State of California
Air Resources Board

Addendum to the Final Statement of Reasons for Rulemaking

Public Hearing to Consider Proposal to Permanently Adopt the Emergency Vehicle Emissions Regulations

Public Hearing Date: March 26, 2026
Agenda Item No.: 26-2-3
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I. General

This addendum to the Final Statement of Reasons (FSOR) for the rulemaking action entitled "Public Hearing to Consider Proposal to Permanently Adopt the Emergency Vehicle Emissions Regulations" updates the original FSOR that the California Air Resources Board (CARB) submitted to the Office of Administrative Law (OAL) on September 25, 2026.

II. Modifications to the Original Summary of Comments and Agency Responses in the FSOR

As stated in the original FSOR, comments pertaining to the proposed amendments to the On-Road Heavy-Duty Engine and Vehicle Omnibus (Omnibus) and the Low Carbon Fuel Standard (LCFS) regulations were not included because they did not pertain to this rulemaking action for the permanent adoption of the Emergency Vehicle Emissions Regulations. However, in order to provide a complete set of the comments received from all regulatory items that were noticed alongside the notice for the permanent adoption of the Emergency Vehicle Emissions Regulations, CARB is now adding both Omnibus- and LCFS-related comments. The following comments and agency responses are considered as an addendum to the FSOR.

It should be noted that Daimler Truck North America (DTNA), Truck and Engine Manufacturers Association (EMA), and International Motors (International) submitted comment letters that covered topics related to both the Emergency Vehicle Emissions Regulations and the Omnibus Regulation. Originally, the comments pertinent to the proposal to permanently adopt the Emergency Vehicle Emissions Regulations were listed in Table A-1 of the original FSOR. The Omnibus-related comments from these comment letters are now included in the list below.

A. Comments on the Proposed Amendments to the Omnibus Regulation

As noted above, the proposed amendments to the Omnibus regulation were separate from and are not proceeding with this permanent adoption of the Emergency Vehicle Emissions Regulation rulemaking action. Nonetheless, for completeness and informational purposes, CARB is now including summaries for comments related to this item that were submitted in response to the 45-Day Notice of Public Hearing issued on September 23, 2025.

(a) Disapproval Resolutions

1. **Comment**: The Proposal appears to be designed to avoid the consequences of the Congressional Review Act (CRA) legislation that the President signed into law on June 12, 2025. Congress and the President expressly disapproved and voided the prior federal preemption waiver that EPA had issued for Omnibus and certain other mobile source regulations. Pursuant to the CRA legislation, EPA is now prohibited from granting any future preemption waivers for any CARB regulations that are "substantially the same" as the now-voided Omnibus and other regulations. See H.J. Res. 89, Pub. L. No. 119-17. (EMA and International)

2. **Comment**: CARB's Proposal is fundamentally flawed and unlawful. The CRA legislation curtails CARB's regulatory authority such that both the Omnibus amendments and the new and amended "antecedent" standards are preempted. See Presidential Signing Statement for Joint Resolutions, June 12, 2025; see also 42 U.S.C. §§ 7543(a)-(b). As noted, the first component of CARB's pending rulemaking is to amend the Omnibus regulations to "largely align" with EPA's low-NOx regulation. But that proposal no longer makes sense. There are no viable Omnibus regulations to amend. To the contrary, the CRA legislation voided those regulations, with the result that those regulations are of no force or effect whatsoever. It is as though they never existed. Accordingly, CARB is proposing to amend what amounts to a nullity, something that it has no authority to do. Moreover, even if CARB could amend a nullity, EPA is precluded from granting a preemption waiver for any CARB regulation that is substantially the same as the Omnibus regulations, which the amended Omnibus regulations obviously would be. (EMA and International)

3. **Comment**: Significantly, in a comment letter dated September 27, 2025 sent to CARB's Executive Officer, the EPA Assistant Administrator stated:

> EPA also is deeply troubled by recent statements from CARB, including in the proposed rule materials, that there is "uncertainty" regarding the status of CARB's . . . "Omnibus" Low NOx regulations. There is no uncertainty that, as a consequence of bipartisan Congressional Review Act (CRA) resolutions enacted into law on June 10, 2025, EPA's prior waivers for those provisions have no force and effect and the provisions are therefore preempted by CAA section 209(a). Nor is there uncertainty that, as a further consequence of the bipartisan CRA resolutions, EPA is barred from waiving preemption for any standard that is "substantially the same" as those in the . . . Omnibus Low NOx regulations. 5 U.S.C. § 801(b)(2). (EMA and International)

4. **Comment**: CARB is simultaneously proposing to continue to implement the Omnibus regulations (as amended), while attempting to resurrect and revise certain previously-lapsed antecedent HDOH standards and requirements that were in effect and codified in

the California Code of Regulations (CCR) prior to the initial adoption of the Omnibus regulations in 2020. It makes no sense to amend the Omnibus regulations and also attempt to revive an alternative scheme simultaneously in the same rulemaking. (EMA and International)

5. **Comment**: International does not support CARB's Proposed Action because it contravenes state and federal law. As explained in the comment letter submitted to CARB by the Truck and Engine Manufacturers Association, incorporated here by reference and enclosed, CARB's Proposed Action violates the Clean Air Act and serves as an inappropriate attempt to circumvent the Congressional Review Act ("CRA") resolutions passed by Congress and signed into law by the President on June 12, 2025. (International)

6. **Comment**: On May 22, 2025, Congress completed its proceedings under the Congressional Review Act to invalidate the federal preemption waiver that EPA previously issued for CARB's Omnibus regulations. On June 12, 2025, the President signed that Congressional mandate. By operation of law, the Omnibus regulation is now preempted under section 209(a) of the Clean Air Act, 42 U.S.C. § 7543(a). Under the Congressional Review Act, EPA cannot issue a waiver "that is substantially the same" without express congressional authorization. (DTNA)

7. **Comment**: Furthermore, under the terms of the Congressional Review Act, EPA cannot grant CARB a waiver for a regulation "that is substantially the same." And EPA cannot grant CARB a waiver because CARB's proposed regulations cannot meet the Clean Air Act requirements for lead time. (DTNA)

8. **Comment**: DTNA cannot support the adoption of amendments to a rule that has been federally preempted. This practice of adopting and amending emissions standards without a preemption waiver violates the Clean Air Act and creates significant confusion for industry as to the relevant law governing vehicle and engine certification. While DTNA does not believe that CARB has authority to demand certifications for heavy-duty vehicles at this time, if such certifications are sought, allowing "deem to comply" with the federal NOx standards (the standard with which this CARB amendment is trying to align) would be a better way to harmonize federal and state law during the current period of uncertainty. (DTNA)

(b) Clean Truck Partnership (CTP)

9. **Comment**: On October 31, 2025, the United States District Court for the Eastern District of California entered an order preliminarily enjoining CARB from taking any steps to implement the CTP. Daimler Truck N. Am., et al. v. CARB, Case No. 2:25-CV-02255-DC-AC (E.D. Cal. Oct. 31, 2025), slip. op. at 34. The court found that "there are serious questions going to the merits of [Plaintiffs'] claim that the [CTP] is preempted," and that through CARB's attempts to enforce the CTP, CARB is attempting enforcement of "at least some standards for which it admitted never obtained preemption waivers." Id. at 32. The CTP was one of the bases CARB included in Initial Statement of Reasons (ISOR) in support of the Proposal, and the CTP is now enjoined. (See ISOR, pp. II, 5, 10, 23, 26, 48, 50.) That said, EMA supports CARB's objective of harmonization. However, during this period of uncertainty as to whether CARB has valid certification authority at all, allowing manufacturers to follow federal emissions standards is the best approach to harmonize standards. (EMA and International)

10. **Comment**: The Clean Truck Partnership (CTP) does not commit manufacturers to voluntarily complying with a federally preempted standard.

    After CARB commenced this rulemaking process, the Eastern District of California granted a preliminary injunction "based on [the] claim that the Clean Truck Partnership is preempted" and further ordering that CARB is enjoined from "implementing . . . the Clean Truck Partnership."

    Daimler does not object to the CARB-EPA harmonization goal of the Omnibus Amendments but proposes that allowing manufacturers to follow federal emissions standards is the best approach for harmonization during this period of uncertainty. (DTNA)

11. **Comment**: CARB has not worked collaboratively with manufacturers to resolve any issues warranting regulatory amendments.

    To the extent that CARB is implementing these amendments to fulfill CTP, CARB already has breached it. For example, earlier this year, CARB made several changes to the Advanced Clean Trucks (ACT) regulation and Zero-Emission Powertrain (ZEP) Certification Test Procedures without cooperation with manufacturers. CARB proposed those amendments without first engaging in any substantive discussions with DTNA or EMA regarding the specifics of the proposed amendments, or whether those proposed amendments were acceptable to EMA and its members. Manufacturers explicitly opposed many of those changes, but CARB finalized those amendments without addressing manufacturer's concerns about fairness and technical feasibility. In addition, certain of the amendments did not comport with the terms of the CTP. For example, the CTP stated that CARB "will propose to modify ACT to lengthen the number of years a manufacturer has to make up a deficit from one year to three years." But the changes to ACT did not provide the promised three-year make-up period. It only allowed manufacturers to carry over 30 percent of the deficit from year-to-year—a material restriction not contemplated by the CTP. Furthermore, CARB is certifying engines in breach of their commitments made in the CTP. (DTNA)

12. **Comment**: It is impossible for CARB to meet its regulatory obligations in the CTP.

