credit or debit calculations will be recalculated. EPA may void erroneous credits, unless transferred, and must adjust erroneous debits. In the case of transferred erroneous credits, EPA must adjust the selling manufacturer’s credit or debit balance to reflect the sale of such credits and any resulting generation of debits.

(d) Notice of opportunity for hearing. Any voiding of the certificate under paragraph (a)(6) of this section will be made only after EPA has offered the manufacturer concerned an opportunity for a hearing conducted in accordance with §86.614 for light-duty vehicles and light-duty trucks and with 40 CFR part 1068, subpart G, for heavy-duty vehicles.

(79 FR 23735, Apr. 28, 2014)

§ 86.1863–07 Optional chassis certification for diesel vehicles.

This section does not apply for vehicles certified to the Tier 3 standards in §86.1816–18, including those vehicles that certify to the Tier 3 standards before model year 2018.

(a) A manufacturer may optionally certify heavy-duty diesel vehicles 14,000 pounds GVWR or less to the standards specified in §86.1816. Such vehicles must meet all the requirements of this subpart S that are applicable to Otto-cycle vehicles, except for evaporative, refueling, and OBD requirements where the diesel-specific OBD requirements would apply.

(b) For OBD, diesel vehicles optionally certified under this section are subject to the OBD requirements of §86.1806.

(c) Diesel vehicles certified under this section may be tested using the test fuels, sampling systems, or analytical systems specified for diesel engines in subpart N of this part or in 40 CFR part 1065.

(d) Diesel vehicles optionally certified under this section to the standards applicable to model year 2008 in earlier model years.

(g) Diesel vehicles optionally certified under this section in model years 2007, 2008, or 2009 shall be included in phase-in calculations specified in §86.007–11(g).

(h) Diesel vehicles subject to the standards of 40 CFR 1037.104 are subject to the provisions of this subpart as specified in 40 CFR 1037.104.

(i) Non-petroleum fueled complete vehicles subject to the standards and requirements of this part under §86.016–01(d)(5) are subject to the provisions of this section applicable to diesel-fueled heavy-duty vehicles.


§ 86.1864–10 How to comply with the fleet average cold temperature NMHC standards.

(a) Applicability. Cold temperature NMHC exhaust emission standards apply to the following vehicles, subject to the phase-in requirements in §86.1811–10(g)(3) and (4):

(1) 2010 and later model year LDV/LLDTs.

(2) 2012 and later model year HLDT/MDPVs.

(3) [Reserved]

(4) Vehicles imported by ICIs as defined in 40 CFR 85.1502.

(b) Useful life requirements. Full useful life requirements for cold temperature NMHC standards are defined in §86.1805–04(g). There is not an intermediate useful life standard for cold temperature NMHC standards.

(c) Altitude. Altitude requirements for cold temperature NMHC standards are provided in §86.1810–09(f).

(d) Small volume manufacturer certification procedures. Certification procedures for small volume manufacturers are provided in §86.1838–01.

(e) Cold temperature NMHC standards. Fleet average cold temperature NMHC standards are provided in §86.1811–10(g)(2).

(f) Phase-in. Phase-in of the cold temperature NMHC standards are provided in §86.1811–10(g)(3) and (4).

(g) Phase-in flexibilities for small volume manufacturers. Phase-in flexibilities for small volume manufacturer compliance with the cold temperature
NMHC standards are provided in § 86.1811–04(k)(5).

(h) Hardship provisions for small volume manufacturers. Hardship provisions for small volume manufacturers related to the cold temperature NMHC standards are provided in § 86.1811–04(q)(1).

(i) In-use standards for applicable phase-in models. In-use cold temperature NMHC standards for applicable phase-in models are provided in § 86.1811–10(a)

(j) Durability procedures and method of determining deterioration factors (DFs). The durability data vehicle selection procedures of § 86.1822–01 and the durability demonstration procedures of § 86.1823–06 apply for cold temperature NMHC standards. For determining compliance with full useful life cold temperature NMHC emission standards, the 68–86°F, 120,000 mile full useful life NMOC DF may be used.

