FINAL

California Environmental Performance Label Specifications for 2021 and Subsequent Model Year Medium-Duty Vehicles, Except Medium-Duty Passenger Vehicles

Date of Hearing: August 27, 2020
State of California
AIR RESOURCES BOARD

California Environmental Performance Label Specifications

1. Prohibition.

(a) The sale and registration in this state of any California certified new 2021 and
subsequent model year medium-duty vehicles, pick-up trucks and vans, with
8,501 to 14,000 pounds gross vehicle weight rating (GVWR) except medium-
duty passenger vehicles, manufactured on or after January 1, 2021, to which a
California Environmental Performance label has not been affixed in accordance
with these procedures is prohibited unless the vehicle is manufactured by a
small business, as defined in the heavy-duty vehicle test procedures in section
95663(d), title 17, California Code of Regulations (CCR). The sale and
registration in this state of any California certified new 2022 and subsequent
model year medium-duty vehicles, manufactured by a small business, as
defined in the heavy-duty vehicle test procedures in section 95663(d), title 17,
CCR, on or after January 1, 2022, to which a California Environmental
Performance label has not been affixed in accordance with these procedures is
prohibited. Affixing the Environmental Performance label to a vehicle
manufactured before January 1, 2021, is optional.

2. Environmental Performance Label Requirements.

(a) The manufacturer must obtain approval from the Executive Officer of the
California Air Resources Board (CARB) of label values and format prior to
affixing the Environmental Performance labels to medium-duty vehicles.

(b) The Environmental Performance label must display the Greenhouse Gas Rating
for each vehicle within its test group and label group (if using a label group), as
specified in paragraph 4. Greenhouse Gas Rating (tailpipe only) of these
specifications.

(c) The Environmental Performance label must display the Smog Rating for each
vehicle based on its test group, as specified in paragraph 5. Smog Rating

1 The requirement to affix a California Environmental Performance label applies to a complete vehicle (as
defined in title 40, Code of Federal Regulations (CFR), sections 1036.801 and 1037.801, as last amended
October 25, 2016, which are incorporated by reference herein) pick-up trucks and vans, with 8,501 to
14,000 pounds GVWR except medium-duty passenger vehicles.

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(tailpipe only) of these specifications.

(d) The Environmental Performance label must take the form as set forth in paragraph 9. Environmental Performance Label Format Requirements. The Executive Officer may approve a label that varies slightly from the required specifications on a case-by-case basis, provided the deviations do not significantly alter the overall appearance and proportions, and do not result in changes to fonts or slider bars.

(e) The manufacturer must submit one copy of an actual label for its vehicle fleet per model year within 90 days after the end of the model year to CARB to demonstrate compliance.

3. Environmental Performance Label Placement.

(a) The Environmental Performance label may be placed within the new vehicle Monroney sticker required by the Automobile Information Disclosure Act (15 U.S.C. 1231-1233), provided the required information in the Monroney sticker is maintained and the prominence and legibility of the Environmental Performance label is not compromised as set forth in paragraph 2(d).

(b) Except as provided in paragraph 3(a), a stand-alone Environmental Performance label made of paper or plastic must be securely affixed on a side window to the rear of the driver or, if it cannot be so placed, to the windshield of the motor vehicle in accordance with paragraph (3) of subdivision (b) of section 26708 of the Vehicle Code.


(a) Vehicles must be tested using the chassis dynamometer test procedures utilizing the Federal Test Procedure (FTP) for urban stop-and-go driving and Highway Fuel Economy Test cycle (HFET) for highway driving, to comply with emission standards, cited in title 17, CCR, section 95663. The vehicle's grams of carbon dioxide per mile (g CO₂/mile) value is determined by the sum of the FTP vehicle testing value multiplied by 55 percent and the HFET vehicle testing value multiplied by 45 percent. The value must represent the worst-case subconfiguration within each test group and label group (if using a label group) defined below. Alternatively, if actual data are not available for the vehicle being labeled, for the purpose of the greenhouse gas Environmental Performance Label rating only, manufacturers may determine the vehicle g CO₂/mile using

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Analytically Derived CO₂ (ADCO₂) per 40 CFR section 86.1819-14(g)(1)-(6) and (g)(8)-(9), as last amended on October 25, 2016, which are incorporated by reference herein. Note for section 86.1819-14(g)(5), the downward adjustment limit of 20 percent below baseline emission rate is not applicable for the purposes of this regulation. This value must be compared to values in the Greenhouse Gas Rating table and must represent the worst-case subconfiguration within each test group and label group (if using a label group) defined below.

"Worst-Case" means the complete vehicle subconfiguration, as defined in title 40, CFR, section 86.1819-14(d)(12)(ii), as last amended October 25, 2016, within each test group, as defined in title 40, CFR, section 86.1803-01, as last amended October 25, 2016, which is incorporated by reference herein, that generates the highest combined CO₂ value as calculated above. Optionally, a manufacturer may choose to split the test group into label groups. Each label group must consist of vehicles with the same engine, transmission, and vehicle type (e.g. pick-up truck, van). Manufacturers may request, in advance, approval from the Executive Officer of CARB for additional reasons to subdivide a test group not listed here. Each label group would have its own worst-case subconfiguration that generates the highest combined CO₂ values (e.g. considering parameters such as equivalent test weight, road load horsepower and axle ratio of the vehicles within each label group).

(b) The Greenhouse Gas Ratings in the following table apply to new complete 2021 and subsequent model year chassis-certified medium-duty vehicles (pick-up trucks and vans), with 8,501 to 14,000 pounds GVWR, except medium-duty passenger vehicles. A CO₂ combined value greater than 650 grams CO₂ per mile must receive a Greenhouse Gas Rating of “D”, the lowest possible.
Greenhouse Gas Rating

<table>
<thead>
<tr>
<th>Greenhouse Gas Rating</th>
<th>Grams CO₂ per mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>0</td>
</tr>
<tr>
<td>A</td>
<td>1-300</td>
</tr>
<tr>
<td>A-</td>
<td>301-350</td>
</tr>
<tr>
<td>B+</td>
<td>351-400</td>
</tr>
<tr>
<td>B</td>
<td>401-450</td>
</tr>
<tr>
<td>B-</td>
<td>451-500</td>
</tr>
<tr>
<td>C+</td>
<td>501-550</td>
</tr>
<tr>
<td>C</td>
<td>551-600</td>
</tr>
<tr>
<td>C-</td>
<td>601-650</td>
</tr>
<tr>
<td>D</td>
<td>&gt;650</td>
</tr>
</tbody>
</table>

5. Smog Rating (tailpipe only).

(a) The Smog Rating is based on CARB’s Low-Emission Vehicle III program, which include specific thresholds for oxides of nitrogen (NOx) and non-methane organic gas (NMOG). The rating is determined based on the exhaust emission standard to which a vehicle is certified. For example, a vehicle certified to the LEV3 SULEV150 standard would have a Smog Rating of A, per the table in 5(b).

(b) The Smog Ratings in the following table apply to new complete 2021 and subsequent model year chassis-certified medium-duty vehicles (pick-up trucks and vans), with 8,501 to 14,000 pounds GVWR except medium-duty passenger vehicles which are already certified to the light-duty vehicle emission standards, as required pursuant to title 13, CCR, section 1961.2(a)(1). The tailpipe emissions would be zero for vehicles that run on electricity only; hence, such vehicles get an "A+" Smog Rating, the highest rating.

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### Smog Rating

<table>
<thead>
<tr>
<th>Vehicle Class*</th>
<th>California Emissions Standard</th>
<th>NMOG + NOx (g/mile)</th>
<th>Smog Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDV4, MDV5</td>
<td>ZEV</td>
<td>0.000</td>
<td>A+</td>
</tr>
<tr>
<td>MDV4</td>
<td>LEV3 SULEV150</td>
<td>0.150</td>
<td>A</td>
</tr>
<tr>
<td>MDV4</td>
<td>LEV3 SULEV170</td>
<td>0.170</td>
<td>A-</td>
</tr>
<tr>
<td>MDV4</td>
<td>LEV3 ULEV200</td>
<td>0.200</td>
<td>B+</td>
</tr>
<tr>
<td>MDV5</td>
<td>LEV3 SULEV200</td>
<td>0.200</td>
<td>B+</td>
</tr>
<tr>
<td>MDV5</td>
<td>LEV3 SULEV230</td>
<td>0.230</td>
<td>B</td>
</tr>
<tr>
<td>MDV4</td>
<td>LEV3 ULEV250</td>
<td>0.250</td>
<td>B-</td>
</tr>
<tr>
<td>MDV5</td>
<td>LEV3 ULEV270</td>
<td>0.270</td>
<td>C+</td>
</tr>
<tr>
<td>MDV4</td>
<td>LEV3 ULEV340**</td>
<td>0.340</td>
<td>C</td>
</tr>
<tr>
<td>MDV4</td>
<td>LEV3 LEV395**</td>
<td>0.395</td>
<td>C-</td>
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<tr>
<td>MDV5</td>
<td>LEV3 ULEV400</td>
<td>0.400</td>
<td>C-</td>
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<tr>
<td>MDV5</td>
<td>LEV3 ULEV570**</td>
<td>0.570</td>
<td>D</td>
</tr>
<tr>
<td>MDV5</td>
<td>LEV3 LEV630**</td>
<td>0.630</td>
<td>D</td>
</tr>
</tbody>
</table>