    The CTP requires CARB to substantively amend ACT and Omnibus Low NOx, largely for the purpose of harmonization of state and federal emissions standards. As explained above, however, the President signed Joint Resolutions of Congress under the Congressional Review Act that expressly revoked California's preemption waivers for ACT and Omnibus Low NOx. Following the signature of these Joint Resolutions into law, EPA cannot reissue CARB's waivers for those standards without a subsequent act of Congress expressly permitting such action. As a result, CARB is statutorily foreclosed from amending these rules as contemplated by the Clean Truck Partnership or enforcing the resulting amendments. DTNA acknowledges that CARB has challenged these federal statutes in federal court, but CARB has not sought any emergency relief to clarify the relevant law or that it can enforce its standards, and as a result, the Congressional Review Act remains controlling law. CARB's practice of adopting and amending emissions standards without a preemption waiver (including pursuant to CTP, which is now subject to a preliminary injunction) creates significant confusion for industry as to the relevant law governing vehicle and engine certification. It also results in unnecessary expenditure that industry will never recover should CARB's challenges to the Congressional Review Act fail. (DTNA)

13. Comment: The amendments proposed by CARB staff as part of this rulemaking do not satisfy the CTP terms with respect to harmonization.

In July of 2023, CARB staff committed to propose amendments to the Omnibus regulation "that will generally align the emission standards, test procedures, and accompanying enforcement provisions for 2027 and subsequent MY engines and vehicles with the corresponding provisions in the EPA-NOx rule." As part of that proposal, CARB included a specific list of deviations and exclusions. However, in this amendment package, CARB has proposed many additional deviations from EPA's regulation. CARB's proposed Appendix B-3: Proposed New California Exhaust Emission Standards and Test Procedures for 2027 and Subsequent Model Heavy-Duty Engines, Vehicles and Hybrid Powertrains is, itself, a list of changes CARB intends to make to EPA's 2027 NOx provisions. As just one example, CARB explicitly proposes excluding many of the interim allowances in 40 C.F.R. § 1036.150, including § 1036.150(t), which effects which standards certain MY2027 engines must be certified to. If CARB intends to proceed with the adoption of this amendment package in pursuant to its view of the CTP, the agency should adopt EPA's rule only with the exceptions identified in July of 2023. (DTNA)

(c) On-Board Diagnostics (OBD)

14. Comment: The provisions in section 1971.1(i)(2.3.4) that require manufacturers to submit engine system aging test data and validation plans (including high mileage system data and accelerated aging processes) involve the manufacturer's core technology and trade secrets, which is not good for enterprises. An equivalent international aging procedure in accordance with the U.S. EPA accelerated aging procedure (40 Code of Federal Regulations § 1065.1131-§ 1065.1145) or other functionally equivalent standardized aging procedures approved by the type certification authority of a member state of the United Nations WP.29 (e.g., the European Union) should be endorsed. Test results from engine manufacturers that use this procedure shall be accepted to meet this requirement. (China WTO/TBT National Notification & Enquiry Center)

15. Comment: The freeze frame storage requirements of section 1968.2(g)(4.3.2)(D) should be modified to decrease the amount of data required to be stored. The current requirement to store freeze frame conditions for a minimum of 5 fault codes per diagnostic or emission critical powertrain control unit (DEC ECU) on the vehicle would require the storing of hundreds of freeze frame data elements, which would provide little or no value to repair technicians and would force a substantial redesign of the OBD system. Many DEC ECUs are not able to store pending fault codes and instead report the data to another DEC ECU, and DEC ECUs do not necessarily directly communicate with the generic scan tools that technicians use to retrieve the fault codes and freeze frame data. We do not believe CARB or industry intended to require storage of this much data that are not helpful to technicians. Instead, we believe that the regulations intended to require storage of two data frames of freeze frame conditions for at least 5 fault codes for the whole OBD system, a minimum requirement that will be exceeded since most OBD systems have multiple DEC ECUs that store and communicate pending fault codes to a generic scan tool.

These requirements should be modified to require the following, which will result in storage of far more data than OBD systems have historically stored and should help repair technicians quickly and accurately repair malfunctions:

1) For each DEC ECU capable of storing and directly communicating at least 5 pending fault codes to a generic scan tool, the DEC ECU must have the ability to store freeze frame conditions for a minimum of 5 of these fault codes.
2) For each DEC ECU capable of storing and directly communicating at 1 to 4 pending fault codes to a generic scan tool, the DEC ECU must have the ability to store freeze frame conditions for all these fault codes.
3) The OBD system as a whole must store freeze frame conditions for a minimum of 5 fault codes. (Alliance for Automotive Innovation (AAI))

16. **Comment**: For NOx emission tracking (section 1968.2(g)(6.12)), medium-duty diesel vehicles with a gross combination weight rating greater than 14,000 pounds should be added to the proposed 2-bin moving average window (2B-MAW) requirements, which is currently being proposed for 2031 and subsequent model year medium-duty diesel engines certified to an engine dynamometer standard but not medium-duty diesel vehicles. (AAI)

17. **Comment**: Section 1968.2(g)(3.4.2)(A) should be deleted to allow the OBD II system to respond with negative response code (NRC) $13 for a scan tool request that contains an invalid request message format. NRC $13 is the most appropriate feedback to this scan tool request message, and SAE International (SAE) J1969-2 and International Organization for Standardization (ISO) 14229-1 standards specify the electronic control unit send an NRC 0x13 (IncorrectMessageLengthOrFormat) in response to an invalid request message format. (AAI)

18. **Comment**: The proposed modifications to the NOx sensor monitoring capability requirements (sections 1968.2(f)(5.2.2)(D) and 1971.1(e)(9.2.2)(D)) reflect the provisions that industry requested for manual adjustment of the test points based on potential overlap with other failure modes, for allowing bi-directional failure characteristics, for allowing other monitors to provide coverage when there is overlap of diagnostic coverage, and for unintended system interactions when combining degraded catalysts with degraded sensors. Industry requests the following additional provisions to correct discrepancies in the regulation:

    1) Remove the testing burden for test points that were redundant to other testing requirements in the regulation (i.e., best performing unacceptable (BPU) catalyst with full useful life (FUL) sensors under section 1968.2(h)(4.2)),
    2) Limit the required failure modes to sensor gain and sensor offset, since undefined requirements leave manufacturers left interpreting the regulation and allow future regulation expansion based on interpretation,
    3) Allow the following alternate ways to determine the standard deviation required in the regulation: calculation using NOx sensor component variance data (e.g., calculated variance data from the NOx sensor supplier) or mathematically to cover the functional space between the performance of the nominal NOx sensor and beyond BPU NOx sensor. The lack of allowed calculation methods can overly burden the testing demands on the manufacturer to determine the standard deviation of the different monitors in many different conditions,
    4) Allow manual control of the test point spacing to cover the desired spacing between FUL and BPU. This would prevent overly burdensome testing for no functional benefit by avoiding testing of the same functional point multiple times due to a small standard deviation, and

5) Revise the required number of data points with the NOx sensor performance set above the sensor malfunction threshold from 3 to 1. (AAI)

19. **Comment**: The regulation should be modified to allow the manufacturer to fulfill the diesel catalyzed particulate matter (PM) filter non-methane hydrocarbon (NMHC) conversion monitoring requirements (sections 1968.2(f)(9.2.4) and 1971.1(e)(8.2.4)) with the PM filter filtering performance monitor (section (f)(9.2.1)). The proposed 45-day modifications to the exemption criteria for catalyzed PM filter NMHC conversion monitoring reflects the request from industry to align the test-out threshold with the modern emission standards and the measurement accuracy of the emissions equipment. But the PM filter NMHC conversion monitoring requirement drives burdensome and unnecessary testing and architecture and emissions control decisions that are counter to CARB's objective of lowering tailpipe emissions. Industry believes there is still no viable monitoring technology for stand-alone PM filter NMHC conversion, and this requirement is not needed since it is redundant to the PM filter filtration efficiency requirements based on real-world PM filter failure mechanisms. (AAI)

20. **Comment**: For the proposed in-use monitor performance ratio (IUMPR) denominator requirement for NOx converting catalyst systems with multiple catalysts in series (sections 1968.2(d)(4.3.2)(P) and 1971.1(d)(4.3.2)(O)), the requirement for the manufacturer to seek CARB Executive Officer approval to use this special denominator should be removed. The proposed language has no automatic allowance to use this special denominator (i.e., tied to minimum NOx levels for monitoring). The regulation should also clarify that the aging levels of the adjoining SCR would be at full useful life, consistent with other component diagnostic demonstration methods. These provisions, which were mutually agreed upon by industry and CARB staff, are an essential option for aftertreatment systems that incorporate multiple diesel oxidation catalysts in series. (AAI)

21. **Comment**: CARB should reconsider mandating costly new PM sensing technologies intended to increase IUMPR while lowering OBD emission thresholds in order to meet the diesel PM filter monitoring and IUMPR requirements (sections 1968.2(d)(3.2.1)(G)(iv), 1968.2(h)(2.2), 1968.2(k)(7.3), 1968.2(f) Table 3, 1968.2(f)(9.2.1)(A)(ii)). Current PM sensing technology is not capable of robustly meeting these requirements, so if new technology proves to be infeasible, additional modifications would be needed. CARB's "Workshop for Drive Forward Light-duty Vehicle Program Confirmation" reflects a commitment to improving vehicle affordability. Commercialization of these technologies represents a significant financial burden with questionable air quality impacts. Data for current systems already show effective in-use monitoring that meet the program's goal of real-world monitoring (detection of faults, illumination of MIL, prompting of necessary repairs), with PM filter filtering performance monitors meeting an IUMPR of about 0.150 on healthy vehicles and higher IUMPRs for faulted systems, consistent with the sensor's design to detect PM bridging the electrode gap (higher PM to the sensor equates to quicker detection). Increased monitoring frequency of healthy systems and the increased cost of implementing new technology do not correlate with improved air quality. (AAI)

22. **Comment**: For the proposed changes to the nonconformance SAE J1979-2 comprehensive component monitor readiness criteria in the OBD enforcement regulations (sections 1968.5(c)(3)(A)(vii) and 1971.5(d)(3)(A)(vii)), the short-term relief provided is insufficient and should be made permanent instead. There are many comprehensive components, and the large comprehensive component monitor group with the high

dynamics of the components involved result in a high risk of implementation errors after the short-term relief expires. (AAI)