(k) Vehicle test procedure. (1) The test procedure for demonstrating compliance with cold temperature NMHC standards is contained in subpart C of this part. With prior EPA approval, alternative testing procedures may be used, as specified in § 86.106–96(a), provided cold temperature NMHC emissions test results are equivalent or superior.

(2) Testing of all LDVs, LDTs and MDPVs to determine compliance with cold temperature NMHC exhaust emission standards set forth in this section must be on a loaded vehicle weight (LVW) basis, as defined in § 86.1803–01.

(3) Testing for the purpose of providing certification data is required only at low altitude conditions and only for vehicles that can operate on gasoline, except as requested in §§ 86.1810–09(f) and 86.1844–01(d)(11). If hardware and software emission control strategies used during low altitude condition testing are not used similarly across all altitudes for in-use operation, the manufacturer must include a statement in the application for certification, in accordance with §§ 86.1844–01(d)(11) and 86.1810–09(f), stating what the different strategies are and why they are used. If hardware and software emission control strategies used during testing with gasoline are not used similarly with all fuels that can be used in multi-fuel vehicles, the manufacturer will include a statement in the application for certification, in accordance with §§ 86.1844–01(d)(11) and 86.1810–09(f), stating what the different strategies are and why they are used. For example, unless a manufacturer states otherwise, air pumps used to control emissions on dedicated gasoline vehicles or multi-fuel vehicles during low altitude conditions must also be used to control emissions at high altitude conditions, and software used to control emissions or closed loop operation must also operate similarly at low and high altitude conditions and similarly when multi-fueled vehicles are operated on gasoline and alternate fuels. These examples are for illustrative purposes only; similar strategies would apply to other currently used emission control technologies and/or emerging or future technologies.

(l) Emission data vehicle (EDV) selection. Provisions for selecting the appropriate EDV for the cold temperature NMHC standards are provided in §§ 86.1828–10(g) and 86.1829–01(b)(3).

(m) Calculating the fleet average cold temperature NMHC standard. Manufacturers must compute separate sales-weighted fleet average cold temperature NMHC emissions at the end of the model year for LDV/LLD Ts and HLDTs/MDPVs, using actual sales, and certifying test groups to FELs, as defined in § 86.1803–01. The FEL becomes the standard for each test group, and every test group can have a different FEL. The certification resolution for the FEL will be 0.1 grams/mile. LDVs and LLD Ts must be grouped together when calculating the fleet average, and HLD Ts and MDPVs must also be grouped together to determine the fleet average. Manufacturers must compute the sales-weighted cold temperature NMHC fleet averages using the following equation, rounded to the nearest 0.1 grams/mile:

\[
\text{Fleet average cold temperature NMHC exhaust emissions (grams/mile)} = \frac{\sum (N \times \text{FEL})}{\text{Total number of vehicles sold of the applicable weight category}}
\]

Where:

803
\( N \) = The number of LDVs and LLDTs, or HLDTs and MDPVs, sold within the applicable FEL, based on vehicles counted to the point of first sale.

FEL = Family Emission Limit (grams/mile).

(n) Certification compliance and enforcement requirements for cold temperature NMHC standards.

(1) Compliance and enforcement requirements are provided in §86.1864–10 and §86.1848–10(c)(8).

(2) The certificate issued for each test group requires all vehicles within that test group to meet the emission standard or FEL to which the vehicles were certified.

(3) Each manufacturer must comply with the applicable cold temperature NMHC fleet average standard on a sales-weighted average basis, at the end of each model year, using the procedure described in paragraph (m) of this section.

(4) During a phase-in year, the manufacturer must comply with the applicable cold temperature NMHC fleet average standard for the required phase-in percentage for that year as specified in §86.1811–10(g)(3) or (4).

(5) Manufacturers must compute separate cold temperature NMHC fleetaverages for LDV/LLDTs and HLDT/MDPVs. The sales-weighted cold temperature NMHC fleet averages must be compared with the applicable fleet average standard.

