

## Attachment F-1

Descriptions of the proposed changes to the test procedures and the reasons for making them.

This discussion does not address non-substantive modifications to correct typographical or grammatical errors, changes in numbering or formatting, addition of or edits to internal regulatory cross-references, or similar revisions that improve clarity.

### **Proposed Modifications to the “California 2026 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles”**

#### 1. Referenced Sections

There are a number of occurrences where subsections of title 13, California Code of Regulations (CCR), section 1961.4 are referenced in these test procedures. Since section 1961.4 has been restructured, as discussed above, it is necessary to modify these test procedures to correctly identify the intended referenced subsections. Modifications to the referenced subsections in section 1961.4 are as follows.

- i. The reference in the “Note” near the beginning of the document that shows other documents to be used in conjunction with this document is being changed from “section 1961.4 (f)” to “section 1961.4 (c).”
- ii. The references in Part I, section D.2.3 are being changed from “section 1961.4 (c)(9)” to “section 1961.4 (d)(3) or (e)(3), as applicable.”
- iii. The references in Part I, section G.3.3 are being changed from “section 1961.4 (c)(8)” to “section 1961.4 (d)(5) and (e)(5), as applicable.”
- iv. The reference in Part I, section H.1.3 is being changed from “section 1961.4 (c)(9)” to “section 1961.4 (d)(3) or (e)(3), as applicable.”
- v. The reference in Part I, section H.1.4.1 is being changed from “section 1961.4 (c)(15)” to “section 1961.4 (c)(5).”
- vi. The reference in Part I, section H.1.4.3 is being changed from “section 1961.4 (c)(15)(B)” to “section 1961.4 (c)(5)(B).”
- vii. The reference in Part I, section H.1.4.1 is being changed from “section 1961.4 (c)(15)” to “section 1961.4 (c)(5).”
- viii. The reference in Part I, section H.1.4.3 is being changed from “section 1961.4 (d)(1) through (d)(6)” to “section 1961.4 (d) and (e).”

## Attachment F-1

- ix. The reference in Part I, section I.1.1.1, footnote 2 is being changed from “section 1961.4 (c)(9)(B) or (c)(9)(E)” to “section 1961.4 (d)(3)(A)1. or (e)(3)(A)1.”
- x. The reference in Part I, section I.1.1.2, footnotes 1, 2, and 3 are being changed from “section 1961.4 (c)(9)(B) or (c)(9)(E)” to “section 1961.4 (d)(3)(A)1. or (e)(3)(A)1.”
- xi. The reference in Part I, section I.1.1.3 is being changed from “section 1961.4 (c)(1)” to “section 1961.4 (d)(2)(A)1. or (e)(2)(A).”

### 2. Introductory Paragraph after Document Title

The introductory paragraph after the document title explicitly states that the Code of Federal Regulations (CFR) sections mentioned in these test procedures and the applicability of these sections to these test procedures are incorporated by reference. It is necessary for accuracy and clarity to modify this paragraph to include additional CFR sections that were omitted in the 45-day notice version of this paragraph but included in the body of the document, as well as in accordance with some of the 15-day changes.

### 3. Part I, Section A.1.1

Part I, section A.1.1 establishes the applicability of these test procedures, by incorporating section 86.1801-12 of Title 40, CFR, with amendments that are specific to compliance with title 13, CCR, section 1961.4. These California-specific amendments are contained in the subsections of Part I, section A.1.1 of these test procedures. In the originally proposed 45-day notice version of these test procedures, amendments to 40 CFR section 86.1801-12 were shown as amendments to each subparagraph (a) through (k). The proposed 15-day amendments to the subsections of Part I, section A.1.1 are necessary to clarify the California-specific applicability of the subparagraphs of 40 CFR section 86.1801-12 and remove non-applicable CFR provisions.

