



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
2565 PLYMOUTH ROAD
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF
AIR AND RADIATION

May 15, 2023

CD-2023-05 (LDV, LDT)

SUBJECT: Appropriate Test Fuel to Use for Demonstrating Compliance with Nitrous Oxide (N₂O) and Methane (CH₄) Emissions

Dear Manufacturer

The purpose of this letter is to address inquiries EPA has received regarding the appropriate test fuel to use for demonstrating compliance with nitrous oxide (N₂O) and methane (CH₄) emissions. Because fuel economy testing has not moved to E10 test fuels the EPA seeks to clarify our expectations as outlined in the enclosure.

If you have further questions, please contact your certification engineer.

Enclosure

Sincerely,

A handwritten signature in black ink, appearing to read "Byron Bunker", is placed over a light gray rectangular background.

Byron Bunker, Director
Compliance Division
Office of Transportation and Air Quality

Enclosure to CD-2023-05
N₂O and CH₄ Testing Policy

The regulations at §86.1811-17(b)(1)(iv) specify that E10 is the official test fuel for vehicles subject to Tier 3 emission standards. Manufacturers were required under §600.117(a) to demonstrate compliance with greenhouse gas emission standards using E0 fuel through model year 2019. All vehicles that are presented for official fuel economy data must also demonstrate compliance with exhaust emission standards [§600.007(b)(4)]. A manufacturer can choose to demonstrate compliance to emission standards using E0 fuel. As allowed in §600.117(b), a vehicle that does not demonstrate compliance with exhaust emission standards on E0 may be retested on E10 fuel to demonstrate compliance.

The requirement in §600.117(a) for E0 fuel testing has expired. While the EPA has been allowing special test procedures for determination of fuel economy and CO₂ values, we have not insisted upon showing compliance with N₂O and CH₄ using E0.

Therefore, if a vehicle does not meet the cap-standards (base caps of 0.010 g/mi N₂O and 0.030 g/mi CH₄), or an alternate manufacturer selected emission limit under §86.1818-12(f)(3) when testing on E0 fuel, then the manufacturer must demonstrate compliance on E10 test fuel.