(6) Each manufacturer must comply on an annual basis with the fleet average standards as follows:

(i) Manufacturers must report in their annual reports to the Agency that they met the relevant corporate average standard by showing that their sales-weighted average cold temperature NMHC emissions of LDV/LLDTs and HLDT/MDPVs, as applicable, are at or below the applicable fleet average standard;

(ii) If the sales-weighted average is above the applicable fleet average standard, manufacturers must obtain and apply sufficient NMHC credits as permitted under paragraph (o)(8) of this section. A manufacturer must show via the use of credits that they have offset any exceedence of the corporate average standard. Manufacturers must also include their credit balances or deficits.

(iii) If a manufacturer fails to meet the corporate average cold temperature NMHC standard for two consecutive years, the vehicles causing the corporate average exceedence will be considered not covered by the certificate of conformity (see paragraph (o)(8) of this section). A manufacturer will be subject to penalties on an individual-vehicle basis for sale of vehicles not covered by a certificate.

(iv) EPA will review each manufacturer’s sales to designate the vehicles that caused the exceedence of the corporate average standard. EPA will designate as nonconforming those vehicles in test groups with the highest certification emission values first, continuing until reaching a number of vehicles equal to the calculated number of noncomplying vehicles as determined above. In a group where only a portion of vehicles would be deemed nonconforming, EPA will determine the actual nonconforming vehicles by counting backwards from the last vehicle produced in that test group. Manufacturers will be liable for penalties for each vehicle sold that is not covered by a certificate.

(o) Requirements for the cold temperature NMHC averaging, banking and trading (ABT) program. (1) Manufacturers must average the cold temperature NMHC emissions of their vehicles and comply with the cold temperature NMHC fleet average corporate standard. Manufacturers may generate credits during and after the phase-in period. Manufacturers may generate credits prior to the phase-in periods as described in paragraph (o)(5) of this section. A manufacturer whose cold temperature NMHC fleet average emissions exceed the applicable standard must complete the calculation in paragraph (o)(4) of this section to determine the size of its NMHC credit deficit. A manufacturer whose cold temperature NMHC fleet average emissions are less than the applicable standard must complete the calculation in paragraph (o)(4) of this section to generate NMHC credits.

(2) There are no property rights associated with NMHC credits generated under this subpart. Credits are a limited authorization to emit the designated amount of emissions. Nothing
in this part or any other provision of law should be construed to limit EPA’s authority to terminate or limit this authorization through a rulemaking.

(3) Each manufacturer must comply with the reporting and recordkeeping requirements of paragraph (p) of this section for NMHC credits, including early credits. The averaging, banking and trading program is enforceable through the certificate of conformity that allows the manufacturer to introduce any regulated vehicles into commerce.

(4) Credits are earned on the last day of the model year. Manufacturers must calculate, for a given model year, the number of credits or debits it has generated according to the following equation, rounded to the nearest 0.1 gram/mile:

\[
\text{NMHC Credits or Debts} = \left( \frac{\text{Cold Temperature NMHC Standard} - \text{Manufacturer’s Sales-Weighted Fleet Average Cold Temperature NMHC Emissions}}{\text{Total Number of Vehicles Sold}} \right) \times \text{NMHC Credits or Debts}
\]

Where:
- Cold Temperature NMHC Standard = 0.3 grams/mile for LDV/LLDTs or 0.5 grams/mile for HLDT/MDPV; per §86.1811–10(g)(2).
- Manufacturer’s Sales-Weighted Fleet Average Cold Temperature NMHC Emissions = average calculated according to paragraph (m) of this section.
- Total Number of Vehicles Sold = Total 50-State sales based on the point of first sale.

(5) The following provisions apply for early banking:

(i) Manufacturers may certify LDV/LLDTs to the cold temperature NMHC exhaust standards in §86.1811–10(g)(2) for model years 2008–2009 to bank credits for use in the 2010 and later model years. Manufacturers may certify HLDT/MDPVs to the cold temperature NMHC exhaust standards in §86.1811–10(g)(2) for model years 2010–2011 to bank credits for use in the 2012 and later model years.

(ii) This process is referred to as “early banking” and the resultant credits are referred to as “early credits.” To bank early credits, a manufacturer must comply with all exhaust emission standards and requirements applicable to LDV/LLDTs and/or HLDT/MDPVs. To generate early credits, a manufacturer must separately compute the sales-weighted cold temperature NMHC average of the LDV/LLDTs and HLDT/MDPVs it certifies to the exhaust requirements and separately compute credits using the calculations in paragraph (o)(4) of this section. Early HLDT/MDPV credits may not be applied to LDV/LLDTs before the 2010 model year. Early LDV/LLDT credits may not be applied to HLDT/MDPV before the 2012 model year.