### 4. Part I, Section A.3

Three modifications to Part I, section A.3 are being proposed as 15-day changes. These proposed modifications are necessary to improve clarity and readability of these test procedures by providing additional explanations of how various provisions of incorporated sections of the CFR apply to California vehicle certification. The first modification to this section is the addition of language to subsection A.3.3, which provides an example of how the original language in section A.3.3 should be applied. The second two modifications to section A.3 are the addition of two new subsections numbered A.3.5 and A.3.6. Subsection A.3.5 explains the meaning of the notations “Delete” and “Delete; Replace with the following,” as used throughout these test procedures. Subsection A.3.6 explains the meaning of the notation “Amend as follows,” as used throughout these test procedures.

## Attachment F-1

### 5. Part I, Section B.2

A definition for the term “attestation” is being added to Part I section B.2. Since this term is used throughout title 13, CCR, section 1961.4, this new definition is necessary to establish the accurate meaning of the term as it applies to this regulation. The substance of the definition ensures that attestations under this regulation comply with Code of Civil Procedure section 2015.5. The definition is identical to the definition added in section 1962.4 and relies on the same necessity/rationale.

### 6. Part I, Section C.1.1.2

Part I, section C.1.1 incorporates 40 CFR section 86.1805-17 into these test procedures. Subsection C.1.1.2 addresses the applicability of subparagraph (b) of 40 CFR section 86.1805-17 to these test procedures. In the 45-day notice version of these test procedures, subsection C.1.1.2 amended subparagraph (b) to replace the CFR language with California-specific language that applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles certified to the greenhouse gas standards in title 13, CCR, section 1961.3. However, these test procedures are not applicable to vehicles certifying to title 13, CCR, section 1961.3. Therefore, subsection C.1.1.2 is being modified to say that subparagraph (b) is not applicable, which is necessary for accuracy and clarity.

### 7. Part I, Section C.3.1

Part I, section C.3.1 incorporates 40 CFR section 86.1807-01 into these test procedures. The subsections to section C.3.1 specify the applicability of each subparagraph of 40 CFR section 86.1807-01 to these test procedures. In the 45-day notice version of these test procedures, the subsections to section C.3.1 failed to include all of the subparagraphs of 40 CFR section 86.1807-01. The proposed 15-day modifications to section C.3.1 adds these previously omitted subsections, which is necessary for accuracy and clarity.

### 8. Part I, Section C.3.2.2 (b)

Part I, section C.3.2.2 lists the information that a manufacturer must include on vehicle tune-up labels. Subsection C.3.2.2 (b) states that the tune-up label must identify the exhaust emission control system with which a vehicle is equipped. The 45-day notice version of subsection C.3.2.2 (b) provides a list of emission control system components that must be identified, and states that the tune-up label must include, but is “not limited to” the items on this list. As necessary to clarify the scope of the requirements of this subsection, it is being modified to remove the phrase “not limited to” in the introduction to the list, and the sentence “Any other information necessary to identify the Exhaust Emission Control System” is being added as an item on the list.

## Attachment F-1

### 9. Part I, Section D.1

Part I, section D.1 incorporates 40 CFR section 86.1810-17 into these test procedures. Staff proposes to reword the subsection, which is necessary to improve clarity and readability.

### 10. Part I, Section D.1.3

Part I, section D.1.3 specifies the applicability of subparagraph (f) of 40 CFR section 86.1810-17 to these test procedures. The 45-day notice version of these test procedures, section D.1.3 specifies that 50°F standards and SFTP standards shall only apply at low altitude conditions. This specific exclusion is being removed, because it is unnecessary. The applicability of emission standards at high and low altitude conditions is shown in title 13, CCR, section 1961.4, so it is not needed here. The removal is necessary for accuracy and clarity.

### 11. Part I, Section G.2.2.2

Each model year, a manufacturer must demonstrate compliance with the 50° F standards by testing at least three emission data or engineering development vehicles from passenger car or light-duty truck test groups and at least three emission data or engineering development vehicles from medium-duty vehicle test groups. Part I, section G.2.2.2 of the 45-day notice version of these test procedures specifies that the same test group shall not be selected in the succeeding two years unless the manufacturer produces “fewer than three test groups.” This provision is being changed to “fewer than nine test groups.” This change is necessary for accuracy and clarity because over a three-year period, a manufacturer can test nine different test groups.

### 12. Part I, Section G.2.3.1

A reference to “Part I, section G.3.5” is being changed to “Part I, section G.3.4”. This change is necessary to correctly reference the applicable section of these test procedures.

### 13. Part I, Section G.3.1.2

Part I, section G.3.1.2 is being modified to incorporate subparagraph (c) of 40 CFR section 86.1829-15 with no changes. This modification is necessary, because the changes to this subparagraph that were part of the 45-day notice version of Part I, section G.3.1.2 are not needed. In general, CARB provisions deviate from incorporated CFR text only as necessary, which supports clarity and manufacturer familiarity and likely compliance.

### 14. Part I, Section G.3.1.3

A reference to “Part I, section G.3.5” is being changed to “Part I, section G.3.4”. This change is necessary to correctly reference the applicable section of these test procedures.

15. Part I, Section G.3.1.7

Part I, section G.3.1 incorporates 40 CFR section 86.1829-15 into these test procedures. The 45-day notice version of these test procedures did not address the applicability of subparagraph (g) of 40 CFR section 86.1829-15. It is necessary to add new section G.3.1.7 to these test procedures to address the applicability of subparagraph (g) of 40 CFR section 86.1829-15.

16. Part I, Section G.3.4

Part I, section G.3.4 specifies that manufacturers of medium-duty vehicles other than medium-duty passenger vehicles may submit to the Executive Officer an attestation that the system complies with SC03 emission standards instead of providing test data in order to demonstrate compliance. This section is being removed from these test procedures, because this provision is included with the SC03 emission standards in title 13, CCR, section 1961.4. Staff proposes to remove this unnecessary and duplicative provision, which is necessary for accuracy and clarity.

17. Part I, Section G.8.2

The 45-day notice version of Part I, section G.8.2 established allowable maintenance requirements that are specific to hybrid electric vehicles. These requirements, which will be applicable to 2026 and subsequent model year vehicles, were carried over from the currently applicable test procedures. Part I, section G.8.2 is being deleted as part of the proposed 15-day changes because it is no longer necessary. Hybrid electric vehicle batteries are a mature technology now and more is known about their durability, and to the extent to which battery issues occur that adversely impact criteria pollutants, on-board diagnostic requirements ensure such issues are detected in a timely manner and the consumer and repair technicians are alerted to their presence. Since the on-board diagnostic system fulfills the original intent of the "maintenance indicator" that was required by the 45-day notice version of Part I, section G.8.2, it is necessary to delete this redundant requirement to reduce burden on the vehicle manufacturers while still achieving the intended purpose of alerting the consumer to the need for maintenance.

18. Part I, Section H.3.2

In order to verify the status of a manufacturer's compliance with the fleet average and phase-in requirements for a given model year, and in order to confirm the accrual of credits or debits, each manufacturer is required to submit an annual report to the Executive Officer which sets forth the production data used to establish compliance, by no later than a specified date of the calendar year following the close of the model year. The deadline for submitting the annual report is established in Part I, section H.3.2 of these test procedures. The 45-day notice version of Part I, section H.3.2 contains reporting deadlines for both vehicles certifying to the criteria pollutant emission standards in title 13, CCR,

## Attachment F-1

section 1961.4 and to the greenhouse gas emission standards in title 13, CCR, section 1961.3. However, these test procedures are not applicable to vehicles certifying to title 13, CCR, section 1961.3. Therefore, section H.3.2 is being modified to remove the reporting requirements for vehicles certifying to title 13, CCR, section 1961.3. This, like the other reporting under the proposed regulations, is necessary for the health, safety, and welfare of the people of the state because it helps ensure and allows verification of compliance with the emission standards.

### 19. Part I, Section H.4.1

Part I, section H.4.1 incorporates 40 CFR section 86.1844-01, with amendments that are specific to compliance with title 13, CCR, section 1961.4, into these test procedures. The subsections to section H.4.1 specify the applicability of each subparagraph of 40 CFR section 86.1844-01 to these test procedures. In the 45-day notice version of these test procedures, the subsections to section H.4.1 failed to include all of the subparagraphs of 40 CFR section 86.1844-01. The proposed 15-day modifications to section H.4.1 adds these previously omitted subsections and their California-specific applicability to these test procedures. The proposed 15-day amendments also remove unnecessary wording and restructure Part I, section H.4.1 for improved readability.

### 20. Part I, Section H.4.5

Part I, section H.4.5 contains reporting requirements for the purpose of demonstrating compliance with greenhouse gas requirements in title 13, CCR, section 1961.3. The proposed 15-day changes remove this section, because these test procedures are not applicable to vehicles certifying to title 13, CCR, section 1961.3.

### 21. Part I, Section I.1.1.4

Part I, section I.1.1.4 incorporates subparagraph (c)(5)(i) of 40 CFR section 86.1845-04, with amendments that are specific to compliance with title 13, CCR, section 1961.4, into these test procedures. In the 45-day notice version of these test procedures, section I.1.1.4 specifies that high altitude testing is not required for demonstrating compliance with 50°F standards, Partial Soak non-methane organic gas plus oxides of nitrogen (NMOG+NOx) standards, Quick Drive-Away NMOG+NOx standards, or High Power Cold Start US06 standards. These specific exclusions are being removed, because they are unnecessary. The applicability of emission standards at high and low altitude conditions is shown in title 13, CCR, section 1961.4, so it is not needed here.

### 22. Part I, Section I.4.1.6

Part I, section I.4.1 establishes test procedures for three binned moving average window and moving average window requirements. In the 45-day notice version of these test procedures, Part I, section I.4.1.6 specified that in order to be a valid test, "At least 50% of non-idle operation during the manufacturer's test shall

## Attachment F-1

include towing with a combined vehicle weight with a minimum of 70% GCWR within  $\pm 5\%$ ." Two 15-day changes are being proposed for this subsection. For the first modification, the requirement that the manufacturer's test shall include "towing with a combined vehicle weight" with the specified minimum GCWR to say that the manufacturer's test shall include "operation" with the specified minimum GCWR. This change is necessary to allow vehicles such as vans to meet the minimum GCWR without needing a trailer.

For the second modification, the allowable variability of "within  $\pm 5\%$ " is being removed for the minimum gross combination weight rating (GCWR) requirement to limit the minimum GCWR test weight to be 70% GCWR. This is necessary to ensure that all manufacturers are testing at the same minimum GCWR, which ensures adequate control of emissions at the vehicles' higher GCWR limits.

### 23. Part I, Section I.4.1.6.1

Part I, section I.4.1.6.1 is being modified, which is necessary for clarity and to remove potential ambiguity from the 45-day notice version of the proposed test procedure language. Specifically, the modified text is adding that a manufacturer must include an explanation for why it is using the trailer it selected, that does not meet the SAE J2807 specifications, as part of the test plan approval process in Part I, section I.4.3, and the criteria by which the Executive Officer will review and approve the trailer for testing. The modified text promotes greater clarity and lessens potential ambiguity of the originally proposed text by specifying the information that must be submitted, and when, by a manufacturer for approval of an alternate trailer and establishes the criteria by which CARB shall review and approve this information.

### 24. Part I, Section I.4.1.9

Part I, section I.4.1.9 is being modified for clarity. The modified language does not change the requirements of this section from the requirements in 45-day notice version of these test procedures but is necessary for clarity. The numbering of subsections I.4.1.9.1 through I.4.1.9.4, which were incorrectly numbered as subsections I.4.1.2.1 through I.4.1.2.4 in the 45-day notice version of these test procedures, is also being corrected, which is also necessary for clarity.

### 25. Part I, Section I.4.3.1

Part I, section I.4.3.1 is being modified to remove language that is unclear, which is necessary for clarity.

## Attachment F-1

### 26. Part I, Section I.4.3.2

Part I, section I.4.3.2 is being modified to add a missing word, which is necessary for clarity.

