

State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text and Additional Documents

PROPOSED ALTERNATIVE CERTIFICATION REQUIREMENTS AND TEST PROCEDURES FOR HEAVY-DUTY ELECTRIC AND FUEL-CELL VEHICLES AND PROPOSED STANDARDS AND TEST PROCEDURES FOR ZERO-EMISSION POWERTRAINS (ZERO-EMISSION POWERTRAIN CERTIFICATION REGULATION)

Public Hearing Date: February 21, 2019
Public Availability Date: May 13, 2019
Deadline for Public Comment: May 28, 2019

At its February 21, 2019, public hearing, the California Air Resources Board (CARB or Board) considered staff's proposed amendments to California Code of Regulations, title 13, section 1956.8 (13 CCR 1956.8) and California Code of Regulations, title 17, section 95663 (17 CCR 95663); the proposed adoption of the following document incorporated by reference therein: "California Standards and Test Procedures for New 2021 and Subsequent Model Heavy-Duty Zero-Emission Powertrains," released for comment on December 31, 2018; and proposed amendments to the "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles," last amended December 19, 2018, incorporated by reference in 17 CCR 95663, which would establish a new, optional certification pathway for heavy-duty electric and fuel-cell vehicles and the powertrains they use.

At the hearing, staff presented suggested modifications to the regulatory language developed in response to comments received during the 45-day comment period following the release of the Staff Report: Initial Statement of Reasons (Staff Report) to the public on December 31, 2018.

The Board directed the Executive Officer to make the modified regulatory language, and any additional conforming modifications, available for public comment, with any additional supporting documents and information, for a period of at least 15 days as required by Government Code section 11346.8. The Board further directed the Executive Officer to consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Executive Officer was directed to evaluate all comments received during the public comment periods, including comments raising significant environmental issues, and prepare written responses to such comments as required by CARB's certified regulations at California Code of Regulations, title 17, sections 60000-60007 and Government Code section 11346.9(a). The Executive Officer was further directed to present to the Board, at a subsequently scheduled public hearing, staff's written responses to environmental comments and the final

environmental analysis for consideration for approval, along with the finalized amendments to 13 CCR 1956.8 and 17 CCR 95663; the following document incorporated by reference therein: "California Standards and Test Procedures for New 2021 and Subsequent Model Heavy-Duty Zero-Emission Powertrains," released for comment on December 31, 2018; and the "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles," last amended December 19, 2018, incorporated by reference in 17 CCR 95663, for consideration for adoption.

The resolution and all other regulatory documents for this rulemaking are available online at the following CARB website:

<http://ww2.arb.ca.gov/rulemaking/2019/zepcert2019>

Attachment A to this notice shows the proposed 15-day modifications to the "Proposed Regulation Order"; Attachment B to this notice shows the proposed 15-day modifications to the "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles," last amended December 19, 2018; and Attachment C to this notice shows the proposed 15-day modifications to the "California Standards and Test Procedures for New 2021 and Subsequent Model Heavy-Duty Zero-Emission Powertrains," released for comment on December 31, 2018. In Attachments A and B, the language, as amended on December 19, 2018, as part of the "California Greenhouse Gas Emissions Standards for Medium- and Heavy-Duty Engines and Vehicles and Proposed Amendments to the Tractor-Trailer GHG Regulation" (HD Phase 2), is shown in plain text. The originally proposed regulatory amendments are shown in ~~single-strikeout~~ to indicate deletions and single underline to indicate additions. New deletions and additions to the proposed language that are made public with this notice are shown in ~~double-strikeout~~ and double underline format, respectively. In Attachment C, the originally proposed regulatory language is shown in plain text. New deletions and additions to the proposed language that are made public with this notice are shown in ~~single-strikeout~~ and single underline format, respectively.

In addition, Attachment D to this notice is being provided as an addendum to the Staff Report. It corrects the description of a calculation method used in the economic impacts analysis and provides additional rationale for specific regulatory provisions of the proposal.