(6) NMHC credits are not subject to any discount or expiration date except as required under the deficit carryforward provisions of paragraph (o)(8) of this section. There is no discounting of unused credits. NMHC credits have unlimited lives, subject to the limitations of paragraph (o)(2) of this section.

(7) Credits may be used as follows:

(i) Credits generated and calculated according to the method in paragraph (o)(4) of this section may be used only to offset deficits accrued with respect to the standard in §86.1811–10(g)(2). Credits may be banked and used in a future model year in which a manufacturer’s average cold temperature NMHC level exceeds the applicable standard. Credits may be exchanged between the LDT/LLDT and HLDT/MDPV fleets of a given manufacturer. Credits may also be traded to another manufacturer according to the provisions in paragraph (o)(9) of this section. Before trading or carrying over credits to the next model year, a manufacturer must apply available credits to offset any credit deficit, where the deadline to offset that credit deficit has not yet passed.

(ii) The use of credits shall not be permitted to address Selective Enforcement Auditing or in-use testing failures. The enforcement of the averaging standard occurs through the vehicle’s certificate of conformity. A manufacturer’s certificate of conformity is conditioned upon compliance with the averaging provisions. The certificate will be void ab initio if a manufacturer fails to meet the corporate average standard and does not obtain appropriate credits to cover its shortfalls in that model year or in the subsequent
model year (see deficit carryforward provision in paragraph (o)(8) of this section). Manufacturers must track their certification levels and sales unless they produce only vehicles certified to cold temperature NMHC levels below the standard and do not plan to bank credits.

(8) The following provisions apply if debits are accrued:

(i) If a manufacturer calculates that it has negative credits (also called “debits” or a “credit deficit”) for a given model year, it may carry that deficit forward into the next model year. Such a carry-forward may only occur after the manufacturer exhausts any supply of banked credits. At the end of that next model year, the deficit must be covered with an appropriate number of credits that the manufacturer generates or purchases. Any remaining deficit is subject to an enforcement action, as described in this paragraph (o)(8). Manufacturers are not permitted to have a credit deficit for two consecutive years.

(ii) If debits are not offset within the specified time period, the number of vehicles not meeting the fleet average cold temperature NMHC standards (and therefore not covered by the certificate) must be calculated by dividing the total amount of debits for the model year by the fleet average cold temperature NMHC standard applicable for the model year in which the debits were first incurred.

(iii) EPA will determine the number of vehicles for which the condition on the certificate was not satisfied by designating vehicles in those test groups with the highest certification cold temperature NMHC emission values first and continuing until reaching a number of vehicles equal to the calculated number of noncomplying vehicles as determined above. If this calculation determines that only a portion of vehicles in a test group contribute to the debit situation, then EPA will designate actual vehicles in that test group as not covered by the certificate, starting with the last vehicle produced and counting backwards.

(iv)(A) If a manufacturer ceases production of LDV/LLDTs and HLDT/MDPVs, the manufacturer continues to be responsible for offsetting any debts outstanding within the required time period. Any failure to offset the debits will be considered a violation of paragraph (o)(8)(i) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate, pursuant to paragraphs (o)(8)(ii) and (iii) of this section.

(B) If a manufacturer is purchased by, merges with, or otherwise combines with another manufacturer, the controlling entity is responsible for offsetting any debits outstanding within the required time period. Any failure to offset the debits will be considered a violation of paragraph (o)(8)(i) of this section and may subject the manufacturer to an enforcement action for sale of vehicles not covered by a certificate, pursuant to paragraphs (o)(8)(ii) and (iii) of this section.

(v) For purposes of calculating the statute of limitations, a violation of the requirements of paragraph (o)(8)(i) of this section, a failure to satisfy the conditions upon which a certificate(s) was issued and hence a sale of vehicles not covered by the certificate, all occur upon the expiration of the deadline for offsetting debits specified in paragraph (o)(8)(i) of this section.