### 27. Part I, Section I.4.5.1

Part I, section I.4.5.1 sets forth CARB's authority to conduct in-use compliance testing to identify vehicles that fail to conform to the applicable emission standards in the moving average window (MAW) in-use test procedures, and to take corrective action against the manufacturers of such vehicles based on the results of this testing. Three sentences are being added to Part I, section I.4.5.1 as part of these 15-day changes. The first sentence is a statement that affirms that CARB may conduct testing under any operating conditions where the emission standards apply as reasonably necessary to confirm compliance with any regulatory provision. The second sentence affirms that such testing conducted by CARB imposes no additional responsibilities on the manufacturer and is undertaken solely by CARB for assessing compliance. The third sentence clarifies that during CARB in-use testing of the MAW test procedures, CARB is not held under the same restrictions that manufacturers must comply with under sections I.4.1.4, I.4.1.6, and I.4.1.9.1. This change, related to the first sentence, is necessary to ensure the effectiveness of CARB's in-use program to evaluate emissions and to clarify that CARB's testing is not subject to the parameters that apply to manufacturers' required testing.

### 28. Part I, Section I.4.6

The subsections of Part I, section I.4.6 are being deleted and replaced with references to 40 CFR section 86.1905, with California-specific changes noted. This modification to Part I, section I.4.6 is necessary to allow harmonization with federal regulations wherever possible, which supports clarity and manufacturer familiarity and likely compliance.

### 29. Part I, Section I.4.7

The subsections of Part I, section I.4.7 are being deleted and replaced with references to 40 CFR section 86.1908, with California-specific changes noted. This modification to Part I, section I.4.7 is necessary to allow harmonization with federal regulations wherever possible, which supports clarity and manufacturer familiarity and likely compliance.

### 30. Part I, Section I.4.8

The subsections of Part I, section I.4.8 are being deleted and replaced with references to 40 CFR section 86.1910, with California-specific changes noted. This modification to Part I, section I.4.8 is necessary to allow harmonization with federal regulations wherever possible, which supports clarity and manufacturer familiarity and likely compliance.



## Attachment F-1

### 31. Part I, Section I.4.9

The subsections of Part I, section I.4.9 are being deleted and replaced with references to 40 CFR section 86.1920, with California-specific changes noted. This modification to Part I, section I.4.9 is necessary to allow harmonization with federal regulations wherever possible, which supports clarity and manufacturer familiarity and likely compliance.

### 32. Part I, Section I.4.10

The subsections of Part I, section I.4.10 are being deleted and replaced with references to 40 CFR section 86.1925, with California-specific changes noted. This modification to Part I, section I.4.10 is necessary to allow harmonization with federal regulations wherever possible, which supports clarity and manufacturer familiarity and likely compliance. The section number I.4.10.3 for "Appendices I, II, and III to 40 CFR, Part 86, Subpart S [No change.]" is being deleted, because it was misnumbered. "Appendices I, II, and III to 40 CFR, Part 86, Subpart S [No change.]" is a standalone section of Part I, section I, rather than part of Part I, section I.4.10.

### 33. Part I, Section J.13

Part I, section J.13 incorporates 40 CFR section 86.1862-04, with amendments that are specific to compliance with title 13, CCR, section 1961.4, into these test procedures. In the 45-day notice version of these test procedures, 40 CFR section 86.1862-04 was identified as "not applicable" to California vehicle certification, because section H.3.2 seems to be sufficient in order for CARB to verify the status of a manufacturer's compliance with the fleet average and phase-in requirements in title 13, CCR, section 1961.4. That said, 40 CFR section 86.1862-04 more clearly states the information that must be submitted by a manufacturer in order to meet the requirements in section H.3.2. Consequently, 40 CFR section 86.1862-04 will no longer be designed as "not applicable". Instead, it will be incorporated into these test procedures, with amendments that are specific to compliance with title 13, CCR, section 1961.4. This change is necessary to improve clarity and prevent possible ambiguity regarding the information that must be submitted by a manufacturer in order to demonstrate compliance with title 13, CCR, section 1961.4.