In the Final Statement of Reasons, staff will respond to all comments received on the record during the comment periods. The Administrative Procedure Act requires that staff respond to comments received regarding all noticed changes. Therefore, staff will only address comments received during this 15-day comment period that are responsive to this notice, documents added to the record, or the changes detailed in Attachments A, B, C, and D.

Summary of Proposed Modifications

The following summary does not include all modifications to correct typographical or grammatical errors, changes in numbering or formatting, nor does it include all of the non-substantive revisions made to improve clarity.

- A. Proposed modifications to the “Proposed Regulation Order” are contained in Attachment A to this notice.
1. Subsection (d) of 17 CCR 95663: Staff is proposing to amend this subsection to update the “last amended” date of the “California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles,” incorporated by reference therein. This change reflects recent HD Phase 2 amendments, adopted on December 19, 2018, and approved by the Office of Administrative Law on February 7, 2019.
 2. “Note” section: At the February 21, 2019, public hearing, staff proposed to delete erroneous authority and reference citations to California Health and Safety Code section 43107 set forth in the “Note” section of 13 CCR 1956.8. However, because these citations were deleted as part of HD Phase 2, no additional changes to the “Note” section are necessary.
- B. Proposed modifications to the “California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles” (incorporated by reference in 17 CCR 95663) are contained in Attachment B to this notice.
1. Section B.3.1.1 of 1037.115: Staff is proposing to remove the erroneous reference to subsection 1 of 1037.615. The referenced subsection is not applicable, as 1037.615 does not include any provisions for zero-emission powertrains.
 2. Section B.3.1.2 of 1037.115: Staff is proposing to clarify the criterion that would be used by the Executive Officer to approve any alternative protocols to meet the optical tell-tales requirement. This clarification would provide additional guidance to manufacturers seeking to utilize this provision.
 3. Sections B.3.1.6, B.3.3.2, and B.3.3.3 of 1037.115: Staff is proposing to clarify that, if a manufacturer has a dealer, the tools, diagnostic software, and diagnostic and repair manual that the manufacturer must make available to third-party repair facilities would need to be the same as those provided to its dealer(s), rather than those provided to their internal repair personnel. Staff has determined, based on discussions with industry stakeholders, that the most appropriate tools, diagnostic software, and diagnostic and repair manual for third-party repair facilities would be the ones provided to a manufacturer’s dealers. However, if a manufacturer does not have a dealer, the manufacturer would still be required to make

available the tools and diagnostic and repair manual provided to its internal repair personnel, as originally proposed.

4. Section B.3.1.6.4 of 1037.115: Staff is proposing to modify the criteria for determining a “fair and reasonable price” for repair tools. Specifically, staff is proposing to remove the criterion that prices shall account for the ability of third-party repair facilities to afford such tools. Manufacturers have contended that at the low volumes expected in the near term, the research, development, and distribution costs for repair tools could be significant on a per-vehicle basis. As such, they are concerned that tool pricing based on affordability could result in substantial financial losses for manufacturers, especially at a time when the vehicles themselves may not yet be profitable. Staff agrees. While this modification could result in higher repair tool pricing when market volumes are low, staff expects that tool pricing will decrease as more electric and fuel-cell vehicles are deployed. Furthermore, staff does not believe the proposed modification would reduce the effectiveness of the proposal in achieving the primary objective of the criteria, which is to prevent manufacturers from deliberately inflating tool pricing to prevent access by third-party repair facilities. This is because staff believes the remaining pricing criteria proposed would be sufficient in achieving that objective.
5. Section B.3.1.7 of 1037.115: Staff is proposing to modify the provisions applicable to the required sales disclosure statement to clarify that the approval of any alternative statement by the Executive Officer shall be based on whether the alternative statement is as effective as the original statement in communicating the applicable information. This clarification would provide additional guidance to manufacturers seeking to utilize this provision. Also, staff is proposing to modify the sales disclosure statement to provide two additional disclosures: one addressing the possibility that the weight of a zero-emission powertrain could reduce the allowable payload of a vehicle and another that describes the potential impact of environmental conditions on vehicle performance and durability. Staff has determined, based on more-recent discussions with stakeholders, that the additional disclosures would provide more specificity to the sales disclosure statement that would be useful to fleets purchasing battery-electric or fuel-cell vehicles for the first time. Furthermore, the impact on manufacturers would be minimal because the amendments would only require them to include a few more lines of text to a disclosure document they would already be required to provide pursuant to the original proposal.
6. Sections B.3.2 and B.3.3 of 1037.115: Staff is proposing to add language to clarify that owner’s manual and diagnostic and repair manual information would not be required to be presented as one document so long as the information is made available. In addition, staff is also proposing to clarify that the vehicle owner’s manual and diagnostic and repair manual would not be required to provide duplicative information that is already provided in the owner’s manual and diagnostic and repair