(9) The following provisions apply to NMHC credit trading:

(i) EPA may reject NMHC credit trades if the involved manufacturers fail to submit the credit trade notification in the annual report. A manufacturer may not sell credits that are not available for sale pursuant to the provisions in paragraphs (o)(7)(i) of this section.

(ii) In the event of a negative credit balance resulting from a transaction that a manufacturer could not cover by the reporting deadline for the model year in which the trade occurred, both the buyer and seller are liable, except in cases involving fraud. EPA may void ab initio the certificates of conformity of all engine families participating in such a trade.

(iii) A manufacturer may only trade credits that it has generated pursuant to paragraph (o)(4) of this section or acquired from another party.

(p) Reporting and recordkeeping. Keep records and submit information for demonstrating compliance with the
§ 86.1865–12 How to comply with the fleet average CO\textsubscript{2} standards.

(a) Applicability. (1) Unless otherwise exempted under the provisions of § 86.1801–12(j) or (k), CO\textsubscript{2} fleet average exhaust emission standards of this subpart apply to:
   (i) 2012 and later model year passenger automobiles and light trucks.
   (ii) Heavy-duty vehicles subject to standards under 40 CFR 1037.104.
   (iii) Vehicles imported by ICIs as defined in 40 CFR 85.1502.

(b) Useful life requirements. Full useful life requirements for CO\textsubscript{2} standards are defined in § 86.1818–12. There is not an intermediate useful life standard for CO\textsubscript{2} emissions.

(c) Altitude. Altitude requirements for CO\textsubscript{2} standards are provided in § 86.1810–09(f).

(d) Small volume manufacturer certification procedures. Certification procedures for small volume manufacturers are provided in §86.1838. Small businesses meeting certain criteria may be exempted from the greenhouse gas emission standards in §86.1818 according to the provisions of §86.1801–12(j) or (k).

(e) CO\textsubscript{2} fleet average exhaust emission standards. The fleet average standards referred to in this section are the corporate fleet average CO\textsubscript{2} standards for passenger automobiles and light trucks set forth in §86.1818–12(e) and (f). The fleet average CO\textsubscript{2} standards applicable in a given model year are calculated separately for passenger automobiles and light trucks for each manufacturer and each model year according to the provisions in §86.1818–12. Each manufacturer must comply with the applicable CO\textsubscript{2} fleet average standard on a production-weighted average basis, for each separate averaging set, at the end of each model year, using the procedure described in paragraph (j) of this section.

(f) In-use CO\textsubscript{2} standards. In-use CO\textsubscript{2} exhaust emission standards applicable to each model type are provided in §86.1818–12(d).

(g) Durability procedures and method of determining deterioration factors (DFs). Deterioration factors for CO\textsubscript{2} exhaust emission standards are provided in §86.1823–06(m).

(h) Vehicle test procedures. (1) The test procedures for demonstrating compliance with CO\textsubscript{2} exhaust emission standards set forth in this section must be on a loaded vehicle weight (LVW) basis, as defined in §86.1803–01.

(2) Testing of all passenger automobiles and light trucks to determine compliance with CO\textsubscript{2} exhaust emission standards set forth in this section must be on a loaded vehicle weight (LVW) basis. As defined in §86.1803–01. If hardware and software emission control strategies used during low altitude condition testing are not used similarly across all altitudes for in-use operation, the manufacturer must include a statement in the application for certification, in accordance with §86.1844–01(d)(11) and §86.1810–09(f), stating what the different strategies are and why they are used.

(i) Calculating the fleet average carbon-related exhaust emissions. (1) Manufacturers must compute separate production-weighted fleet average carbon-related exhaust emissions at the end of the model year for passenger automobiles and light trucks, using actual production, where production means vehicles produced and delivered for sale, and certifying model types to standards as defined in §86.1818–12. The model type carbon-related exhaust emission results determined according to 40 CFR part 600 subpart F (in units of grams per mile rounded to the nearest whole number) become the certification standard for each model type.

(2) Manufacturers must separately calculate production-weighted fleet average carbon-related exhaust emissions levels for the following averaging sets according to the provisions of part 600 subpart F of this chapter: