§ 1037.30 Submission of information.
Send all reports and requests for approval to the Designated Compliance Officer (see §1037.801). See §1037.825 for additional reporting and recordkeeping provisions.

Subpart B—Emission Standards and Related Requirements

§ 1037.101 Overview of emission standards for heavy-duty vehicles.
(a) This part specifies emission standards for certain vehicles and for certain pollutants. It also summarizes other standards that apply under 40 CFR part 86. This part contains standards and other regulations applicable to the emission of the air pollutant defined as the aggregate group of six greenhouse gases: carbon dioxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

(b) The regulated emissions are addressed in four groups:
(1) Exhaust emissions of NOx, HC, PM, and CO. These pollutants are sometimes described collectively as “criteria pollutants” because they are either criteria pollutants under the Clean Air Act or precursors to the criteria pollutant ozone. These pollutants are also sometimes described collectively as “non-greenhouse gas pollutants”, although they do not necessarily have negligible global warming potential. As described in §1037.102, standards for these pollutants are provided in 40 CFR part 86.

(2) Exhaust emissions of CO2, CH4, and N2O. These pollutants are described collectively in this part as “greenhouse gas pollutants” because they are regulated primarily based on their impact on the climate. These standards are provided in §§1037.104 through 1037.106.

(3) Hydrofluorocarbons. These pollutants are also “greenhouse gas pollutants” but are treated separately from exhaust greenhouse gas pollutants listed in paragraph (b)(2) of this section. These standards are provided in §1037.115.

(4) Fuel evaporative emissions. These requirements are described in 40 CFR part 86.

(c) The regulated heavy-duty vehicles are addressed in different groups as follows:
(1) For criteria pollutants, vehicles are regulated based on gross vehicle weight rating (GVWR), whether they are considered “spark-ignition” or “compression-ignition,” and whether they are first sold as complete or incomplete vehicles. These groupings apply as described in 40 CFR part 86.

(2) For greenhouse gas pollutants, vehicles are regulated in the following groups:
(i) Complete and certain incomplete vehicles at or below 14,000 pounds GVWR (see §1037.104 for further specification). Certain provisions of 40 CFR part 86 apply for these vehicles; see §1037.104(h) for a list of provisions in this part 1037 that also apply for these vehicles. These provisions may also be
optionally applied to certain other vehicles, as described in §1037.104.

(ii) Tractors above 26,000 pounds GVWR.

(iii) All other vehicles subject to standards under this part. These other vehicles are referred to as “vocational” vehicles.

§ 1037.102 Exhaust emission standards for NO\textsubscript{X}, HC, PM, and CO.

See 40 CFR part 86 for the exhaust emission standards for NO\textsubscript{X}, HC, PM, and CO that apply for heavy-duty vehicles.

§ 1037.104 Exhaust emission standards for CO\textsubscript{2}, CH\textsubscript{4}, and N\textsubscript{2}O for heavy-duty vehicles at or below 14,000 pounds GVWR.

This section applies for heavy-duty vehicles at or below 14,000 pounds GVWR. See paragraph (f) of this section and §1037.150 of this section for provisions excluding certain vehicles from this section, and allowing other vehicles to be certified under this section.

(a) Fleet-average CO\textsubscript{2} emission standards. Fleet-average CO\textsubscript{2} emission standards apply for each manufacturer as follows:

(1) Calculate a work factor, WF, for each vehicle subconfiguration (or group of subconfigurations allowed under paragraph (a)(4) of this section), rounded to the nearest pound, using the following equation:

\[ WF = 0.75 \times (\text{GVWR} - \text{Curb Weight} + \text{xwd}) + 0.25 \times (\text{GCWR} - \text{GVWR}) \]

Where:

\[ \text{xwd} = 500 \text{ pounds if the vehicle has four-wheel drive or all-wheel drive; xwd} = 0 \text{ pounds for all other vehicles.} \]

(2) Using the appropriate work factor, calculate a target value for each vehicle subconfiguration (or group of subconfigurations allowed under paragraph (a)(4) of this section) you produce using one of the following equations, rounding to the nearest 0.1 g/mile:

(i) For spark-ignition vehicles: CO\textsubscript{2} Target (g/mile) = 0.0440 \times WF + 339

(ii) For compression-ignition vehicles and vehicles that operate without engines (such as electric vehicles and fuel cell vehicles): CO\textsubscript{2} Target (g/mile) = 0.0416 \times WF + 320

(3) Calculate a production-weighted average of the target values and round it to the nearest 0.1 g/mile. This is your fleet-average standard. All vehicles subject to the standards of this section form a single averaging set. Use the following equation to calculate your fleet-average standard from the target value for each vehicle subconfiguration (Target\textsubscript{i}) and U.S.-directed production volume of each vehicle subconfiguration for the given model year (Volume\textsubscript{i}):

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

(4) You may group subconfigurations within a configuration together for purposes of calculating your fleet-average standard as follows:

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

(ii) You may group together other subconfigurations if you use the lowest target value calculated for any of the subconfigurations.

(b) Production and in-use CO\textsubscript{2} standards. Each vehicle you produce that is subject to the standards of this section has an “in-use” CO\textsubscript{2} standard that is calculated from your test result and that applies for selective enforcement audits and in-use testing. This in-use CO\textsubscript{2} standard for each vehicle is equal to the applicable deteriorated emission level multiplied by 1.10 and rounded to the nearest 0.1 g/mile.