an online hearing at 10 a.m. Eastern Standard Time on July 14, 2021.

#### ADDRESSES:

Comments: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2019-0307, at http://www.regulations.gov. For detailed instructions on sending comments and additional information on the rulemaking process, see the "Public Participation" section of this document.

Docket: EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2019-0307. Publicly available docket materials are available either electronically at http:// www.regulations.gov or in hard copy at Air and Radiation Docket and Information Center, EPA Docket Center, EPA/DC, EPA WJC West Building, 1301 Constitution Ave. NW, Room 3334, Washington, DC. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room was closed to public visitors on March 31, 2020, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. We encourage the public to submit comments via https:// www.regulations.gov or email, as there is a temporary suspension of mail delivery to EPA, and no hand deliveries are currently accepted. For further information on EPA Docket Center services and the current status, please visit us online at https://www.epa.gov/ dockets.

Public Hearing: Individuals are invited to notify EPA of interest in a public hearing; see FOR FURTHER INFORMATION CONTACT.

Public Participation: Comments: All submissions received must include the Docket ID No. EPA-HQ-OAR-2019-0307 for this rulemaking. Follow the online instructions for submitting comments. Once submitted, comments received may be posted without change to https://www.regulations.gov/, including any personal information provided, and cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/ commenting-epa-dockets.

Out of an abundance of caution for members of the public and our staff, the **EPA Docket Center and Reading Room** was closed to public visitors on March 31, 2020, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. We encourage the public to submit comments via https:// www.regulations.gov or email, as there is a temporary suspension of mail delivery to EPA, and no hand deliveries are currently accepted. For further information on EPA Docket Center services and the current status, please visit us online at https://www.epa.gov/.

EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention, local area health departments, and our Federal partners so we can respond rapidly as conditions change regarding COVID-19.

Docket: All documents in the docket are listed on the www.regulations.gov website. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form through the EPA Docket Center at the location listed in the ADDRESSES section of this document.

Public Hearing: If we hold a public hearing, we will announce detailed information about the hearing on our website https://www.epa.gov/regulations-emissions-vehicles-and-engines/supplemental-rule-improvements-heavy-duty-engine-and. Send requests for a hearing and questions about the status of a hearing to the contact identified in FOR FURTHER INFORMATION CONTACT.

### FOR FURTHER INFORMATION CONTACT:

Amy Kopin, Office of Transportation and Air Quality, Assessment and Standards Division, Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone number: (734) 214–4173; email address: kopin.amy@epa.gov.

### SUPPLEMENTARY INFORMATION:

#### **Table of Contents**

- I. General Information
- II. Greenhouse Gas Emissions Model (GEM) Background
- III. Proposed Updates to GEM
- IV. Statutory Authority and Executive Order Reviews

### I. General Information

Does this action apply to me?

This action relates to companies that manufacture or sell new heavy-duty engines and vehicles as defined under EPA's CAA regulations.¹ Regulated categories and entities include the following:

NAICS codes A				NAICS titles	Examples of potentially regulated entities
333618, 336111, 336999.	336112,	336120,	336211,	Other Engine Equipment Manufacturing, Automobile Manufacturing, Light Truck and Utility Vehicle Manufacturing, Heavy Duty Truck Manufacturing, Motor Vehicle Body Manufacturing, All Other Transportation Equipment Manufacturing.	Motor vehicle manufacturers and engine manufacturers.

<sup>&</sup>lt;sup>A</sup> North American Industry Classification System (NAICS).

<sup>&</sup>lt;sup>1</sup> "Heavy-duty engine" and "heavy-duty vehicle" are defined in 40 CFR 1037.801.

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.

What action is the Agency taking?