manual for the powertrain. This would provide additional flexibility for manufacturers and is more closely aligned with how information is disseminated in the industry today. Ultimately, the proposed modification would not impact the access of purchasers and third-party repair facilities to the applicable information. Staff is also proposing to clarify that if a manufacturer chooses to provide the owner's manual in a format that is different from a physical document or digital downloadable file, the Executive Officer's approval would be contingent upon the alternative format being at least as accessible as one of those formats specified. This clarification would provide additional guidance to manufacturers seeking to utilize this provision. In addition, staff is proposing to remove the provision that requires manufacturers to provide only the owner's manual to the Executive Officer, if requested. The Executive Officer will need to evaluate whether the owner's manual meets applicable requirements and thus will always need a copy as part of the certification process.

7. Section B.3.2.5 of 1037.115: Staff is proposing to replace the term "anticipated" with "generally expected" in the proposed requirement for manufacturers to describe repair response times in their owner's manuals. Manufacturers contend that the regulatory language, as originally proposed, could be interpreted to mean a manufacturer would be required to update the information in the owner's manual on anticipated response times for each individual repair, which was not staff's intent. Therefore, this change would simply clarify the intent of the proposal, which is to require that manufacturers provide a general estimate of repair response times (only once) in the owner's manual that is provided to the purchaser at the time of vehicle delivery. Furthermore, the Board directed staff to make this change for powertrain owner's manuals per Resolution 19-7 and staff believes it is appropriate to clarify this intent for vehicle owner's manuals as well.
8. Section B.3.3.5 of 1037.115: Staff is proposing to clarify that if a manufacturer chooses to present the diagnostic and repair manual in an alternative format different from a digital downloadable file, the Executive Officer's approval would be contingent upon the format being at least as accessible as a digital downloadable file. This clarification would provide additional guidance to manufacturers seeking to utilize this provision.
9. Section B.1 of 1037.615: Staff is proposing to remove a sentence stating that the vehicle manufacturer would be responsible for components related to the integration of the powertrain into the vehicle. This is duplicative of the previous sentence, and the change would not affect the proposed requirements.
10. Section B of 1037.801: Staff is proposing to change the term, "usable capacity," to the correct term, "usable energy capacity." This would only be a correction, as the term, "usable capacity," is not defined in the proposed regulation.

C. Proposed modifications to "California Standards and Test Procedures for New 2021 and Subsequent Model Heavy-Duty Zero-Emission Powertrains," are contained in Attachment C to this notice.