### 34. Part II, Section B.7, Subsection 1066.635

The 45-day notice version of Part II, section B.7, subsection 1066.635 contained language that appeared to be contradictory. It is necessary to modify this language to clarify the meaning of this section.

### 35. Part II, Section B.9.1.4.3

Staff is proposing modifications that are necessary to correct the numbering of a referenced section of these test procedures and to clarify the meaning of this

## Attachment F-1

section. Language is also being added that is necessary to clarify that this subpart pertains to compliance with the Partial Soak emission standards.

### 36. Part II, Section I

The 45-day notice version of Part II, section I.2 says, "Confirmatory testing and/or in-use compliance testing may be performed in any driver-selectable mode to ensure compliance with emission standards". It is necessary to move this statement from Part II, section I.2 to Part II, section I, because the statement does not just apply to vehicles that are tested use the test procedure in Part II, section I.2, but it also applies to vehicles that are tested use the test procedures in Part II, sections I.3, I.4, I.6, I.7, and I.8. It is also necessary to replace the combination of words "and/or" with the word "and" for clarity and because the word "or" is unnecessary to the intended meaning of the statement.

### 37. Part II, Section I.2

The sentence, "Confirmatory testing and/or in-use compliance testing may be performed in any driver-selectable mode to ensure compliance with emission standards" is being deleted from Part II, section I.2, because it is no longer needed here. The corrected version of this statement at the beginning of Part I, section I covers vehicles that are tested using the test procedures in this section. These proposed changes are necessary for accuracy and clarity.

### 38. Part II, Section I.3.1.1

The last sentence of Part II, section I.3.1.1, which says "Additional preconditioning UDDS cycles may be approved in advance by the Executive Officer if the need for additional preconditioning is demonstrated by the manufacturer." is being deleted, because it is not needed. The approval of additional preconditioning UDDS cycles is covered by the "alternative procedures" provision in the introductory paragraph at the start of Part II, section I.3. This proposed change is necessary for accuracy and clarity.

### 39. Part II, Section I.4.1.6

Part II, section I.4.1.6 incorporates subparagraph (b)(3)(ii) of 40 CFR section 1066.831 into these test procedures. For accuracy and clarity, it is necessary to modify Part II, section I.4.1.6 to remove unnecessary language.

### 40. Part II, Section I.6.2(i)

The 45-day notice version of Part II, section I.6.2(i) inadvertently omitted the units in the definitions for three of the terms used in the equation,  $Y_1$ ,  $Y_2$ , and  $Y_3$ . It is necessary to add the applicable units to the definitions in order to provide a clear understanding of the equation.

### 41. Part II, Sections I.7.5 and I.7.5.2

The 45-day notice version of Part II, Section I.7.5.2 includes a statement that says, "To submit an approval request, follow the procedure in Part II, section I.2.3.18."

## Attachment F-1

It is necessary to move this statement to the introductory paragraph of Part II, section I.7.5, because it applies to both Part II, section I.7.5.1 and Part II, section I.7.5.2. This proposed change is necessary for accuracy and clarity.

42. Part II, Section I.7.6

The first sentence of Part II, section I.7.6 is being modified to identify that the provisions set forth herein apply to compliance with the Partial Soak emission standards, which is necessary for clarity.

43. Part II, Section I.8.2.4.1.1

Part II, section I.8.2.4.1.1 is being modified to delete the word "subsection", because Part II, section H, which is being referenced, is not a subsection. This proposed change is necessary for accuracy and clarity.

44. Part II, Sections I.8.4 and I.8.4.2

The 45-day notice version of Part II, Section I.8.4.2 includes a statement that says, "To submit an approval request, follow the procedure in Part II, section I.2.3.18." For accuracy and clarity, it is necessary to move this statement to the introductory paragraph of Part II, section I.8.4, because it applies to both Part II, section I.8.4.1 and Part II, section I.8.4.2.