This action proposes to amend the regulations that implement our air pollutant emission standards for heavyduty engines and vehicles. The proposed amendments in this notice of proposed rulemaking include corrections, clarifications, additional flexibilities, and adjustment factors to the Greenhouse gas Emissions Model (GEM) compliance tool for heavy-duty vehicles. These amendments would modify the existing test procedure for heavy-duty highway engines and vehicles and apply to the measurement of CO<sub>2</sub> emissions. EPA published a proposed rule on May 12, 2020 (85 FR 28153) ("Technical Amendments proposed rule"). EPA is issuing a final rulemaking ("Technical Amendments final rule") relating to most revisions proposed in the Technical Amendments proposed rule, published in the Final Rules section of this issue of the **Federal** Register, titled "Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and other technical amendments," docket number EPA-HQ-OAR-2019-0307; FRL-10018-52-OAR.

This action supplements the Technical Amendments proposed rule for only certain specific aspects of revising GEM by proposing several amendments to the model, after consideration of comments solicited and received on the Technical Amendments proposed rule, including a proposed revision to address concerns raised regarding potential stringency impacts that may result from changes to GEM.

What are the incremental costs and benefits of this action?

This action is limited in scope and does not have significant economic or environmental impacts. EPA has therefore not estimated the potential costs or benefits of this notice of proposed rulemaking.

## II. Greenhouse Gas Emissions Model (GEM) Background

GEM is a computer application that estimates the greenhouse gas (GHG) emissions and fuel efficiency performance of specific aspects of heavy-duty vehicles. GEM uses several vehicle-specific inputs, such as engine fuel maps, aerodynamic drag

coefficients, and vehicle weight ratings, to simulate vehicle and engine operation and model the amount of CO<sub>2</sub> emitted over multiple duty cycles for tractors and vocational vehicles. The resulting CO2 values over these cycles are weighted by GEM to provide a composite GEM score. GEM version 3.0 was used to set standards in the Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles-Phase 2 ("Phase 2") rulemaking (81 FR 73478). For purposes of determining compliance, composite GEM scores are compared to the applicable Phase 2 vehicle standard.

In the Technical Amendments proposed rule, we proposed several amendments to GEM 3.0, including corrections, clarifications, and additional flexibilities in a revised version of the model, GEM 3.5 (85 FR 28145). EPA also requested comment on whether any differences in GEM output values resulting from changes to the model would impact the effective stringency of the program and, if so, whether EPA should revise the GEM model itself or address such impacts via regulations (see 85 FR 28145).

Comments received in response to the NRPM supported most of the proposed updates to GEM and requested additional revisions to further improve the model.<sup>2</sup> The California Air Resources Board (CARB) provided comment on this topic, stating the importance of GEM results being consistent with the current program standards to avoid affecting program stringency. CARB recommended that EPA revise GEM in order to ensure stringency is maintained.<sup>3</sup>

After considering the comments received, EPA applied further potential changes to GEM 3.5 and released a new development version of GEM, GEM 3.7, to the public for download and review by stakeholders to evaluate and assess the performance of this revised model. GEM 3.7 incorporated some corrections and improvements relative to the proposed version GEM 3.5, as noted in the corresponding memorandum in the rulemaking docket.<sup>4</sup>

While evaluating GEM 3.7, we found differences in the output values for some tractor and vocational vehicles compared to the output values from GEM 3.0 used to set the Phase 2 CO<sub>2</sub> standards. To understand the differences between GEM 3.0 and GEM 3.7, we recreated the process used in 2016 to determine the numerical level of the Phase 2 standards. Without an adjustment to the resulting GEM output value, these differences in GEM output values when compared to the Phase 2 final rule could be considered an effective change in stringency. In light of GEM 3.7 output differences and considering CARB's comment, we identified adjustment factors in that same docketed memo that could be applied to the unrounded GEM 3.7 output to better ensure effective stringency of the standards is maintained.5

The Truck and Engine Manufacturers Association (EMA) requested additional time for its members to review the potential updates to the model in GEM 3.7 and evaluate the impact of the adjustment factors made available.<sup>6</sup>