1. Staff is proposing to combine the two "NOTE" sections preceding Part I to reduce redundancy.
2. Part I, Section A: Staff is proposing to remove the last sentence from the general applicability section because it lacked clarity and the voluntary nature of these test procedures is clear from the previous sentence.
3. Part I, Section B and Part II, Subsection A.3: Staff is proposing to move the definition for "Authorized Service Establishment" from Part II to Part I and to remove the redundant definitions for, "Executive Officer," and "Powertrain Manufacturer," in Part II. Staff is also proposing to correct the definition of "inverter" by adding the term, "current." This term was erroneously left out of the definition making the terms, "direct" and "alternating," unclear. These modifications would not impact the requirements of the proposal and are being proposed only to improve clarity and ensure consistency throughout the document.
4. Part I, Subsection C.1.1.2: Staff is proposing to correct the sentence, "Each unique battery type shall be responsible for the requirements set forth in subsection C.2 and section D," so that it reads instead as, "The manufacturer shall be responsible for the requirements set forth in subsection C.2 and section D for each unique battery type." This change would modify the sentence so that it correctly specifies that it is the manufacturer (not the battery type) who is responsible for the requirements.
5. Part I, Subsection C.1.3: Staff is proposing to change the term, "Executive Order," to the term, "family," for clarity. While in the context of this paragraph, the terms could be used interchangeably, it would be clearer to use the term, "family," instead, because that is how groupings of engines and vehicles are typically referred to by CARB staff and manufacturers for the purposes of California certification. Also, the term, "rated capacities," is being changed to "rated energy capacities," which is what staff initially intended. The term, "rated capacities," was used in error and is not defined in the document.
6. Part I, Subsection C.1.4: Staff is proposing to clarify that if a manufacturer opts to change the battery module type used in a currently certified zero-emission powertrain family, a new certification family would be required. This aligns with staff's original intent, which is supported by Part I, Subsection C.1.3, which states that manufacturers may only certify different energy storage systems together in the same family if they have identical components at a modular level.
7. Part I, Subsection C.1.5: Staff is proposing to amend this section to allow manufacturers to modify battery management and thermal management system strategies of a certification family mid-model year. The originally proposed language would require manufacturers to certify a new

powertrain family for such changes. Industry stakeholders contend that the provisions, as originally proposed, are too restrictive, especially given that the industry is still an emerging one and that they will be making many software modifications to their products in the near term. Staff agrees.

8. Part I, Subsection C.2.1: Staff is proposing to remove this section, which would require a manufacturer making hardware changes to the battery pack to certify a new powertrain family. This section contradicts subsection C.1.5, which would allow different hardware configurations to be included within a single certification family so long as the same battery modules are used.
9. Part I, Subsection C.2.2: Staff is proposing to clarify the types of changes to the system monitoring and diagnostic system that a manufacturer would be required to report to the Executive Officer by providing examples of such changes and adding further explanation that the section only applies to changes that would alter the information originally submitted in their certification application. In addition, staff is proposing to remove language about hardware changes, which are already addressed in Part I, Subsection C.1.5.
10. Part I, Subsection C.3.1: Staff is proposing to allow alternative communications hardware and protocols other than those specified in the original proposal. Based on discussions with stakeholders, staff determined that it would be appropriate to allow flexibility for a manufacturer to use alternative methods so long as those methods are readily available to third-party repair facilities and provide similar functionality to the communication methods already set forth in the proposal. Furthermore, this change was presented to the Board at its February 21, 2019, public hearing.
11. Part I, Subsection C.3.2: Staff is proposing to clarify the terms “default percentage charge limit” and “discharge limit” by adding examples. Staff is also proposing to change the term, “tools,” to “hardware and/or protocols” and the term, “readings,” to “signals.” This would only be a clarification, as these new terms would more accurately characterize the nature of diagnostic communications of a powertrain and are more widely understood.
12. Part I, Subsections C.3.2, C.4.1, C.4.3.2, and C.4.3.3: Staff is proposing to clarify that, if a manufacturer has a dealer, the tools and diagnostic and repair manual that the manufacturer must make available to third-party repair facilities would need to be the same as those provided to its dealer(s), rather than those provided to their internal repair personnel. Staff has determined based on discussions with industry, that the most appropriate tools and diagnostic and repair manual for third-party repair facilities would be the ones provided to a manufacturer’s dealers. However, if a manufacturer does not have a dealer, the manufacturer would still be required to make available the tools and diagnostic and repair manual provided to its internal repair personnel, as originally proposed.