23. **Comment**: For the proposed 45-day readiness requirements (sections 1968.2(g)(4.1.1)(J) and (g)(4.1.2)(G) and 1971.1(h)(4.1.1)(J) and (h)(4.1.2)(G)), CARB should remove the criterion that requires no permanent fault code to be stored for the monitor of concern in order for the readiness to be set to "complete" since it defeats the purpose of the minimum vehicle usage criterion. Certain monitors like those dependent on specific ambient conditions or driving behaviors may not run frequently for readiness status to complete under typical vehicle usage patterns, especially in regions with seasonal climate variations or for vehicles with limited or specialized usage. Since readiness is used to pass inspection and maintenance (I/M) tests, an incomplete readiness status can prevent vehicle registration even after repairs are made and the vehicle's emissions systems are functioning properly. This introduces unnecessary complexity and does not fully resolve the problem. Permanent fault codes, which serve a distinct purpose from readiness and are used to prevent fraud on I/M tests, should not be used to block readiness status completion since it conflates two separate diagnostic functions and limits I/M program administrators' flexibility to tailor pass/fail criteria to their jurisdiction's needs. For example, a heater performance monitor that fails during the cold winter months and with repairs completed in the spring may not rerun for many months, leaving a permanent fault code and incomplete readiness. Under the proposed language, the readiness could not be set to complete, which undermines the intent of the alternate criteria and may unfairly penalize vehicle owners and confuse state I/M program administrators that may have to exempt that specific monitor from both readiness and permanent fault code fail criteria. Removing this permanent fault code criterion preserves the integrity of both readiness status and permanent fault code functions while supporting practical implementation across diverse operating environments. (AAI)

24. **Comment**: For monitors using special denominators (i.e., denominator incrementing criteria in section 1968.2(d)(4.3.2)(C) through (J) and (l) through (P), or sections 1971.1(d)(4.3.2)(C) through (I) and (K) through (O)), CARB should add an allowance for the permanent fault codes to clear when at least 15 warm-up cycles have occurred and at least 200 miles (for 1968.2) or 400 minutes of engine runtime (for 1971.1) have accumulated. The BAR website presumably indicates a large volume of cases where the vehicle is repaired and the readiness is set to "complete" but the permanent fault code is still stored, which would have failed the vehicle, so BAR had to implement a temporary solution using the criteria mentioned above to pass vehicles. CARB should make the suggested change above so state I/M program administrators can avoid setting different requirements and prevent unnecessary issues for customers. (AAI)

25. **Comment**: CARB's proposed changes to the durability demonstration aging requirements (sections 1968.2(h)(2.3.2) and 1971.1(i)(2.3.5)) still require extensive data collection to validate the accelerated aging process, including parameters that may not be relevant to aging or that simply reflect diverse product use cases. This is concerning because aging does not result in a single "standard" aged system – it varies widely based on vehicle usage. Though CARB insists on collecting the data, CARB has stated it will not use the data as approval criteria for the accelerated aging process but has not stated how the data will be used or about its expected conclusions. While CARB may use the data to confirm different vehicle use cases, this does not necessarily relate to aging correlation. Technical literature and manufacturer experience indicate that aging is primarily a function of time at

temperature, so parameters reflecting time and temperature may be used for aging correlation while other requested data points may provide little value. CARB staff and industry should review CARB's multiple post-production validation programs, which include aging correlation for worst performing acceptable and BPU systems, manufacturer self-testing, and Clean Truck Check (CTC), and eliminate duplicative requirements that unnecessarily increase program costs that are quickly becoming a barrier to the adoption of new, lower-emission vehicles and engines. (AAI)

26. **Comment**: CARB should change the production vehicle evaluation testing in sections 1968.2(j)(1.4.2)(E) and 1971.1(l)(1.4.3)(E) to limit testing to DEC ECUs that can directly communicate any emission-related fault code to a generic scan tool via the diagnostic connector. When a DEC ECU does not communicate a fault code directly to a generic scan tool and relies on another control unit to transmit fault codes, testing of this DEC ECU is unnecessary and redundant, so the overall testing is unnecessarily burdensome. Accessing certain DEC ECUs can also be extremely difficult and have safety risks, requiring removal of air bags, seats, or other components, so testing should also be omitted for specific DEC ECUs if testing cannot be reasonably performed without risking vehicle damage or testing personnel safety. This testing also has a tight deadline (3 months after production start), so manufacturers typically perform this testing at assembly plants. For DEC ECUs that cannot communicate directly with a generic scan tool, CARB should modify the regulation to test these DEC ECUs under sections 1968.2(j)(2) and 1971.1(l)(2), which have longer deadlines, covers nearly all fault codes, and is usually handled by engineering teams. This testing should confirm if the MIL illuminates and fault codes are communicated to a generic scan tool for communication disruptions between a scan tool facing control unit and the DEC ECU. And for DEC ECUs that cannot be reasonably tested, manufacturers should also be allowed to use other test methods or to omit testing of these specific cases. It is important to note that the testing under sections 1968.2(j) and 1971.1(l) was intended to be a quick verification process, not a comprehensive process, during the transition to on-board data utilization for I/M programs, which is reflected in the short deadline and the primary objective to confirm the vehicle communicates properly with I/M stations. Regarding the issue with accessing certain DEC ECUs, CARB had suggested that manufacturers design vehicles to accommodate CARB's post-production test programs, which overlooks the significant design and engineering trade-offs required to develop new vehicles that comply with numerous safety and emission regulatory requirements not just OBD. (AAI)

27. **Comment**: Regarding CARB's proposed changes to the engine selection criteria for manufacturers self-testing (MST) (section 1971.1(c)(2)), CARB should retain the pre-2027 model year mileage range. Manufacturers believe locating vehicles in the real world that accumulate the proposed required mileage within 4 years will be extremely challenging if not impossible, given that these criteria do not adequately account for vehicles that are not line-haul applications (e.g., local delivery vehicles that may only accumulate 65 miles a day). CARB should consider the practical limitations and explore alternative approaches that reflect the diversity of real-world vehicle usage. CARB's proposed 2027+ model year mileage requirements are much higher compared to the pre-2027 model year mileage requirements even if vehicles are allowed an extra year to accumulate that mileage. Keeping the pre-2027 model year mileage range will improve the likelihood of finding vehicles that meet the required mileage in the field. This request is based on the consideration that MST is one of many post-production test programs (including WPA and BPU aging correlation, NOx REAL data collection and submission, and production engine

vehicle evaluation testing) and that vehicle owners are already required to comply with the quarterly inspections under the CTC and heavy-duty I/M programs for diesel and alternative-fueled engines. The MST program is estimated to cost $1 million per program for procurement, testing, hosting witnesses, and related activities, assuming no remediation is required - a significant cost burden that seems unnecessary given the quarterly inspections. The proposed extension of the MST program deadline from 3 years to 4 years adds complexity for manufacturers since the engineers and technical experts involved in product development are often no longer in the same roles after 2-3 years. The MST program should be evaluated in the context of other post-production testing requirements and quarterly CTC inspections. A more practical approach would be transitioning MST to an audit-based program rather than maintaining a standing annual requirement for every model year. (AAI)

28. **Comment**: We agree with the proposal to update the malfunction criteria and test-out criteria in the regulations (sections 1968.2(e)(17) and (f)(17) and 1971.1(g)(5)) to align with U.S. EPA's 40 Code of Federal Regulations 1036.110, which provides alternate malfunction and test-out criteria that correspond to the lower exhaust emission standards in U.S. EPA's 2027 and subsequent model year heavy-duty engine rule. (AAI)

(d) Transit Agency Diesel-Fueled Bus and Engine Exemption

29. **Comment**: However, in conversation with our membership, we have learned that the CARB proposed Omnibus Amendments do not appear to harmonize with the EPA regulatory approach for heavy duty (HD) hybrid systems mated to HD diesel engines in transit buses. Specifically, EPA requires only a traditional HD engine certification for HD diesel transit buses but allows an optional hybrid powertrain certification path, which a manufacturer can elect to pursue. In the traditional engine certification path for EPA, hybrid components are not included in emissions testing and thus not considered emissions related components that carry emissions warranty terms. Should a manufacturer elect to pursue the optional powertrain certification path or seek emissions credits for the emissions benefits of the hybrid system, then the hybrid components would be included in the emissions testing and EPA would consider hybrid components to be emissions related components with emissions warranty. In contrast, the CARB Omnibus Amendments language appears to consider hybrid systems emissions related components (1956.8.2 (a)(4)) that carry emission warranty terms regardless of the certification path or if credits are pursued. Some sections in the CARB Omnibus Amendments also delete the word "optional" for the powertrain certification path (e.g. CCR 2035 (b)(1)(E)) implying that powertrain certification would be required.

    If the current Transit Agency Exemption were to sunset in 2027 as the Omnibus Amendments propose, diesel hybrid transit buses will be subject to CARB certifications, CARB certification fees, and emissions warranty beyond the EPA requirement. And, if hybrid powertrain certification is a requirement as implied by some portions of the CARB Omnibus Amendments, engine and hybrid manufacturers will be forced to invent a method for powertrain certification. This invention would be difficult due to inadequate lead time for MY27 as no transit HD hybrids have been powertrain certified to date under EPA or CARB.

    Therefore, in consideration of these potential harmonization issues with EPA and the short timeline for any compliance, the Association and its members propose CARB retain the diesel transit exemption for HD hybrid systems. (California Transit Association)

30. Comment: In Appendix D "Costs and Economic Impacts Assessment for the Proposed Amendments" CARB calculates the expected cost impact of removing the Transit Agency Exemption. While this analysis assessed impacts for non-hybrid diesel vehicle, the analysis did not assess the impacts to hybrid diesel vehicles including:

1. Additional warranty costs for the hybrid system;
2. Additional certification fees for each hybrid configuration that uses the engine;
3. Additional costs for diesel engine/hybrid powertrain emissions testing invention, execution, and certification; and
4. Additional direct and indirect costs (as defined in Appendix D) for the hybrid system.

These costs resulting from the proposed Omnibus Amendments would disadvantage hybrid transit buses when compared to non-hybrid diesel transit buses. This would place additional undue burden on transit agencies that, today, continue to procure mixed fleets of zero-emission and conventionally fueled transit buses in full compliance with the ICT regulation. Many of these agencies are procuring, or intend to procure hybrid transit buses, to ensure that their conventionally fueled transit buses further reduce emissions. We believe that retaining the Transit Agency Exemption would allow public transit agencies to continue having the flexibility to purchase hybrids and meet service and capacity needs as they transition to zero emission fleets under their individual ICT transition plans.

