Holin U. Lang



# Manufacturers Advisory Correspondence (MAC) ECCD-2024-04

To: All Manufacturers of Heavy-Duty Diesel Engines

From: Robin U. Lang, Chief, Emissions Certification and Compliance Division

Date: December 4, 2024

Subject: Clarification of Certification Requirements for 2024 through 2026 Model Year

**Legacy Engines** 

This letter transmits a Manufacturers Advisory Correspondence (MAC) that provides supplemental information to MAC 2022-04.1 This MAC clarifies the use of California Clean Idle Labels on 2026 model year legacy engines, as defined in Title 13, California Code of Regulations, § 1956.8(a)(2)(C)3, and additionally clarifies engine labeling and sequence of certification for 2024 through 2026 model year legacy engines.

If you have any questions related to this MAC, please contact Elena Florea, Manager, Compression-Ignition and Heavy-Duty Certification Section, at Elena.Florea@arb.ca.gov.

<sup>&</sup>lt;sup>1</sup> Clean Idle Label for 2024 and 2025 Model Year Heavy-Duty Diesel Engines Defined as Legacy Engines and 2024 through 2026 Model Year Heavy-Duty Diesel Engines at or above 525 Brake-horsepower Maximum Power. *MAC 2022-04* 

#### State of California

#### California Air Resources Board

Manufacturers Advisory Correspondence (MAC) 2024-04

Subject: Clarification of Certification Requirements for 2024 through 2026 Model Year

Legacy Engines

Applicability: 2024 through 2026 Model Year Legacy Engines

References: 1. Title 13, California Code of Regulations, § 1956.8

> 2. Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles; and 2020 and Subsequent Model Year Trailers

Title 13, California Code of Regulations, § 2036

3. California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles, as last amended December 28, 2023, incorporated by reference in Title 13, California Code of

Regulations, § 1956.8(b)

#### Issue:

On September 9, 2021, the California Air Resources Board (CARB) adopted more stringent exhaust emission standards, durability demonstration, emission warranty and useful life, and in-use testing requirements for 2024 and subsequent model year (MY) on-road medium- and heavy-duty (HD) engines, including HD diesel engines (HDDE) in the Heavy-Duty Engine and Vehicle Omnibus (Omnibus) regulation.<sup>2</sup> On December 28, 2023, CARB adopted amendments<sup>3</sup> to the legacy engine provisions of the Omnibus regulation (2023 Amendments). The 2023 Amendments provided manufacturers greater flexibility to comply with the Omnibus regulation in the 2024 through 2026 MY period, while maintaining the emissions benefits of the Omnibus regulation, and also included additional labeling requirements for legacy engine families (EF) that are produced and delivered for sale in the California (CA) market.

In addition to CA, nine other states, Colorado, Massachusetts, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington have already adopted CA's Omnibus regulation under Section 177 of the Clean Air Act.<sup>4</sup>

Engines that do not meet the new CA Omnibus requirements could still be certified by the United States Environmental Protection Agency (U.S. EPA) for sale outside of CA and the

<sup>&</sup>lt;sup>2</sup> <u>Heavy-Duty Omnibus Regulation</u>

<sup>&</sup>lt;sup>3</sup> Heavy-Duty Engine and Vehicle Omnibus Regulation Amendments

<sup>&</sup>lt;sup>4</sup> States that have Adopted California's Vehicle Regulations

above-mentioned Section 177 states, but those engines would not be eligible for a Clean Idle Label (CIL). Engine manufacturers had previously indicated concern that the lack of a CIL for federally certified 2024 and subsequent MY HDDEs creates an issue in many municipalities outside of CA (or Section 177 states) that have adopted truck idling restrictions. In order to address this concern, CARB issued MAC 2022-04<sup>5</sup> which allowed the use of CILs on 50-State certified (certified by both CARB and U.S. EPA) legacy HDDEs, as well HDDEs rated at or above 525 brake horsepower (bhp).

This MAC serves as a supplement to MAC 2022-04 and is intended to provide further clarification reflecting the 2023 Amendments.

# **Background:**

Since the 2008 MY, Title 13, California Code of Regulations (13 CCR), § 1956.8(a)6 has required new CA certified HDDEs to be either (1) equipped with an engine shutdown system that automatically shuts off the engine after five minutes of continuous idling under most circumstances, or (2) have engine idling emissions that comply with an oxides of nitrogen (NOx) idling emission standard. Compliance with the NOx idling emission standard allows the use of a CIL which meets the specifications in section I.35.B.4 of the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," last amended December 28, 2023. The presence of CIL on an HD truck indicates that the vehicle can idle for more than five minutes continuously in CA. Many municipalities outside of CA have also adopted restrictions on truck idling, allowing extended idle only for vehicles labeled with CA's CIL.

The adoption of the Omnibus regulation in 2021 established more stringent CA emission standards and other emission-related requirements for HDDEs in comparison to the federal requirements starting with the 2024 MY.<sup>6</sup> Consequently, HDDEs that are only certified to federal requirements would not qualify for the CIL.