13. Part I, Subsection C.4.1.4: Staff is proposing to modify the criteria for determining a “fair and reasonable price” for repair tools. Specifically, staff is proposing to remove the criterion that prices shall account for the ability of third-party repair facilities to afford such tools. Manufacturers have contended that at the low volumes expected in the near term, the research, development, and distribution costs for repair tools could be significant on a per-vehicle basis. As such, they are concerned that tool pricing based on affordability could result in substantial financial losses for manufacturers, especially at a time when the vehicles themselves may not yet be profitable. Staff agrees. While this modification could result in higher repair tool pricing when market volumes are low, staff expects that tool pricing will decrease as more electric and fuel-cell vehicles are deployed. Furthermore, staff does not believe the proposed modification would reduce the effectiveness of the proposal in achieving the primary objective of the criteria, which is to prevent manufacturers from deliberately inflating tool pricing to prevent access by third-party repair facilities. This is because staff believes the remaining pricing criteria proposed would be sufficient in achieving that objective.
14. Part I, Subsection C.4.2: Staff is proposing to clarify that if a manufacturer chooses to provide the owner’s manual in a format that is different from a physical or digital downloadable file, the Executive Officer’s approval would be contingent upon the format being at least as accessible as one of those formats specified. This clarification would provide additional guidance to manufacturers seeking to utilize this provision. Also, staff is proposing to remove the provision that requires manufacturers to only provide the owner’s manual to the Executive Officer, if requested. The Executive Officer will need to evaluate whether the owner’s manual meets applicable requirements and thus will always need a copy as part of the certification process.
15. Part I, Subsections C.4.2.1 and C.4.3: Staff is proposing to add language to clarify that owner’s manual and diagnostic and repair manual information would not be required to be presented as one document so long as the information is made available. This would provide additional flexibility for manufacturers and is closer aligned with how information is disseminated in the industry today. Ultimately, the proposed modification would not impact the access of purchasers and third-party repair facilities to the applicable information.
16. Part I, Subsection C.4.2.5: Staff is proposing to replace the term “anticipated” with “generally expected” in the proposed requirement for manufacturers to describe repair response times in their owner’s manuals. Manufacturers contend that, the regulatory language, as originally proposed, could be interpreted to mean a manufacturer would be required to update the information in the owner’s manual on anticipated response times for each individual repair, which was not staff’s intent. Therefore, this change would simply clarify the intent of the proposal, which is to require that manufacturers provide a general estimate of repair response

times (only once) in the owner's manual that is provided to the purchaser at the time of vehicle delivery. Furthermore, the Board directed staff to make this change per Resolution 19-7.

17. Part I, Subsection C.4.3.4: Staff is proposing to clarify that if a manufacturer chooses to present the diagnostic and repair manual in an alternative format different from a digital downloadable file, the Executive Officer's approval would be contingent upon the format being at least as accessible as the digital downloadable file. This clarification would provide additional guidance to manufacturers seeking to utilize this provision.
18. Part I, Section D: Staff is proposing to add language to clarify that the requirements for testing are also applicable to batteries that are part of plug-in-capable fuel-cell powertrains, which was staff's original intent. This is supported by Part I, section C.1.2, which states that batteries designed to directly accept charge and integrated in fuel-cell powertrains will be treated as independent battery packs. In addition, staff is proposing to modify the description of Society of Automotive Engineers J1798 to correct the fact that the document is actually incorporated in the originally proposed language. The corrected reference is consistent with the information provided in the 45-day notice. Staff is also proposing to clarify that manufacturers should seek Executive Officer approval of alternative test procedures in advance of performing the testing. This would ensure that manufacturers do not waste resources in running a test that the Executive Officer ultimately determines does not meet the applicable test criterion. Staff is also proposing to correct all instances of "usable capacity" and "rated capacity" by changing the terms to "usable energy capacity" and "rated energy capacity," respectively. This would only be a correction, as "usable capacity" and "rated capacity" are not defined in the document.
19. Part II, Sections A, D, F, G, J, N, and P: Staff is proposing to correct the inconsistent usage of "nonconformity," "warrantable recall condition," and "failure," throughout Part II of this document. These terms are used interchangeably in several sections in Part II. All of these terms are similar, but "nonconformity" refers to a certification family, while "warrantable recall condition" and "failure" refer specifically to failed component on a particular vehicle or powertrain.
20. Part II, Subsection A.2: Staff is proposing to clarify the applicability of the recall provisions for zero-emission powertrains installed in California-registered vehicles that were originally registered outside of California. This change would clarify that the recall requirements would only apply to such zero-emission powertrains once the manufacturer becomes aware that the vehicle has been registered in California.
21. Part II, Subsection A.3: Staff is proposing to remove a number of definitions, including "influenced recall," "quarterly reports," and "vehicle integration components," as staff is proposing to remove language using such terms from the document. In addition, staff is proposing to clarify the