In these extraordinary times of significant budget shortfalls, sunsetting the Transit Agency Exemption would unnecessarily increase the procurement costs of diesel hybrid transit buses. The timeframe between when the proposed Omnibus Amendments would take effect in 2027 and 2029, the date when ICT would eliminate new sales of diesel engines in transit buses, is a short, but critical, timeframe for transit agencies working towards the ICT regulation's goal of improving public health and the environment while servicing their constituents needs. **The Association, therefore, strongly urges the Board to retain the Transit Agency Exemption in its consideration of the proposed Heavy-Duty Omnibus Engine and Vehicle Amendments.** (California Transit Association)

(e) Heavy-Duty Omnibus Standards, Test Procedures, and Warranty

31. Comment: MECA supports the proposed amendments to the Omnibus to align its standards, test procedures, useful life, in-use compliance and average, banking and trading (ABT) provisions to the current US EPA Heavy-Duty Low-NOx Rule for model year 2027 and later engines. Should EPA choose to reconsider federal heavy-duty criteria standards, we would not support harmonization of weaker nitrogen oxide (NOx) and particulate matter (PM) standards. However, we would support a change to the final warranty requirements as outlined below. (Manufacturers of Emission Controls Association (MECA))

32. Comment: With less than one year before implementation, our members have made hundreds of millions of dollars in investments and are working with their OEM customers to integrate technologies that will meet upcoming emission requirements. We estimate the cost of the hardware to meet these standards along with higher durability requirements (without added warranty requirements) for a Class 8 truck to be $1,500 to $2,050, which is in close agreement to EPA's estimate of $2,316 in the rulemaking.[2] These numbers have been corroborated by an independent cost analysis by the ICCT.[3] Based on the average

purchase price of a class 8 sleeper tractor of $160,000 (calculated from $145,000 in 2021 and 2.5% annual increase)[4], the incremental cost is only 1.5% of the purchase price of a new truck.

As noted above, the hardware costs were estimated without inclusion of new warranty requirements, also finalized by EPA for MY 2027 and later trucks. There is greater disagreement on the costs associated with meeting the extended warranty provision of the Heavy-Duty NOx Rule, with some estimates for longer warranty being equal to multiple times the cost of hardware.[5] The difficulty in estimating warranty costs is due to considerable uncertainty about the state of vehicles during the time of operation beyond today's 100,000-mile warranty. Much of the data on warranty claims and repairs as well as vehicle use characteristics originate from the time when the first owner operates a vehicle while data from repairs made by second and third owners is very limited. Without warranty claim information beyond 100,000 miles, it is difficult for suppliers to estimate the cost impact of a warranty period out to 450,000 miles.

We believe revising the warranty requirements to the level required of today's trucks (100,000 miles)—while retaining the 2027 emission limits—can significantly address the cost concerns of fleets that operate these trucks for their business. Any fleets wanting longer warranties can purchase extended warranties already offered by OEMs for their customers. MECA's cost analysis, which was provided to EPA and corroborated by several other studies, demonstrates the impact of reconsidering only the warranty requirements (i.e., keeping today's warranty) while retaining the model year 2027 and later criteria pollutant limits. We estimate this will result in 50-65% lower per-vehicle costs than originally projected, while achieving public health goals through the previously finalized cost effective and achievable emission standards in the Heavy- Duty NOx Rule. (MECA)

33. **Comment**: MECA urges CARB to move forward to finalize the adoption of these amendments to align 2027 and later model year requirements with EPA's Clean Truck Rule to ensure the timeline to introduce these engines is retained. (MECA)

34. **Comment**: In light of the actual status of global motor vehicle NOx emissions, it is recommended to appropriately relax California's NOx emission limits, or consider a phased approach that gives foreign manufacturers a longer transition period to adapt. (China WTO/TBT National Notification & Enquiry Center)

35. **Comment**: It is recommended to extend the phased implementation time of the above form (2-3 years), from 2027 to 2030, from 2027-2030 to 2030-2033, and from 2031 to 2034, providing sufficient preparation time for manufacturers and the transportation industry. (China WTO/TBT National Notification & Enquiry Center)

36. **Comment**: It is recommended to clearly state the specific technical details of alignment with federal standards, and allow the use of EPA-accepted test data and certification results to avoid repeated testing and certification. At the same time, it is recommended to establish an "equivalence certification" mechanism to simplify or exempt some CARB certification requirements for foreign engines that have passed EPA certification. (China WTO/TBT National Notification & Enquiry Center)

37. **Comment**: The proposal should clarify the specific 'alternative methods' for collecting new vehicle owner information under the EWIR revision**.** (China WTO/TBT National Notification & Enquiry Center)

(f) Encourage the Adoption of Renewable Natural Gas (RNG)

38. **Comment**: Due to CARB's leadership, the cleanest available ICE trucks on the road today are those that are certified to the Heavy-Duty Omnibus 50 mg standard for NOx, especially if they also operate on renewable fuels like RNG. According to Energy Vision's March 2025 report, A Path to a Healthier America: Ditching Older Diesel Trucks, RNG trucks deliver 88% of the benefits of electric vehicles. Further, a more recent report by UC Riverside's Center for Environmental Research and Technology goes even further in stating the benefits of a complete transition to zero emissions after 2027 would only provide an additional 5.1% emissions reduction. It is for these reasons and more that we believe CARB should further encourage the adoption of this technology while ZEV platforms and supporting infrastructure develop over time. (Clean Energy)

39. **Comment**: In the earlier stages of the light-duty passenger ZEV regulation, natural gas vehicles enjoyed an Advanced Technology Partial Zero Emission Vehicle (ATPZEV) credit as they helped to advance Fuel Cell Electric Vehicles (FCEV) fuel storage and delivery. We still believe this is the case for heavy-duty truck operations. Further, the successful distribution of RNG in the transportation space for Omnibus-compliant trucks will help develop renewable hydrogen fueling infrastructure as California makes its transition over time toward ZEVs. We therefore strongly urge the Governing Board to include low NOx trucks running on RNG to be included in the Omnibus regulation's "NZEV" definition. (Clean Energy)

40. **Comment**: At the October Board meeting, staff presented that federal Congressional Review Act actions blocking ACT, Advanced Clean Cars II, Omnibus, and Clean Truck Check will increase NOx emissions by 175 tons per day (a 40% increase in NOx emissions) by 2037, resulting in greater than 14,500 cardiopulmonary deaths, over 5,000 hospitalizations, more than 6,700 emergency room visits, and increased cancer risk in West Oakland, South Central Fresno, and East Los Angeles.

    They also highlighted the potential consequences if California fails to demonstrate transportation conformity and SIP requirements (i.e., federal highway funds withheld and a possible FIP implementation). This increase in NOx emissions cannot be addressed by regional air districts alone. In fact, regional air districts often bring to their boards proposed regulations that reduce emissions in stationary sources by .5 to 3 tons per day. We clearly need a mobile source strategy that promotes both ZEV and clean combustion trucks to reach attainment. (Clean Energy)

41. **Comment**: While we appreciate the importance of the June Executive Order asking CARB to double down on its drive to promote ZEVs in the light-, medium-, and heavy-duty vehicle sectors, it is of equal, if not of greater importance, to make sure we recapture the benefits of Omnibus.

    1. Establish a 35mg Optional Low NOx standard and re-establish the 20mg Optional Low NOx Standard. We urge CARB to send a strong policy signal that encourages manufacturers to produce cleaner internal combustion engines.

    2. Establish a strong policy signal that provides fleets the certainty they need to buy the cleanest internal combustion engines. Fleets are highly hesitant to purchase cleaner heavy-duty trucks that come with an incremental cost because they fear losing their useful life

protections of that vehicle in the future, as experienced in the now-repealed ACF. (Clean Energy)

42. **Comment**: We urge CARB to issue a public statement or FAQ that clearly states trucks which meet or exceed the Omnibus' 50mg standard through at least 2029 will maintain their full useful life protections as defined in SB 1, regardless of any future regulatory actions made by CARB. (Clean Energy).

Agency Response to Comments A.1 to A.42: The notice of public hearing issued on September 23, 2025, included amendments to the Omnibus regulation. Subsequently, a notice of postponement for the Omnibus amendments was issued on November 7, 2025; the Omnibus amendments were not included in the notice of rescheduled hearing, nor heard at the March 26, 2026 hearing. Therefore, those Omnibus amendments were not part of the item considered and approved at the March 26, 2026 CARB hearing, and no hearing to consider those amendments was scheduled. Thus, CARB is not providing any further responses to these comments which are no longer relevant to the rulemaking proposal.

B. Comments on the Proposed Amendments to the LCFS Regulation

As noted above, the proposed amendments to the LCFS regulation were separate from and are not proceeding with this permanent adoption of the Emergency Vehicle Emissions Regulations rulemaking action. Nonetheless, for completeness and informational purposes, CARB staff is now including summaries for comments related to the proposed LCFS amendments that were received in response to the 45-Day Notice of Public Hearing issued on September 23, 2025.