As described in the Technical Amendments final rule, EPA released a revised version of GEM (*i.e.*, GEM 3.5.1) that corrected three errors in GEM 3.5 and finalized provisions to specify GEM 3.5.1 without adjustment factors as the compliance tool for meeting Phase 2 standards. GEM 3.5.1 includes the following updates to GEM 3.5:

- Corrected duty cycle weighting factors for vocational vehicles in the Heavy Heavy-Duty Multipurpose subcategory.
- Corrected an idle map error when the cycle average engine fuel mapping procedure is used for all three drive cycles.
- Corrected a functional error that unnecessarily required manufacturers to include transmission power loss data when using the option to enter a unique (instead of default) k-factor for the torque converter.

<sup>&</sup>lt;sup>2</sup> See "Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and other Technical Amendments Response to Comments", Publication Number: EPA–420–R–20–026, December 2020. Chapter 2 of the Response to Comments provides additional details on the amendments, clarifications requested by commenters, and our responses to most of the comments to the NPRM.

<sup>&</sup>lt;sup>3</sup> California Air Resources Board, Docket number EPA-HQ-OAR-2019-0207-0030.

<sup>&</sup>lt;sup>4</sup> Nelson, Brian. Memorandum to Docket EPA– HQ-OAR-2019-0307. "Development version of GEM and adjustment factors". October 23, 2020. Docket number EPA-HQ-OAR-2019-0307-0083.

Also available online: https://www3.epa.gov/otaq/gem-p2v3.7-release-memo-2020-10-23.pdf.

5 Id.

<sup>&</sup>lt;sup>6</sup>Charmley, Bill. Memorandum to Docket EPA–HQ–OAR–2019–0307. "EPA discussions with the Truck and Engine Manufacturers Association, and with the California Air Resources Board, regarding Highway Heavy-Duty Technical Amendments." December 14, 2020. Docket Number EPA–HQ–OAR–2019–0307–0092.

<sup>&</sup>lt;sup>7</sup> See the notice of final rulemaking for "Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and other Technical Amendments" published in the Final Rule's section of today's Federal Register, titled "Improvements for Heavy-Duty Engine and Vehicle Test Procedures," docket number EPA-HQ-OAR-2019-0307; FRL-10018-52-OAR.

### III. Proposed Updates to GEM

In this notice of proposed rulemaking, as detailed further in this section, we are proposing to revise GEM and to revise GEM's test procedures to include adjustment factors after consideration of comments solicited and received on the Technical Amendments proposed rule. We request comment only on these specific revisions and are not proposing changes to or seeking comment on any other amendments included in the Technical Amendments proposed or final rule.

We are releasing GEM version 3.8 for notice and comment.<sup>8</sup> The proposed GEM 3.8 allows additional compliance flexibilities and improves the vehicle simulation by incorporating the following improvements relative to GEM 3.5.1:

 Changed limits on engine input to allow small negative torque inputs.

- Corrected how GEM adjusts the idle fueling of the transient cycle by using the same idle duration time both for subtracting the idle fuel rate from the transient cycle average engine fuel map and for adding back in the simulated idle fuel rate.
- Added an option for vocational vehicles to input a value for neutral coasting in GEM and amend the related test procedure in 40 CFR 1037.520(j)(1).
- Corrected manual and automated manual transmissions to perform clutched upshifts for Heavy HDV.

We request comment on the revisions listed above.

As noted in a memorandum to the docket, the resulting standards generated using GEM 3.8 in place of GEM 3.0 were, on average, 0.58 percent lower for tractors and 0.20 percent higher for vocational vehicles, with the greatest difference (an increase of 1.3 percent) occuring in a few of the custom chassis standards. 9 To ensure that these changes to GEM do not change the effective stringency of the Phase 2 CO<sub>2</sub> standards, we propose a revision to the test procedures in 40 CFR 1037.520(o) to include a table of adjustment factors to be applied to the unrounded GEM 3.8 output to correct the differences. We request comment on this proposed revision to 40 CFR 1037.520(o). EPA also requests comment on whether EPA should incorporate the adjustment factors directly into the GEM model, if

EPA is able to develop a version of the GEM model which properly incorporates the adjustment factors.