definitions for “nonconformity,” “ordered recall,” and “voluntary recall,” and remove definitions already provided in Part I, Section B.

22. Part II, Subsection B.6: Staff is proposing to clarify that the list of warranted parts subject to Executive Officer approval would be the same list that is required to be furnished with each new zero-emission powertrain pursuant to subsection B.5. This is merely to ensure consistency with other parts of this paragraph which specifically refer to subsection B.5 when referencing the list of warranted parts.
23. Part II, Section D: Staff is proposing to reword this section to improve clarity.
24. Part II, Sections F, G, H, and K: Staff is proposing to remove influenced recalls from the proposal. Staff determined that while an influenced recall is a process important for internal combustion vehicles and engines, it is a process that would not likely be utilized for zero-emission powertrains. This is because zero-emission powertrain failures that trigger a recall pursuant to the proposal would affect the operability of the vehicle, and thus be expected to be consistently reported. In contrast, failures of emission control components on an internal combustion vehicle may go unreported, as vehicles with failing emission control components could still be operable. Therefore, for internal combustion engines and vehicles, there is a material need for the ability to initiate a recall based on data sources other than warranty reports. Staff believes removing the influenced recall would streamline the warranty requirements without impacting the implementation of the requirements. In addition, staff’s intention to further streamline the recall provisions was presented to the Board at its February 21, 2019, public hearing.
25. Part II, Section G.7.9: Staff is proposing to modify this provision to clarify that only the negative impacts on range, performance, durability, and safety of recall repairs or adjustments would need to be reported to the Executive Officer. The intent of this provision is to notify the Executive Officer of any potential issues that could arise with a proposed repair or adjustment, and thus, it would not be necessary to provide information about how a repair could positively impact the range, performance, durability, or safety of affected vehicles.
26. Part II, Sections H and Q: Staff is proposing to modify these sections to allow, subject to Executive Officer approval, manufacturers to provide a digital label in lieu of a physical label, if the repair subject to recall is not performed at a physical repair facility (e.g., an over-the-air update to the powertrain’s computer). A digital label would be required to include the same information required on a physical label, except that it could be stored in the on-board computer and made accessible via a scan tool or an on-vehicle display screen. Because these vehicles would not be brought into a physical repair facility, allowing for a digital label would help reduce labeling errors. Staff is also proposing to clarify the criterion by which the Executive Officer would evaluate for approval the location of a physical label or accessibility of a digital label.