(a) Objections to LCFS proposal

1. **Comment**: Combustion Power Is Incompatible with California's ZEV trajectory. CARB proposes to add "linear generator[s]" to section 95488.8 of the LCFS regulation and to allow book-and-claim biomethane to be matched to fossil methane burned in linear generators through December 31, 2035. This change would provide far greater subsidies for charging that is powered entirely by combustion than for charging that is powered by California's increasingly clean electric grid or by fully powered on-site zero-emission resources like solar and batteries. There is no basis for this change, as there is no evidence that the linear generators would displace higher-carbon grid electricity or reduce overall emissions. We urge the Board to reject this misleading, pro-combustion accounting scheme. (Earthjustice)

2. **Comment**: California's truck rules (i.e. Advanced Clean Trucks and Advanced Clean Fleets) and Executive Order N-79-20 commit the state to a zero-emission trajectory for medium- and heavy-duty vehicles. Creating a new combustion-based LCFS crediting pathway contradicts those investment and creates a back-door gas pathway that dilutes ZEV charging investment and complicates grid-integrated signals. This undermines CARB's goal of reducing combustion-based emissions. (Earthjustice)

3. **Comment:** Appendix F, the Supplement to the Initial Statement of Reasons, states that the "proposed amendments to the LCFS support the State's climate and air quality targets."1 Yet just two sentences earlier, CARB notes that in order to meet its carbon neutrality goals, it must "drive down fossil fuel demand in transportation" and "deploy zero-emission

technology wherever feasible..."2 The proposed changes run counter to these objectives, subsidizing paper environmental offsets in the form of book-and-claim biomethane credits, increasing combustion, and shifting LCFS funding away from grid improvements for another 10 years. (Earthjustice)

4. **Comment:** What is more, because the proposal will result in more book-and-claim biomethane projects, the number of LCFS credits will increase, potentially driving down the credit price, which directly affects funding to California's electric utilities, who are required to spend the money from their LCFS credits on furthering transportation electrification. Staff fails to analyze this highly consequential, deleterious effect on zero-emissions pathways. (Earthjustice)

5. **Comment:** Appendix F also contains no estimate of the LCFS credits that linear generator projects paired with biomethane credits could generate, nor any sensitivity on emissions or price impacts. Appendix F asserts (without data) that the amendment is "not expected" to add new units and "not expected" to change NOx/PM, because some generators already exist.3 This assertion defies logic and lacks evidentiary support because the changes, if adopted, would provide lucrative subsidies for methane-fired linear generators without any enhancement of crediting for zero-emitting power sources such as wind and solar, thereby tilting the playing field in favor of emitting resources. (Earthjustice)

6. **Comment:** Further, Staff's proposal would stymie innovation of multiple zero-NOx options that are in direct competition with linear generators, thereby disrupting a competitive market for temporary power solutions for EV charging stations that await grid connection.4 Staff fail to acknowledge these perverse market signals and has not published a scenario analysis of likely deployment, credit volume per megawatt (MW), and displacement effects on vehicle charging. Staff's failure to disclose these impacts deprives the public and the Board of critical information about the effects of the proposed changes. (Earthjustice)

7. **Comment:** Importantly, the California Energy Commission has consistently described linear generators as backup or load management power systems for industrial uses like data centers, warehouses, grocery stores, and factories, not as dedicated EV charging resources.5 Therefore, crediting these units as "EV charging infrastructure" risks subsidizing industrial behind-themeter generation rather than supporting genuinely dedicated zero-emission fueling infrastructure. Further, even under optimal conditions, linear generators convert methane to electricity at about 40-50% efficiency.6 This is significantly lower than renewable electricity delivered through the grid. Labeling such units as low-carbon fueling options is therefore misleading. Incentivizing their operation through LCFS crediting would divert investments needed to truly decarbonize California' grid. (Earthjustice)

8. **Comment:** The proposed crediting pathway revisits an issue the Board explicitly addressed during the 2024 LCFS rulemaking. At that time, the Board recognized that the existing LCFS crediting system provides outsized financial benefits to dairy manure projects, and directed staff, through Resolution 24-14, to develop a livestock methane regulation.

   By allowing biomethane to be booked-and-claimed for electricity in fossil-methane linear generators, the proposal would expand the same mechanism the Board sought to sunset. Most of the additional crediting would likely be generated from out-of-state livestock projects that do not reduce California's methane emissions. If implemented, the proposed change would allow even more dairy methane molecules to earn LCFS credits

at below -300 gCO2e/MJ. It thus directly contradicts both the Board's 2024 direction and the state's objective of transitioning away from combustion in the transportation sector. (Earthjustice)

9. **Comment:** Further, this policy could incentivize both expanding herd sizes and warming of manure lagoons to increase methane production.8 This approach: Violates Board direction to realign biomethane policy under a separate methane rule; Circumvents transparency, since this provision was not discussed during the 2024 LCFS amendments or through public workshops to interested methane, dairy, and LCFS parties; Rewards polluting practices by continuing to pay emitters for basic pollution control that other methane-emitting industries have long been required to undertake without subsidies; and Distorts credit markets, diverting LCFS value from zero-emission resources to legacy combustion systems. (Earthjustice)

10. **Comment:** Additionally, environmental justice advocates have long noted that large dairy operations incentivized under the LCFS create a range of local harms, including groundwater contamination, odor, and other air-quality and public health impacts. Other jurisdictions have recognized these potential harms and have adopted safeguards to prevent crediting for projects that may violate environmental requirements such as air quality or waste management rules. For instance, Washington's LCFS-equivalent program expressly prohibits avoided methane emissions crediting from any project in violation of other regulations.9 New Mexico's Environmental Department has proposed similar safeguards in its forthcoming LCFS-equivalent program, clarifying that a project in violation of other regulations may not generate additional credits.10 CARB's proposal lacks any comparable protection, leaving open the possibility that the LCFS could subsidize digester projects that are out of compliance with other standards. Together with the book-and-claim allowance, this gap creates a clear loophole: Projects unable to qualify in other jurisdictions because of environmental violations could instead seek crediting under California's LCFS. This omission further undermines the integrity and fairness of California's program. (Earthjustice)

11. **Comment:** First, CARB references "previously identified significant effects" from the 2024 LCFS Environmental Impact Analysis (EIA) as justification for not analyzing impacts on the current proposal. Yet that analysis did not assess the effects of linear generator crediting that is currently proposed. Linear generators release harmful pollutants, including volatile organic compounds and NOx.14 Indeed, linear generators are more polluting than many of the gas-fired generators that power the California grid because the South Coast Air Quality Management District applies a less stringent NOx standard to them than the one that applies to combined cycle gas generators. Thus, installing additional generators or running existing generators more often will increase emissions. CARB asserts that "there will be no change to existing conditions," given "the anticipated credit price," but its assumed credit prices are unrealistically low. In fact, the LCFS regulation's auto acceleration mechanism could lead to a price of $112.15 CARB fails to demonstrate that this price will not lead to increased linear generator operation compared to grid connected charging through 2035. Further, given the many variables that impact the LCFS credit prices and their dependence on factors outside of CARB's control, CARB cannot predict with "certainty" that its price assumptions are correct and that there is definitively "no possibility" of significant effects. CEQA's common sense exemption is reserved for a narrow set of circumstances where significant effects are categorically out the question. Given the volatile nature of the complex LCFS credit market, those conditions do not exist here. CARB's conclusion that

credit prices will never rise to a level that incentivizes increased emissions from linear generators is unsupported. (Earthjustice)

12. **Comment:** Second, the EIA did not adequately assess the impact of avoided methane and book-and claim crediting even though ample evidence in the LCFS record demonstrates that avoided methane crediting has encouraged the expansion and concentration of large livestock operations. CARB therefore cannot rely upon the faulty EIA here and claim that there is "no possibility" of significant effects from the proposed change. The current proposal does not shift crediting opportunities from one methane source to linear generators; it adds to them. Therefore, there is no "certainty" that no significant effects will occur, as CARB claims. Indeed, CARB cannot have it both ways: either the proposed change will increase power generation for EV charging through use of emitting linear generators and biomethane crediting and thus increase air pollution and other environment harms, or the proposed change will do nothing and thus lacks justification. (Earthjustice)

13. **Comment:** Third, CARB has failed to evaluate the energy impact of the proposed changes, in violation of CEQA.16 As explained above, Appendix F lacks any analysis of likely linear generator deployment, credit volume per MW, and displacement effects on genuine zero-emissions EV charging. It fails to address the flawed market signal it will send to encourage buildout of fossil-fueled power generation to the detriment of renewables and other zero-NOx alternatives available in the market. This failure deprives the public and the Board of critical information about the short and long-term energy impacts of the proposed changes. (Earthjustice)

14. **Comment:** Fourth, even if the prior EIA were adequate (which it is not), new information of substantial importance has emerged since it was certified in 2024. In January 2025, US Treasury Department explicitly acknowledged that crediting systems can incentivize more methane generation by shifting manure to lagoons, increasing herd sizes, and heating the manure.17 These have the opposite effect of the subsidy, which was to mitigate an existing methane problem, not to create new sources of pollution. Under Public Resources Code section 21166 and CEQA Guideline section 15162, CARB must reevaluate its analysis in light of this new evidence, rather than rely on a contested, outdated record.18 Whenever a public agency must make a further discretionary decision to carry out or approve a project for which it has previously issued an approval, the agency must determine whether further environmental review is required due to changes in the project, changes in circumstances, or new information.19 Here, CARB has proposed significant project changes after the close of public comment and certification of an EIA. Significant project changes require CEQA review when, as here, the changes could result in new and worsened environmental impacts that have not been analyzed in an environmental review document. (Earthjustice)

15. **Comment:** CARB has not articulated a rational need for the Proposed Amendments. Nor has it justified its failure to conduct a full environmental review of the foreseeable adverse impacts to the environment that will arise from the Proposed Amendments. Adoption of the Proposed Amendments would therefore violate CARB's environmental review obligations as well as the California Administrative Procedure Act. (Defensores)

16. **Comment:** CARB's stated need for the Proposed Linear Generator Amendments is to increase the near-term availability of low-carbon intensity electricity for electric truck fueling. But CARB proposes to accomplish this not by increasing the actual production of low-carbon intensity electricity in California or making it more accessible to trucks, but instead

by allowing the use of illusory, non-additional, inflated credits from factory farm biogas operations to reduce carbon intensity on paper. In other words, CARB proposes an accounting trick. Without real, additional, and verifiable reductions in carbon intensity, CARB is not meeting its stated need for the Proposed Amendments. (Defensores)