We are proposing to incorporate by reference into the regulations the revised version, GEM 3.8, for manufacturers to demonstrate compliance with the Phase 2 standards, including obtaining a certificate of conformity and submitting end-of-year reports. For MY 2021, we are proposing to allow use of GEM 3.5.1 under § 1037.150(bb) as an interim provision, but to limit this optional use of GEM 3.5.1 for demonstrating compliance with the Phase 2 standards, including obtaining a certificate of conformity and submitting end-of-year reports, to MY 2021 vehicles only. A manufacturer who opts to use GEM 3.5.1 for MY 2021 is required to apply GEM 3.5.1 across its entire MY 2021 U.S.-directed production volume. We also propose to allow MY 2021 data based on the use of GEM 3.5.1 to be used for carryover requests for certificates of conformity for MY 2022 and future years for qualifying vehicles under § 1037.235(d); however, manufacturers would still need to use GEM 3.8 for end-of-year reporting for MY 2022 and later. Under this proposal, GEM 3.8 would need to be used for all other certificates of conformity for MY 2022 and later. Due to the model improvements and flexibilities available in GEM 3.8 relative to GEM 3.5.1, we request comment on the appropriateness of requiring that GEM 3.8 be used for MY 2021 end-of-year reports even if MY 2021 certificates of conformity were obtained using GEM 3.5.1. Finally, we are proposing that if an engine fuel map was run on an engine using a cycle generated from GEM 3.5.1 for MY 2021 and the manufacturer of that engine applies for carryover certification for MY 2022 or later, the manufacturer would not need to rerun the engine fuel map. We request comment on these requirements, allowable uses, and limitations proposed for each of these revised GEM model versions, including the use of GEM 3.5.1 for MY 2021 and carryover applications.

### IV. Statutory Authority and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <a href="http://www2.epa.gov/laws-regulations/laws-and-executive-orders">http://www2.epa.gov/laws-regulations/laws-and-executive-orders</a>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not

submitted to the Office of Management and Budget (OMB) for review.

### B. 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 adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This action is designed to reduce testing burdens, increase compliance flexibility, and make various corrections and adjustments to compliance provisions; as a result, we anticipate no costs associated with this rule. We have therefore concluded that this action will have no net regulatory burden for directly regulated small entities.

### C. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments. Requirements for the private sector do not exceed \$100 million in any one year.

### D. 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 national government and the states, or on the distribution of power and responsibilities among the various levels of government.

E. 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.

F. 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 the EPA does not believe the environmental

<sup>&</sup>lt;sup>8</sup> Greenhouse gas Emissions Model (GEM) Phase 2, Version 3.8, December 2020. A working version of this software is also available for download at https://www.epa.gov/regulations-emissions-vehicles-and-engines/greenhouse-gas-emissions-model-gem-medium-and-heavy-duty.

<sup>&</sup>lt;sup>9</sup> Sanchez, James, Memorandum to Docket EPA– HQ–OAR–2019–0307. Process of Using GEM to Set Vehicle Standards. December 4, 2020.

health or safety risks addressed by this action present a disproportionate risk to children. There are no environmental health or safety risks created by this action that could present a disproportionate risk to children.

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

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

H. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs agencies to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This action involves technical standards.

Except for the reference discussed below, the standards included in the regulatory text as incorporated by reference in 40 CFR part 1037 were all previously approved for IBR and no change is proposed in this action.

In accordance with the requirements of 1 CFR 51.5, we are proposing to incorporate by reference a new version of the Greenhouse gas Emissions Model (GEM), which we use for certifying heavy-duty highway vehicles to the greenhouse gas emission standards in 40 CFR part 1037. The model calculates emission rates for heavy-duty highway vehicles based on input values defined by the manufacturer. The model is available as noted in the amended regulations at 40 CFR 1037.810.

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

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

### List of Subjects

40 CFR Part 1036

Administrative practice and procedure, Air pollution control, Confidential business information, Environmental protection, Greenhouse gases, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

### 40 CFR Part 1037

Administrative practice and procedure, Air pollution control, Confidential business information, Environmental protection, Incorporation by reference, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

#### Jane Nishida,

Acting Administrator.

For the reasons set out in the preamble, we propose to amend title 40, chapter I of the Code of Federal Regulations as set forth below.

### PART 1036—CONTROL OF EMISSIONS FROM NEW AND IN-USE HEAVY-DUTY HIGHWAY ENGINES

■ 1. The authority citation for part 1036 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

■ 2. Amend § 1036.150 by adding paragraph (r) to read as follows:

### § 1036.150 Interim provisions.

\* \* \* \* \*

(r) Carryover fuel maps. You may use fuel maps from model year 2021 engines for certifying model year 2022 and later vehicles using carryover provisions in § 1036.235(d), even if the specified version of the GEM simulation tool to generate duty cycles for fuel mapping changes for those later model years.

### PART 1037—CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES

■ 3. The authority citation for part 1037 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 4. Amend § 1037.150 by adding paragraph (bb) to read as follows:

#### § 1037.150 Interim provisions.

\* \* \* \* \*

(bb) *Transition to updated GEM.*Vehicle manufacturers may demonstrate

compliance with Phase 2 GHG standards in model year 2021 vehicles using GEM Phase 2, Version 3.5.1 (incorporated by reference in § 1037.810). Each vehicle manufacturer must use a single version of GEM for all its model year 2021 families. Vehicle manufacturers may use GEM Phase 2, Version 3.5.1 for later model years only to certify vehicle families from model year 2021 that qualify for using carryover provisions in § 1037.235(d).

■ 5. Amend § 1037.520 by revising the introductory text and paragraph (j)(1) and adding paragraph (o) to read as follows:

# $\S$ 1037.520 Modeling CO<sub>2</sub> emissions to show compliance for vocational vehicles and tractors.

This section describes how to use the Greenhouse gas Emissions Model (GEM) (incorporated by reference in § 1037.810) to show compliance with the CO<sub>2</sub> standards of §§ 1037.105 and 1037.106 for vocational vehicles and tractors. Use GEM version 2.0.1 to demonstrate compliance with Phase 1 standards; use GEM Phase 2, Version 3.8 to demonstrate compliance with Phase 2 standards. Use good engineering judgment when demonstrating compliance using GEM. See § 1037.515 for calculation procedures for demonstrating compliance with trailer standards.

\* \* \* \* \* \* (j) \* \* \*

(1) Intelligent controls. Enter 2 for tractors with predictive cruise control. This includes any cruise control system that incorporates satellite-based global-positioning data for controlling operator demand. For tractors without predictive cruise control and for all vocational vehicles, enter 1.5 if they have neutral coasting, unless good engineering judgment indicates that a lower percentage should apply.

(o) Adjusting results for updated GEM. Adjust composite results from GEM Phase 2, Version 3.8 using the following equation to account for modeling changes relative to GEM Phase 2, Version 3.0:

$$e_{\text{CO2}_{\text{Adjusted}}} = \frac{e_{\text{CO2}}}{1 + AF}$$

Eq. 1037.520-1

Where:

 $e_{\rm CO2}$  = FEL CO<sub>2</sub> Emissions from GEM. AF = the adjustment factor from the following table:

### TABLE 10 OF § 1037.520—ADJUSTMENT FACTORS FOR COMPOSITE RESULTS FROM GEM PHASE 2, VERSION 3.8

Dogulatow, subsettagow,	Adjustment factor			
Regulatory subcategory	MY 2022–2023	MY 2024–2026	MY 2027-and-later	
Class 7 Day Cab Low Roof	-0.0104	-0.0090	- 0.0094	
Class 7 Day Cab Mid Roof	-0.0106	-0.0084	-0.0097	
Class 7 Day Cab High Roof	-0.0088	-0.0084	-0.0090	
Class 8 Day Cab Low Roof	-0.0062	-0.0079	-0.0068	
Class 8 Sleeper Cab Low Roof	-0.0014	-0.0015	-0.0016	
Class 8 Day Cab Mid Roof	-0.0059	-0.0062	-0.0064	
Class 8 Sleeper Cab Mid Roof	-0.0013	0.0000	0.0000	
Class 8 Day Cab High Roof	-0.0058	-0.0062	-0.0066	
Class 8 Sleeper Cab High Roof	-0.0013	-0.0014	-0.0016	
Class 8 Heavy Haul	-0.0076	-0.0080	-0.0062	
Multi-Purpose Light HDV Compression-ignition	0.0000	-0.0029	0.0000	
Regional Light HDV Compression-ignition	0.0000	0.0000	0.0000	
Urban Light HDV Compression-ignition	0.0000	0.0000	0.0000	
Multi-Purpose Medium HDV Compression-ignition	-0.0038	0.0000	0.0000	
Regional Medium HDV Compression-ignition	0.0000	0.0000	0.0000	
Urban Medium HDV Compression-ignition	-0.0034	-0.0037	0.0000	
Multi-Purpose Heavy HDV Compression-ignition	0.0038	0.0041	0.0043	
Regional Heavy HDV Compression-ignition	0.0000	0.0000	0.0000	
Urban Heavy HDV Compression-ignition	0.0065	0.0071	0.0037	
Multi-Purpose Light HDV Spark-ignition	0.0000	0.0000	-0.0027	
Regional Light HDV Spark-ignition	0.0000	0.0000	0.0000	
Urban Light HDV Spark-ignition	0.0000	0.0000	0.0000	
Multi-Purpose Medium HDV Spark-ignition	0.0000	0.0000	0.0000	
Regional Medium HDV Spark-ignition	0.0000	0.0000	0.0040	
Urban Medium HDV Spark-ignition	0.0030	0.0032	0.0034	
School bus	-0.0034	-0.0034	0.0000	
Motor home	0.0000	0.0000	0.0000	
Coach bus	0.0000	0.0000	0.0049	
Other bus	0.0067	0.0067	0.0000	
Refuse hauler	0.0096	0.0096	0.0034	
Concrete mixer	0.0125	0.0125	0.0127	
Mixed-use vehicle	0.0125	0.0125	0.0127	
Emergency vehicle	0.0123	0.0123	0.0125	

■ 6. Amend § 1037.810 by revising paragraph (c) to read as follows:

### § 1037.810 Incorporation by reference.

(c) U.S. EPA, Office of Air and Radiation, 2565 Plymouth Road, Ann Arbor, MI 48105, www.epa.gov.

(1)(i) Greenhouse gas Émissions Model (GEM), Version 2.0.1, September 2012 ("GEM version 2.0.1"), IBR approved for § 1037.520. (ii) Greenhouse gas Emissions Model (GEM) Phase 2, Version 3.5.1, November 2020 ("GEM Phase 2, Version 3.5.1"); IBR approved for § 1037.150(bb).

(iii) Greenhouse gas Emissions Model (GEM) Phase 2, Version 3.8, November 2020 ("GEM Phase 2, Version 3.8"); IBR approved for § 1037.520.

(iv) GEM's MATLAB/Simulink Hardware-in-Loop model, Version 3.8, December 2020 ("GEM HIL model"); IBR approved for § 1037.550(a). (2) The computer code for these models is available as noted in paragraph (a) of this section. A working version of the software is also available for download at https://www.epa.gov/regulations-emissions-vehicles-and-engines/greenhouse-gas-emissions-model-gem-medium-and-heavy-duty.

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