*MDV4 – Medium-Duty Vehicle (class 2b with 8,501 to 10,000 pounds GVWR)
MDV5 – Medium-Duty Vehicle (class 3 with 10,001 to 14,000 pounds GVWR)

**Applicable only through 2021 Model Years

6. **Zero Emission Vehicles.** Vehicles that use electricity or hydrogen as their only fuel sources are exempt from testing as their tailpipe emission would be zero and both their Greenhouse Gas Rating and Smog Rating would be an A+.

7. **Flexible-Fuel and Dual-Fuel Vehicles.** For flexible-fuel and dual-fuel vehicles as defined in title 40, CFR, sections 1037.801 and 1036.801, as last amended October 25, 2016, which are incorporated by reference herein, the Greenhouse Gas and Smog Ratings are based on exhaust mass emission tests when the vehicle is operating on gasoline.

8. **Greenhouse Gas Ratings Updates.** The Greenhouse Gas Rating is a scale intended to be used through the full-implementation of the California Phase 2 Greenhouse Gas Standards through model year 2027.

9. **Environmental Performance Label Format Requirements.** Detailed printing requirements and a sample label are given below and in the attachment and apply to the label requirements of paragraph 2 of these specifications. Unless otherwise
stated, a dimensional tolerance of plus or minus 0.039 inches (1.0 millimeter) applies to printer and label feedstock alignment.

California Environmental Performance Label\textsuperscript{2,3}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{california_ep_label}
\end{figure}

\textsuperscript{2} Section 43200.1(b)(2)(D), Health and Safety Code
\textsuperscript{3} Section 1965, title 13, CCR

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(1) Must be rectangular in shape 7 inches (177.8 millimeters) wide x 4.50 inches (114.3 millimeters) high. Must be printed in white paper, continuously outlined with black border with 0.06 inch (1.6 millimeters) thick. Each rectangular shape or area, including the overall label outline, has an upper left corner that is square (0 radius). All other corners have a 0.13 inch (3.2 millimeters) radius. Note: The rectangle containing vehicle fuel type in the top right portion of the label must have a 0 radius for all corners. Must have 0.37 inch (9.4 millimeters) high section of black at the top and a 0.94 inch (23.8 millimeters) high section of black at the bottom.

(2) “California Air Resources Board” is in the left portion of the upper black border with 3.582 inches (90.989.5 millimeters) wide. The words must be left-justified and centered vertically within the space. Font: Univers Bold; Size: 186 points; Color: knocked out of black (appears white)

(3) Vehicle fuel type is in the right portion of the upper black border with 3.35 inches (85.1 millimeters) wide. The vehicle’s fuel type is in black font, right justified and centered vertically on a green background (Pantone 354C). Must identify the fuel type, for example, “Gasoline Vehicle,” “Diesel Vehicle,” “Compressed Natural Gas Vehicle,” “Flexible-Fuel Vehicle Gasoline-Ethanol (E85),” “Electric Vehicle,” etc. Font: Univers Bold; Size: 11 points; Color: black

(4) The following statement must appear as shown in the sample label, in the lower section of black on the label: “Vehicle emissions are a primary contributor to climate change and smog. Ratings are determined by the California Air Resources Board based on this vehicle’s measured emissions.” Font: Univers Regular; Size: 10 points; Color: knocked out of black (appears white)

(5) CARB’s white logotype must appear in the lower right hand corner as shown in the sample label. The logo should always be situated in a clear, readable location. Color for all: knocked out of black (appears white)

(6) “Environmental Performance” is the title of the label. This title must be centered in the top section of the 6.87 inches (177.8174.6 millimeters) wide x 1.12 inches (28.4 millimeters) high white background and must be outlined with 0.06 inch (1.6 millimeters) thick top and bottom black borders. Font: Univers Bold; Size: 25 points; Color: black

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“These ratings are not directly comparable to the U.S. EPA/DOT light-duty vehicle label ratings. For information on how to compare, please see www.arb.ca.gov/ep_label.” must be centered immediately under “Environmental Performance”. Font: Univers Regular; Size: 11 points; Color: black

The phrase “Protect the environment. Choose vehicles with higher ratings:” must be centered in the top section of the 6.87 inches (177.8174.6 millimeters) wide x 1.76 inches (44.7 millimeters) high white background and must be outlined with 0.06 inch (1.6 millimeters) thick black border on the bottom. Font: Univers Regular; Size: 15 points; Color: black