17. **Comment:** CARB summarily concludes that there will not be changes to NOx or PM because the linear generators are already operational at sites that may choose to use book-and-claim accounting to match biomethane credits with fossil gas.5 In other words, it looks solely at the site of the linear generator to assess air impacts, ignoring entirely the air quality impacts associated with the production of factory farm gas for which book-and-claim accounting would be available. CARB cannot have it both ways by taking advantage of avoided methane crediting and factory farm biogas credits to reduce the carbon intensity of electricity from linear generators while ignoring where those credits originate. As Commenters have explained in detail, increased factory farm gas production causes increased local air pollution in several ways.6 The most likely effect of the Proposed Linear Generator Amendments is to increase incentives for factory farm gas credit generation, and CARB cannot ignore associated air quality impacts. (Defensores)

18. **Comment:** Next, CARB concludes that few linear generators will utilize book-and-claim accounting of biomethane because the costs of procuring biomethane compared with revenue generation by current and recent credit prices are insufficient to change the status quo. First, data from the real world indicate that CARB's conclusion that LCFS credit prices in the $67 range are not high enough to encourage procurement of factory farm gas credits in response to the Proposed Linear Generator Amendments is incorrect. Looking to factory farm gas credit generation generally, production and credit generation continued to grow in 2024 even while weekly average credit values dipped from approximately $75 dollars to approximately $62 dollars.7 Therefore, being able to sell credits at this price has been a sufficient motivator generally, and CARB has failed to explain why the Proposed Amendments' creation of a new use of those credits would be any different. Furthermore, relying on historic credit prices is not a sound methodology considering that the 2024 LCFS Amendments establish increased stringency standards that CARB specifically intended to increase credit prices between now and 2035. Finally, CARB's effects analysis is inconsistent in at least two ways. It claims on the one hand that the rule change will provide another low-carbon fueling option, but on the other hand, based on the current economics of the LCFS, CARB staff does not anticipate significant usage of book-and-claim accounting of biomethane for linear generators.8 CARB justifies the rule change by saying it will encourage more use of biomethane and explains away environmental impacts by saying that operators of linear generators are unlikely to utilize the new rule. Similarly, CARB's stated need for the Proposed Amendments is that it will potentially provide a near-term solution to accelerate prospective electric vehicle charging sites.9 That statement suggests that CARB anticipates increased usage of linear generators and/or specifically increased usage of linear generators utilizing book-and-claim accounting of avoided methane crediting at factory farms. However, CARB then claims that the economics of the LCFS will not support significant use of book-and-claim accounting of factory farm gas used in linear generators and that there will be no increase in the production of factory farm gas to satisfy this newly authorized use of book-and-claim.10 CARB justifies the Proposed Amendments by claiming that they may meet the need to accelerate development of electric truck charging through more permissive use of book-and-claim and then explains away environmental impacts by saying that no factory farms will generate credits and no

linear generator operators will purchase LCFS credits or build new generators in response to the newly authorized use. Both statements cannot be true. (Defensores)

19. **Comment:** If CARB does not withdraw the Proposed Amendments, it must at least conduct a full environmental analysis. CARB contends that the rule changes are exempt from CEQA under the common-sense exemption because "it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment."11 CARB is wrong. To the contrary, the Proposed Amendments would provide yet another incentive to increase production of factory farm biogas. As explained above, that will result in foreseeable adverse environmental effects that CARB must analyze and seek to mitigate. CARB cannot hide behind arbitrary and inconsistent rationales to ignore the consequences of the Proposed Amendments. Moreover, CEQA requires agencies to provide sufficient "factual support" for use of the common-sense exemption, which is "'all the more important where the record shows, as it does here, that opponents of the project have raised arguments regarding possible significant environmental impacts."12 By failing to mention, let alone provide substantial evidence to dispute, the overwhelming evidence cited by Commenters demonstrating the adverse environmental impacts associated with book-and-claim accounting of factory farm gas, CARB violates its duty under CEQA. (Defensores)

20. **Comment:** CARB also attempts to dodge its responsibility to analyze environmental impacts by relying on its prior analysis during the 2024 LCFS Amendments.13 CARB references "previously identified significant effects" as apparent cover for failing to analyze any here. CEQA authorizes agencies to forego environmental analysis for a project if that project's environmental impacts were adequately considered in a previously certified Environmental Impact Analysis (EIA), and no new information of substantial importance not known at the time the prior EIA was certified shows the project will have new, or substantially more severe impacts not analyzed in the prior EIA.14 Here, however, CARB's prior analysis was fatally and fundamentally flawed when it came to factory farm biogas, avoided methane crediting, and incentivizing factory farms to get bigger and pollute more. Commenters are currently suing CARB over that very analysis and therefore oppose CARB's reliance on it to ignore even more environmental harm caused by the LCFS. CARB's continued failures to address or even acknowledge the significant problem with how the LCFS incentivizes factory farm biogas have thoroughly poisoned the well it now draws from to support these Proposed Amendments. (Defensores)

21. **Comment:** Additionally, since CARB adopted the EIA for the 2024 LCFS Amendments, new information of substantial importance further confirming the link between avoided methane crediting and the expansion of factory farms has surfaced. Notably, on January 15, 2025, the Department of Treasury promulgated final regulations implementing the credit for production of clean hydrogen and certain provisions of the energy credit, as well as final regulations regarding the clean electricity production credit and the clean electricity investment credit, both of which were established by the Inflation Reduction Act. In that rulemaking, Treasury explains plainly how factory farms can increase their methane pollution to take advantage of lucrative crediting, including by "shifting management practices for existing quantities of manure from land application to lagoon, thereby significantly increasing methane generation," and "increasing the overall numbers of animals raised."15 CEQA requires CARB to re-evaluate its prior analysis in light of this new information. (Defensores)

(b) Recommendations for modifications to LCFS proposal

22. Comment: A critical component of California's 2022 scoping plan is the use of zero-carbon electricity to power battery electric vehicles; the use of zero-CI electricity eliminates in-state greenhouse gas emissions covered by the AB32 inventory. Under the conditions analyzed by CARB in the ISOR supplement, zero-CI electricity used for heavy-duty vehicle charging would generate $3.02 per diesel gallon equivalent of LCFS credits in 2026. Linear generators, which rely on natural gas, are not considered in the scoping plan, and while use of these generators to charge electric vehicles would reduce in-state GHGs due to the greater efficiency of BEV powertrains, it would not eliminate GHGs entirely. Under the current LCFS program this benefit is already appropriately recognized; under the conditions analyzed by CARB, the linear generator pathway would receive $2.08 per diesel gallon equivalent (approximately $0.06/kWh) worth of LCFS credits —a significant incentive, but less than the zero-carbon electricity pathway. The proposed changes would upend the current incentive structure, creating a strong preference for linear generators. Again, using CARB's assumptions, book-and-claim crediting would allow the linear generator pathway to generate $8.13 per diesel gallon equivalent of LCFS credits, a $5 per gallon premium over the zero-carbon electricity pathway. (International Council on Clean Transportation)

23. Comment: The proposed changes could also contribute to the financial case for deployment of new natural gas infrastructure. For example, if by 2030 LCFS credit prices rise to $90 per MT and RNG procurement costs fall to $35 per mmBTU—a plausible scenario—linear generator operators would have negative fuel costs, generating $0.02 in revenue for every kWh of electricity supplied to vehicles. In contrast, under these same conditions, grid connected facilities would likely incur electricity costs on the order of $0.11 per kWh, even after the application of LCFS credits. (International Council on Clean Transportation)

24. Comment: The proposal is missing an assessment of air quality, public health, and environmental impacts, particularly impacts on disadvantaged communities. The proposal avoids this analysis by suggesting no increase in linear generator deployment. In light of the uncertainty in future credit values, it would be prudent to assess a range of credit values, including those that would facilitate growth of linear generator deployment, and the subsequent air quality implications of this growth. Despite the lower emissions of linear generators relative to reciprocating engines, linear generators do not eliminate emissions, and there is likely to be a significant difference in the air quality impacts of widespread linear generator operation compared to grid-connected HDV charging through 2035. The likely co-location of linear generator deployment in urban industrial and residential zones with high freight activity and severe grid bottlenecks presents additional concerns. The proposal does not answer the extent to which expansive linear generator deployment would be cited in disadvantaged communities nor answer whether such deployment would have any impact on their air pollution burden. (International Council on Clean Transportation)

25. Comment: In its proposal, CARB cites Board Resolution 23-13, which directs staff to prioritize policy discussions related to SB 1383. Specifically, SB 1383 is intended to empower CARB to implement a strategy to reduce its short lived climate pollutant emissions, including a target of reducing statewide methane emissions by 40% in 2030 relative to a 2013 baseline. However, expanding book-and-claim crediting through this provision does not support the goals of SB 1383. Though the Board explicitly directed CARB in its 2024 resolution to initiate a livestock methane regulation, this proposal instead

expands the current lucrative subsidy. While the existing pathway for RNG-to-electricity incentivizes in-state farms and landfills to capture and combust methane, the proposed revision opens the system to allow out-of-state producers to generate sizeable credits with no tangible contribution towards California's methane targets. Currently, apart from fuel cell generators, RNG based EV charging pathways require a direct connection between the RNG source and a generator feeding electricity into the California grid. This requirement is an 8 important safeguard. Due to the combined impact of avoided methane credits and the greater energy efficiency of electric vehicles, the RNG-EV pathway can generate significantly more LCFS credits than other fuel pathways. The existing RNG-to-electricity deliverability requirement ensures that these credits directly address California GHG emissions. CARB's proposal would remove this safeguard. As we have discussed in prior comments,6 book-and-claim avoided methane credits direct California's limited transportation decarbonization resources towards out of-state livestock operations while not displacing in-state fossil fuel consumption. This is exacerbated by the lack of additionality to determine whether methane avoidance is attributable to the LCFS program. Expansion of book-and-claim to linear generators will create more opportunities for out-of-state RNG suppliers to receive LCFS support, and if linear generators became widely deployed at charging sites, the impact could be sizeable relative to the scale of the LCFS program. (International Council on Clean Transportation)

26. Comment: As described in the ISOR supplement, the installation of linear generators at charging sites is already supported by the existing LCFS framework. Due to the challenge of establishing grid connections, these installations can help deliver immediate charging opportunities where existing natural gas infrastructure is available. However, because linear generators ultimately require a natural gas input, these installations are not compatible with a decarbonized economy. In contrast, grid connected charging infrastructure aligns transport decarbonization with the state's strong commitments to zero carbon electricity generation. To directly accelerate the deployment of grid connected charging infrastructure, CARB could instead propose LCFS changes to support the interim solutions that utilities and their customers are already exploring to address grid constraints and accelerate energization timelines. (International Council on Clean Transportation)

27. Comment: As of December 2024, according to California investor-owned utilities, pilots of pre-agreed, static load control management systems exist for Pacific Gas and Electric (PG&E) and for Southern California Edison (SCE) through their Load Control Management System. Investor-owned utilities are meanwhile developing dynamic load control management with Distributed Energy Resource Management System (DERMS) to enable real-time load control. Utilities are also experimenting with temporary mobile solutions. These include re-deployable mobile battery storage and mobile substations. In some cases, utilities can invest in stationary energy storage and stationary renewable generation sources, which provide long-term grid benefits through reduced need for grid buildout and improved resiliency after individual projects' conclusion. CARB investments through the Low Carbon Fuel Standard may already support utility investments in these solutions through expected credit revenue allocated through the Clean Fuel Rewards Program and its requirement that minimum allocations be made to equity-oriented projects such as those that investment in utility grid solutions. Utilities can also support near-term investments by providing investment grade grid hosting capacity data. Commercial charging providers can avoid grid bottlenecks with higher quality, timely information that communicates where capacity already exists on the grid. But these customers face significant barriers to

accessing this information, introducing significant investment risk in locations where the grid capacity is unknown. CARB staff could work with the PUC to encourage utilities to make available investment-grade information on grid hosting capacity that improves upon the less reliable data utilities current publish. CARB could further support utilities or third party companies with fleet advisory services designed to steer customers to grid locations where capacity already exists or where new capacity is due to come online. (International Council on Clean Transportation)

28. **Comment**: We want to emphasize the importance of Table 8 inclusiveness of linear generators as well as part of the update. In prior comments we had recommended adding a -300 CI temporary pathway for fuel cells and linear generators but only fuel cells were included in response. As we emphasized in prior comments,1 linear generators offer a scalable, low-emission, and rapidly deployable solution for powering heavy-duty fleet charging hubs, which is critical for meeting California's climate and air quality goals. (Prologis)

29. **Comment**: The Draft Rule would allow book-and-claim RNG accounting for linear generators, but only through December of 2035. This sunset for book-and-claim accounting is arbitrary, poorly justified and unnecessary. It is unclear as to what CARB staff believe these linear generators should do post 2035 (e.g., shift to another form of accounting, stop using RNG, shut down?). Book-and-claim accounting is the globally accepted framework for tracking environmental attributes of gaseous fuels, analogous to the use of Renewable Energy Certificates (RECs) in electricity markets.4 Book-and-claim accounting ensures verified environmental benefits (e.g., GHG reductions) are properly assigned to the buyer of the RNG that provides the financial incentive to construct and operate the RNG project, regardless of unavoidable comingling of fossil and renewable gas in pipelines. The linear generator pathway demonstrates the importance of flexible accounting mechanisms for both renewable gas and power. RNG suppliers are smaller sources of gas, each linear generator's gas demand is individually modest and distributed, and EV load is also often distributed. Only through flexible accounting mechanisms—like book-and-claim for both gas and power—can this useful combination of technologies be properly recognized and incented under the LCFS. We do not believe that a more appropriate accounting method will be developed by 2035, and thus the proposed sunset in the Draft Rule is inadvisable. That said, we are happy to engage with CARB staff on potential future alternative accounting methods. (RNG Coalition)

30. **Comment**: The CARB staff analysis in the ISOR of RNG adoption for use in linear generators is surprising. The analysis states that, "staff do not anticipate significant utilization of indirect supply of RNG matched to fossil natural gas nor increases in deployment of linear generators because the additional costs of procuring RNG in place of fossil natural gas would be high, and that in the absence of similarly high credit prices, these additional RNG procurement costs would not be fully compensated by the additional LCFS credit revenue that results from indirectly supplying RNG for linear generators." Some RNG project developers read this statement and conclude that CARB's intent is to not incentivize the use of RNG in linear generators. We recommend that CARB find ways to retract/restate this potentially problematic framing. If LCFS prices do not incent additional RNG adoption, California will not be able to reach statutory goals for methane reduction from organic wastes. Other key tools promoting methane capture from organic waste to power production are being removed or degraded. For example, the California Public Utilities Commission appears to be planning to sunset the BioMAT program.5 Federal tax

credits, such as the Investment Tax Credit and Production Tax Credit, that have historically promoted renewable power projects are no longer available. (RNG Coalition)

31. **Comment**: Anaerobic digestion projects are a critical element of the infrastructure matrix necessary to achieve organic waste diversion and responsible biosolid management. Because of the expense and emissions of transporting organic matter and compost, anaerobic digestion can often be the only economically and environmentally feasible way to manage organic waste in urban environments. However, this technology relies on a stable, well-paying market for the renewable natural gas (RNG) it produces. The proposed amendments to LCFS expand the market for this RNG and help support the mid transition. However, this amendment only helps in-state organics diversion if it applies exclusively to RNG produced in California. For this reason, we request the draft changes be amended to only allow this RNG LCFS credit pathway for in-state RNG producers. (CR&R Environmental Services)

32. **Comment**: Ocean Pacific supports the proposed amendments to the Low Carbon Fuel Standard to allow for book-and-claim accounting of RNG to produce electricity for electric vehicle charging, if the electricity is generated using a linear generator. However, we believe that the ability to utilize book and claim for RNG should apply to other onsite electricity generation options, without picking winners and losers. Ocean Pacific is currently considering the deployment of a fast and cost-efficient option to expand electricity charging capacity at targeted locations by installing natural-gas-powered generators on site and bypassing electrical grid connection. Currently, the number of heavy-duty charging stations in California is well below the state's goal to meet the current charging demand. For instance, according to AB 2127 Second Electric Vehicle Charging Infrastructure Assessment1, Kern, Merced and Riverside counties collectively have only 20% of the charging stations needed as of 2025. A major hurdle that negatively impacts the rate at which stations are being put into service is the lack of adequate utility power infrastructure. Utility power poses many challenges to station developers, including:

    - Long delays in project development (up to several years)
    - Less cost-effective
    - More complex local permitting

    Ocean Pacific is proposing to utilize onsite power generation and pipeline natural gas to overcome these hurdles. Primarily, developers can take advantage of widespread existing CNG infrastructure that has been in place for decades and is funded through state and local grants.

    Ocean Pacific is proposing to utilize onsite power generation and pipeline natural gas to overcome these hurdles. Primarily, developers can take advantage of widespread existing CNG infrastructure that has been in place for decades and is funded through state and local grants. If CARB accepts this methodology as a fuel pathway, it will be greatly beneficial to have access to book and claim accounting where renewable natural gas can be directed beyond the use of fossil natural gas. With the current LCFS natural gas market being approximately 95% renewable natural gas2, any additional expansion would need to occur through the deployment of more natural gas fleets to replace LD and HD fossil-based options. However, if this does not occur, future expansion can still be realized in the conversion of natural gas to electricity in more than just linear

generators in a timely and efficient manner of deployment. Finally, this additional incentive would send a strong single to promote fast charging for heavy-duty vehicles and give confidence to developers that they will not forfeit grid electricity-based LCFS credits should they switch to onsite power options. (Ocean Pacific Energy Company)

(c) Bioethanol

33. Comment: As such, we urge CARB to look to bioethanol to help achieve the criteria pollutant reductions it seeks through the Proposed Rules. The first step in doing so is to provide guidance supporting the quick and efficient adoption of E15 in the state following the passing of AB 30. Multiple studies show that blending bioethanol into the transportation fuel supply results in significantly lower lifecycle GHG emissions compared to petroleum-based gasoline. For example, studies show that emissions reductions attributable to bioethanol range from 41 to 46 percent compared to emissions associated with petroleum-based gasoline. According to the Department of Energy's Argonne National Laboratory ("ANL"), typical corn ethanol provides a 44 percent GHG reduction compared to gasoline.2 Similarly, researchers affiliated with Harvard University, MIT, and Tufts University conducted a meta-analysis showing that corn ethanol as of 2021 offers an average GHG reduction of 46 percent compared to gasoline. (Poet)

34. Comment: In addition to GHG benefits, a recent analysis from leading national experts found air quality and public health benefits associated with higher biofuel blends in gasoline, including reductions in PM, carbon monoxide ("CO"), and total hydrocarbons ("THC").4 This study was the first large scale analysis of data from light-duty vehicle emissions that examines real-world impacts of bioethanol-blended fuels on regulated air pollutant emissions. The study found that CO and THC emissions were significantly lower for higher bioethanol fuels for port fuel injected engines under cold-start conditions. The study found no statistically significant relationship between higher bioethanol blends and NOx emissions. With regard to PM, studies show that emissions decrease by 15 – 18% on average for each 10% increase in ethanol content under cold-start conditions.5 A 2022 University of California Riverside study funded in part by CARB assessing the impact of E15 on air pollutant emissions for model year vehicles 2016 to 2021 was consistent with these results, finding that replacing E10 with E15 reduced PM emissions by 18%, with cold-start emissions being reduced by 17%.6 Analyses by professors at Tufts University show that the associated health benefits may be most significant in disadvantaged communities in areas of high traffic density and congestion. (Poet)

35. Comment: The criteria pollutant and GHG reduction benefits associated with bioethanol are clear, as is the undeniable fact that internal combustion engine vehicles relying on liquid fuels will remain in California's transportation fuel mix for decades still. With the passage of AB 30, providing swift guidance to the state to implement E15 will help CARB achieve the criteria pollutant reductions sought by the Proposed Rules. Accordingly, POET urges CARB to look towards biofuel as a way to achieve its criteria-pollutant and GHG reduction goals and provide E15 guidance as quickly as possible. (Poet)

Agency Response to Comments B.1 to B.35: The notice of public hearing issued on September 23, 2025, included amendments to the LCFS regulation. Subsequently, a notice of postponement for the LCFS amendments was issued on November 7, 2025; the LCFS amendments were not included in the notice of rescheduled hearing, nor heard at the March 26, 2026 hearing. Therefore, those LCFS amendments were not part of the item considered

and approved at the March 26, 2026 CARB hearing, and no hearing to consider those amendments was scheduled. Thus, CARB is not providing any further responses to these comments which are no longer relevant to the rulemaking proposal.