27. Part II, Sections I and P: Staff is proposing to modify these sections to clarify that the warranty statements would only be required on recall notifications in cases where the statement actually applies. That is, if failing to bring a vehicle in for a recall repair does not impact an owner's warranty rights, the warranty statement would not need to be included in the recall notification. Omitting the warranty statement would require Executive Officer approval to verify that a statement is not applicable. This modification is appropriate as it would prevent powertrain owners from receiving information that does not apply to them during a recall.
28. Part II, Sections I and P: Staff is proposing to clarify that manufacturers are not required to ensure that a certain percentage of zero-emission powertrains are brought in for repair. That is, there is no required capture rate. This proposed change was presented to the Board at its February 21, 2019, public hearing.
29. Part II, Sections J and T: Staff is proposing to modify these sections to require manufacturers performing a recall to only submit one annual report, rather than six quarterly reports, to describe the status of a recall. Because manufacturers would not be required to ensure a certain percentage of vehicles are brought back in for repair, the submittal of updates on a quarterly basis would not be necessary. In addition, staff is proposing to remove the provisions requiring manufacturers to use a data storage device when providing vehicle identification numbers, remove the provision allowing the Executive Officer to change the frequency of reporting vehicle identification numbers, and clarify that the information collected would only need to be made available upon request. These proposed modifications would streamline reporting procedures while still ensuring manufacturers provide information important for recall reporting. This would reduce the amount of reporting required and streamline the warranty recall provisions, as presented to the Board at its February 21, 2019, public hearing.
30. Part II, Sections J and T: Staff is proposing to remove a number of data parameters required to be reported as part of the recall reporting. This is because the data parameters that would be removed could be calculated or determined via other information that would be provided as part of a recall status report. These proposed modifications would streamline reporting while still ensuring manufacturers provide information important for recall reporting. This would streamline the warranty recall provisions, as presented to the Board at its February 21, 2019, public hearing.
31. Part II, Section L: Staff is proposing to modify this section to clarify that only failures that render the vehicle inoperable would be considered for the purposes of ordered recalls. This proposed change is only intended to clarify staff's original intent and was presented to the Board at its February 21, 2019, public hearing. Staff is also proposing to add a reference to the section discussing the ordered recall plan for clarity.
32. Part II, Section L and Z: Staff is proposing to remove the requirement for field information reports. Staff determined that while field information

reports are an intermediate step important for warranty reporting of internal combustion vehicles and engines, they are not necessary for zero-emission powertrains. Failures of emission control components on an internal combustion vehicle could go unreported, as vehicles with failing emission control components may still be operable. Therefore, field information reports would provide an additional mechanism with which to identify such vehicles. However, field information reports are not needed for zero-emission powertrains because zero-emission powertrain failures that trigger recall would also affect the operability of the vehicle and thus expected to be consistently reported. This proposed change would streamline the warranty reporting provisions, as presented to the Board at its February 21, 2019, public hearing.

33. Part II, Section P: Staff is proposing to remove subsection P.3 that sets forth the provision that the Executive Officer may require manufacturers to provide subsequent notification to vehicle or powertrain owners after the original notification for an ordered recall. This provision is necessary for internal combustion warranty requirements, because manufacturers of internal combustion vehicles are required to bring in a certain percentage of vehicles in for repair. However, zero-emission powertrain manufacturers are not required to bring a certain percentage of vehicles in for repair and thus, staff determined that re-notification of owners would not be necessary. The remaining provisions would still allow the Executive Officer to determine the means by which a manufacturer must provide the initial notification to owners. This change would streamline the recall provisions, as presented to the Board at its February 21, 2019, public hearing.
34. Part II, Section T: Staff is proposing to remove this section, and instead reference section J, which has identical requirements, to reduce redundancy.
35. Part II, Section V: Staff is proposing to clarify that, if a manufacturer offers an extended warranty beyond that specified in subsection B.2, they would not be required to meet the warranty and recall requirements of this proposal beyond the duration of the warranty period specified in section B.2. This is consistent with staff's intent and would ensure that this section is not misinterpreted.
36. Part II, Sections X and Z: Staff is proposing to modify this section to clarify that only failures that render the vehicle inoperable are considered for the purposes of ordered recalls. This was staff's original intent, and this clarification was presented to the Board at its February 21, 2019, public hearing.
37. Part II, Section Y: Staff is proposing to increase the warranty reporting threshold at which a manufacturer must submit an unscreened warranty report. Staff determined that it was unnecessary to have manufacturers submit unscreened warranty reports unless the true failure rate approached a level such that a manufacturer would be required to take action. Staff is also proposing to increase the number of days a

manufacturer has to file an unscreened warranty report from 25 to 45 days, which aligns it with the length of time for the screened warranty information report. These proposed changes would reduce the amount of reporting required and streamline the warranty reporting, as presented to the Board at its February 21, 2019, public hearing. In addition, staff is proposing to modify the language in this section for clarity.