The words “higher ratings:” must be bolded. Font: Univers Bold; Size: 15 points; Color: black

“Greenhouse Gas Rating” is a title that must always appear over its respective slider bar. Must be placed under the phrase “Protect the environment. Choose vehicles with higher ratings:” and on the left side of the 6.87 inches (177.8174.6 millimeters) wide x 1.76 inches (44.7 millimeters) high white background. Font: Univers Bold; Size: 15 points; Color: black

“(tailpipe only)” in the Greenhouse Gas Rating is a title that must always appear after “Greenhouse Gas Rating” and over its respective slider bar. Must be on the left side. Font: Univers Regular; Size: 10 points; Color: black

Must include a slide bar to indicate the CO₂ emission rating. Must add green color at the left end of slider bar and add white at the right end of slider bar, and shaded continuously across the scale. Must position a black box with a downward-pointing wedge above the slider bar to show the CO₂ emission rating, in white bold 14 points text, determined in paragraph 4. Greenhouse Gas Rating. Range and slider bars are available electronically. See Style Guidelines of Appendix VI to title 40, CFR, Part 600, as last amended July 6, 2011, which is incorporated by reference herein; Color: green (Pantone 354C)

“Smog Rating” is a title that must always appear over its respective slider bar.
bar. Must be placed under the phrase “Protect the environment. Choose vehicles with higher ratings:” and on the right side of the 6.87 inches (177.8 millimeters) wide x 1.76 inches (44.7 millimeters) high white background. Font: Univers Bold; Size: 15 points; Color: black

(14) “(tailpipe only)” in the Smog Rating is a title that must always appear after “Smog Rating” and over its respective slider bar. Must be on the right side. Font: Univers Regular; Size: 10 points; Color: black

(15) Must include a slide bar to indicate the Smog Rating. Must add green color at the left end of the slider bar and add white at the right end of slider bar, and shaded continuously across the scale. Must position a black box with a downward-pointing wedge above the slider bar to show the Smog Rating, in white bold 10 points text, determined in paragraph 5. Smog Rating. Range and slider bars are available electronically. See Style Guidelines of Appendix VI to title 40, CFR, Part 600, as last amended July 6, 2011, which is incorporated by reference herein; Color: green (Pantone 354C)

(16) The letter A+ must appear at the left end of the slider bars in white bold text in the black border. The letter A+ represents the highest rating a vehicle can get on each scale. Size: 14 points for Greenhouse Gas Rating and 10 points for Smog Rating. The title “Cleaner” must appear underneath the letter A+ and must be in black text. Range and slider bars are available electronically. See Style Guidelines of Appendix VI to title 40, CFR, Part 600 as last amended July 6, 2011, which is incorporated by reference herein; Color: green (Pantone 354C)

(17) The letter D must appear at the right end of the slider bars in white bold text in the black border. The letter D represents the lowest rating a vehicle can get on each scale. Size: 14 points for Greenhouse Gas Rating and 10 points for Smog Rating. Range and slider bars are available electronically. See Style Guidelines of Appendix VI to title 40, CFR, Part 600 as last amended July 6, 2011, which is incorporated by reference herein; Color: green (Pantone 354C)

(18) The label for vehicles capable of operating on more than one fuel must display the following statement: “Using alternative fuels may change scores.” This statement may only be displayed on labels for flexible-fuel and dual-fuel vehicles. This statement also must be centered and must
appear underneath the slider bars. Font: Univers Regular; Size: 10 points; Color: black

(19) The label for zero-emission electric vehicles must include the statement, "Does not include emissions from producing electricity." This statement must be centered and must appear underneath the slider bars. Font: Univers Regular; Size: 10 points; Color: black

10. **Severability.** Each provision of these specifications is severable, and in the event that any provision or part(s) thereof are held to be invalid, the remainder of these specifications remain in full force and effect.

**ATTACHMENT**

**Sample Label**

**California Environmental Performance Label**

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Environmental Performance

These ratings are not directly comparable to the U.S. EPA/DOT light-duty vehicle label ratings. For information on how to compare, please see www.arb.ca.gov/ep_label.

Protect the environment. Choose vehicles with higher ratings:

**Greenhouse Gas Rating** (tailpipe only)

- A+ (Cleaner)
- B
- C
- D

**Smog Rating** (tailpipe only)

- A+ (Cleaner)
- B
- C
- D

Using alternative fuels may change scores.

Vehicle emissions are a primary contributor to climate change and smog. Ratings are determined by the California Air Resources Board based on this vehicle’s measured emissions.