However, the Omnibus regulation contains provisions that provide engine manufacturers flexibilities to help manage the transition to the 2024 MY CA standards. These flexibilities also impacted eligibility for the CIL. Specifically, the Omnibus regulation, as initially adopted in September 2021, contains an optional legacy engine provision<sup>7</sup> that provides short-term flexibilities for manufacturers that certify a limited number of their 2024 through 2025 MY HDDEs to the 2010 MY exhaust emission standards for NOx and particulate matter (PM) (legacy engines), provided those manufacturers offset excess emissions generated from such legacy engines. Legacy engines are defined as engines rated below 525 bhp that are

<sup>&</sup>lt;sup>5</sup> Clean Idle Label for 2024 and 2025 Model Year Heavy-Duty Diesel Engines Defined as Legacy Engines and 2024 through 2026 Model Year Heavy-Duty Diesel Engines at or above 525 Brake-horsepower Maximum Power. *MAC 2022-04* 

<sup>&</sup>lt;sup>6</sup> CA engine families that comply with the full Omnibus regulation requirements (i.e., 0.050 g/bhp-hr NOx standard and other applicable requirements) will be eligible for the CIL.

<sup>&</sup>lt;sup>7</sup> 13 CCR § 1956.8(a)(2)(C)3.

certified to a NOx family emission limit of greater than 0.100 grams per brake horsepower-hour (g/bhp-hr) and less than or equal to 0.20 g/bhp-hr on the Federal Test Procedure (FTP) cycle, a PM family emission limit of greater than 0.005 g/bhp-hr and less than or equal to 0.01 g/bhp-hr on the FTP cycle, and a 30 gram per hour (g/hr) NOx idling standard.<sup>8,9</sup> Manufacturers of legacy EFs must offset any excess NOx and PM emissions deficits created by the sale of legacy engines in CA by using 3 possible pathways which are further described in 13 CCR § 1956.8(a)(2)(C)3. These pathways include the use of emission credits earned from the sale of HD zero-emission powertrains, use of credits from the same combustion averaging set, or implementing environmental projects in disadvantaged communities.

### **Policy:**

The following sections provide clarification of policies regarding the certification of 2024 through 2026 MY legacy engines, as established by the 2023 Amendments.

# **Legacy Engine Family Certification**

The legacy engine provisions of the Omnibus regulation provide qualifying manufacturers the opportunity to produce and sell, in California, a limited number of new engines compliant with the applicable federal emission standards for NOx and PM, provided they fully offset any excess emissions generated by such engines. MAC 2022-04 provides manufacturers additional flexibility by allowing the use of the CIL on trucks powered by 50-State certified, 2024-2025 MY legacy EFs, provided such EFs demonstrate compliance with all the legacy engine requirements including providing CA Step 1 emission warranty periods regardless of the state in which the vehicle would be registered or sold. 50-State certified legacy EFs must show identical models and codes on their corresponding CA and U.S. EPA certification applications. Once a legacy EF is 50-State certified, it would be eligible for the CIL and can be sold outside of CA and the Section 177 states that have adopted the Omnibus regulation.

Prior to the adoption of the 2023 Amendments, legacy engine production was limited to 2024 and 2025 MYs only. As a result, MAC 22-04, which was published in December 2022, only included 2024 and 2025 MY legacy EFs as eligible for the CIL. However, with the 2023 Amendments, the applicability of the legacy engine provisions was extended to include 2026 MY HDDEs. Hence, this MAC now provides clarification on extending the applicability of some of the provisions in MAC 22-04 to 2026 MY EFs.

Manufacturers that elect to certify 2026 MY 50-State legacy EFs are therefore allowed to use the CIL on the engines that are sold nationwide, provided such EFs demonstrate compliance with all legacy engine requirements including providing CA Step 1 emission

<sup>&</sup>lt;sup>8</sup> The 2024 through 2026 MY FTP NOx and idling NOx emission standards adopted in the Omnibus regulation are 0.050 g/bhp-hr and 10 g/hr, respectively.

<sup>&</sup>lt;sup>9</sup> 13 CCR § 1956.8(a)(6)(C)1.a.

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warranty periods regardless of the state in which the vehicle would be registered or sold. 50-State certified legacy EFs must show identical models and codes on their corresponding CA and U.S. EPA certification applications.

The 2023 Amendments also establish provisions in 13 CCR § 1956.8(a)(2)(C)3.b.vi that allow manufacturers to certify 2024 MY legacy EFs prior to certification of the Omnibus compliant EFs (certified under 13 CCR § 1956.8(a)(2)(C)1.) In order to streamline the certification process for 2025 and 2026 MYs, the same provision in 13 CCR § 1956.8(a)(2)(C)3.b.vi will also apply to 2025 and 2026 MYs. Manufacturers will be allowed to certify legacy EFs prior to certification of the Omnibus compliant EFs.

## Requirements for Engine Labels

The 2023 Amendments also included changes to the labeling requirements for legacy engines. All 2024 to 2026 MY legacy engines that are produced and delivered for sale in the CA market must include the term "CA" on the engine labels. These requirements are further specified in section I.35.B.8 of the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," as last amended on December 28, 2023. In lieu of the term "CA", manufacturers also have the option to use the term "CA Offset" on the engine labels as well.

As an option, manufacturers can voluntarily use the same labeling methodology (i.e., include the term "CA" on the engine label) for all other 2024 to 2026 MY engines that are produced and delivered for sale in the CA market. This includes HDDEs rated at or above 525 bhp, Omnibus-compliant diesel engines, <sup>10</sup> Otto-cycle engines, and hybrid powertrains.

<sup>&</sup>lt;sup>10</sup> An Omnibus-compliant engine family is certified under 13 CCR § 1956.8(a)(2)(C)1.