38. Part II, Section Y: Staff is proposing to add a requirement that, in the unscreened warranty information report, manufacturers provide a reporting number for tracking purposes. In addition, staff is proposing to require that manufacturers report the potential causes of a failure in the unscreened warranty information report. This information was originally required as part of a field information report, which staff is proposing to remove, as described in paragraph C.31 of this document.
39. Part II, Section Z: Staff is proposing to clarify that the evaluation of the need for a recall would be based on the screened warranty information report. The language in the 45-day package is unclear as to which warranty information report (screened or unscreened) would be used. This change aligns with staff's original intent because the verified failures counted in a screened warranty information report would be the most reliable way to identify component failure rates.
40. Part II, Section AA: Staff is proposing to clarify that only failures that render the vehicle inoperable are to be included for the screened warranty information report. This was staff's original intent and this clarification was presented to the Board at its February 21, 2019, public hearing. In addition, staff is proposing to require manufacturers to report the total number of affected zero-emission powertrains and the number that are anticipated to fail in the screened warranty report rather than the unscreened warranty report. This is because manufacturers would be better able to project the number of anticipated failures once the failures are verified through the screening process, providing more useful and reliable information.
41. Part II, Section AB: Staff is proposing to clarify that the requirements in this section are intended to apply to the screened warranty information reports, not both screened and unscreened warranty information reports. This would align these requirements, as intended, with the internal combustion warranty recall requirements upon which these provisions were based. Furthermore, this proposed change would streamline the recall provisions, as presented to the Board at its February 21, 2019, public hearing.

In addition to the modifications described above, additional modifications correcting grammar, punctuation and spelling have been made throughout the proposed changes. These changes are nonsubstantive.

Additional Document Added to the Record

In the interest of completeness, staff has also added to the rulemaking record and invites comments on:

- CARB; Appendix H – Further Detail on Cost and Economic Analysis. Staff Report: Initial Statement of Reasons for Proposed Rulemaking – Proposed California Greenhouse Gas Emissions Standards for Medium- and Heavy-Duty Engines and Vehicles and Proposed Amendments to the Tractor-Trailer GHG Regulation (HD Phase 2). December 19, 2017.

These documents are available for inspection by contacting Chris Hopkins, Regulations Coordinator, at (916) 445-9564.

Environmental Analysis

These proposed modifications do not change implementation of the regulation in any way that affects the conclusions of the environmental analysis included in the Staff Report because the modifications consist primarily of definition and provision clarifications as well as changes in the reporting requirements, so no additional environmental analysis or recirculation of the analysis is required. At this stage in this rulemaking process, CARB does not expect that any changes in compliance responses resulting from the modifications would result in any of the circumstances requiring recirculation of the analysis as set forth in section 15088.5 of the California Environmental Quality Act (CEQA) Guidelines.

Agency Contacts

Inquiries concerning the substance of the proposed regulation may be directed to David Eiges, Air Resources Engineer, Advanced Emission Control Strategies Section, at (626) 575-6602 or (designated back-up contact) David Chen, Manager, Advanced Emission Control Strategies Section, at (626) 350-6579.

Public Comments

Written comments will only be accepted on the modifications identified in this Notice. Comments may be submitted by postal mail or by electronic submittal no later than the due date to the following:

Postal mail: Clerk of the Board, California Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Please note that under the California Public Records Act (Gov. Code § 6250 et seq.), your written and verbal comments, attachments, and associated contact information

(e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

In order to be considered by the Executive Officer, comments must be directed to CARB in one of the two forms described above and received by CARB no later than the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alternativo u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

CALIFORNIA AIR RESOURCES BOARD



Richard W. Corey
Executive Officer

Date: *May 13, 2019*

Attachments

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see CARB's website at www.CARB.ca.gov.