III. Errata

CARB staff has found and is now correcting several minor errors in the FSOR, as described below.

A. Pages 3-4

Original:

This FSOR also contains a summary of the comments received by CARB on the proposed regulatory action during the rulemaking process and CARB's responses to those comments. Because this rulemaking action addresses only the Emergency Vehicle Emissions Regulations, only comments relevant to this specific rulemaking item are summarized and discussed in this FSOR. Comments pertaining to the proposed amendments to the Omnibus regulation or the LCFS regulation are outside the scope of this rulemaking action and therefore are not addressed in this FSOR.

Corrected:

This FSOR also contains a summary of the comments received by CARB on the proposed regulatory action during the rulemaking process and CARB's responses to those comments. The proposed amendments to the Omnibus regulation and the LCFS regulation were not part of the rescheduled March 26, 2026 hearing; however, for completeness and informational purposes comments on those items are summarized and responded to in the FSOR addendum.

B. Page 6, Footnote 15

Original:

[15] *See* Public Hearing to Consider the Proposed Amendments to the On-Road Heavy-Duty Engine and Vehicle Omnibus, Low Carbon Fuel Standard Regulations, and to Permanently Adopt the Emergency Vehicle Emissions Regulations. Staff Report: Initial Statement of Reasons, App. G: Supplement to Initial Statement of Reasons – Proposed Emergency Vehicle Emission Regulations, App. A-4-1, proposed Section 1962.2.1, Sept. 23, 2025.

Corrected:

[15] See *Public Hearing to Consider the Proposed Amendments to the On-Road Heavy-Duty Engine and Vehicle Omnibus, Low Carbon Fuel Standard Regulations, and to Permanently Adopt the Emergency Vehicle Emissions Regulations. Staff Report: Initial Statement of Reasons, App. A-4-2,* proposed Section 1962.2.1, Sept. 23, 2025.

C. Page 13

Original:

The comments have been grouped by topic wherever possible. Because this rulemaking action addresses only the Emergency Vehicle Emissions Regulations, only comments relevant to this action are summarized below.

Comments regarding the proposed amendments to the Omnibus regulation or the LCFS regulation are outside the scope of this action and are not summarized in this FSOR.

Corrected:

The comments have been grouped by topic wherever possible.

The proposed amendments to the Omnibus regulation and the LCFS regulation were not part of the rescheduled March 26, 2026 hearing; however, for completeness and informational purposes comments on those items are summarized and responded to in the FSOR addendum.

D. Page 14

Original:

Subsection A.2 lists the 45-day commenters that submitted comments with regard to the Omnibus and the LCFS regulations. Since these two items were not considered at the March 2026 Board Hearing and are not being finalized in this rulemaking, the comments are outside the scope of the rulemaking, not summarized here, and no responses are provided to these comments at this time.

Corrected:

Subsection A.2 lists the 45-day commenters that submitted comments with regard to the Omnibus and the LCFS regulations. The proposed amendments to the Omnibus regulation and the LCFS regulation were not part of the rescheduled March 26, 2026 hearing; however, for completeness and informational purposes comments on those items are summarized and responded to in the FSOR addendum.

E. Page 40

Original:

Agency Response to Comments A.72 and A.73: No change was made in response to these comments. CARB does not agree that there is a lack of clarity, as evinced by the fact that manufacturers have been certifying vehicles for MY 2026 through the Emergency Vehicle Emissions Regulations made permanent here. The ISOR indicated that this rulemaking does not supersede MAC ECCD 2025-08. Manufacturers retain discretion during the ongoing litigation to select among available compliance pathways. The language to which the commenter objects is simply a reservation of rights that CARB may nor may not exercise in the event CARB secures such rights from a future court order. See also response to comments in subsection A.1.(m), incorporated by reference here.

Corrected:

Agency Response to Comments A.72 and A.73: No change was made in response to these comments. CARB does not agree that there is a lack of clarity, as evinced by the fact that manufacturers have been certifying vehicles for MY 2026 through the Emergency Vehicle Emissions Regulations made permanent here. Manufacturers retain discretion during the ongoing litigation to select among available compliance pathways. The language to which the commenter objects is simply a reservation of rights that CARB may nor may not exercise in the event CARB secures such rights from a future court order. See also response to comments in subsection A.1.(m), incorporated by reference here.

F. Pages 41-42

Original:

76. Comment: We remain deeply concerned that CARB continues to indicate that ACC II is the only pathway available that does not risk enforcement action. Throughout the regulations and Appendix G, Initial Statement of Reasons, CARB threatens manufacturers with enforcement action on vehicles that they certify under the proposed Emergency Regulations or U.S. Environmental Protection Agency (EPA) motor vehicle emission standards (allowed by CARB Manufacturers Advisory Correspondence (MAC) ECCD-2025-08). Manufacturers are left with no secure pathway to certify except under the ACC II regulations, which federal law prohibits CARB from implementing or enforcing. The Emergency Regulations only provide clarity and certainty if following them does not result in enforcement action. Consequently, we recommend CARB clarify that vehicles complying with the Emergency Regulations or EPA regulations (included in MAC ECCD-2025-08) will not face enforcement action. (AAI)

Corrected:

76. Comment: We remain deeply concerned that CARB continues to indicate that ACC II is the only pathway available that does not risk enforcement action. Throughout the regulations and Appendix G, Initial Statement of Reasons, CARB threatens manufacturers with enforcement action on vehicles that they certify under the proposed Emergency Regulations or U.S. Environmental Protection Agency (EPA) motor vehicle emission standards (allowed by CARB Manufacturers Advisory Correspondence (MAC) ECCD-2025-08). Manufacturers are left with no secure pathway to certify except under the ACC II regulations, which federal law prohibits CARB from implementing or enforcing. The Emergency Regulations only provide clarity and certainty if following them does not result in enforcement action. Consequently, we recommend CARB clarify that vehicles complying with the Emergency Regulations or EPA regulations (included in MAC ECCD-2025-08) will not face enforcement action. If California prevails in its lawsuit, it can revise its regulations to eliminate the LEV III certification pathway and rescind MAC ECCD-2025-08 for vehicle certifications going forward. However, as noted in our recommended changes, CARB should allow appropriate lead time to prevent disrupting the California new vehicle market. If California prevails in its litigation, we recommend starting the updated regulations no sooner than the beginning of the second full model year. (AAI)

G. Page 48

Original:

For simplicity, comments pertaining to the proposed amendments to the Omnibus regulation or the LCFS regulation are not shown in this document. These comments are outside the scope of this rulemaking action and therefore are not addressed in this FSOR.

Corrected:

The proposed amendments to the Omnibus regulation and the LCFS regulation were not part of the rescheduled March 26, 2026, hearing; however, for completeness and informational purposes comments on those items are summarized and responded to in the FSOR addendum.

H. Documents Incorporated by Reference

The list of documents incorporated by reference, section IV of the FSOR, was corrected. In the interest of completeness, the following list of documents replaces the previously listed document list and are incorporated in the Emergency Vehicle Emissions Regulation:

- “California Exhaust Emission Standards and Test Procedures for 1985 through 2003 Model Heavy-Duty Diesel-Engines and Vehicles” (adopted 4/8/1985, last amended 12/12/2002)
- 40 CFR 86.007-11(g)(1/18/2001)
- “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles” (adopted 12/12/2002, last amended 10/21/2014)
- “California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric and Other Hybrid Vehicles in the Urban Bus and Heavy-Duty Vehicle Classes” (adopted 10/24/2002, last amended 10/21/2014)
- 40 CFR 86.005-10(f) (10/6/2000)
- “California Exhaust Emission Standards and Test Procedures for 1987 through 2003 Model Heavy-Duty Otto-Cycle Engines and Vehicles” (adopted 4/25/1986, last amended 12/27/2000)
- “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles” (adopted 12/27/2000, last amended 10/21/2014)
- “California Non-Methane Organic Gas Test Procedures” (adopted 7/12/1991, last amended 12/6/2012)
- SAE J1979 "E/E Diagnostic Test Modes" (5/2007)
- SAE J1939 “Recommended Practice for a Serial Control and Communications Vehicle Network” (9/2000 and 4/2011)

- 40 CFR 86.1360-2007 (7/13/2005)
- 40 CFR 86, Appendix 1, section (g), “EPA US06 Driving Schedule for Light-Duty Vehicles and Light-Duty Trucks” (7/13/2005)
- “Speed Versus Time Data for California’s Unified Driving Cycle” (12/12/1996)
- Air Resources Board Manufacturers Advisory Correspondence (MAC) No. 99-06 (12/20/1999)
- SAE J1930 "Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms – Equivalent to ISO/TR 15031-2: April 30, 2002" (4/2002)
- SAE J1930 “Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms – Equivalent to ISO/TR 15031-2” (10/2008)
- SAE J1962 "Diagnostic Connector – Equivalent to ISO/DIS 15031-3: December 14, 2001” (4/2002)
- SAE J1978 "OBD II Scan Tool – Equivalent to ISO/DIS 15031-4:December 14, 2001” (4/2002)
- SAE J1979-DA “Digital Annex of E/E Diagnostic Test Modes” (10/2011)
- SAE J1850 "Class B Data Communications Network Interface" (5/2001)
- SAE J2012 "Diagnostic Trouble Code Definitions” (12/2007)
- ISO 9141-2:1994 "Road Vehicles-Diagnostic Systems-CARB Requirements for Interchange of Digital Information" (2/1994)
- ISO 14230-4:2000 "Road Vehicles-Diagnostic Systems-KWP 2000 Requirements for Emission-related Systems" (6/2000)
- ISO 15765-4:2005 "Road vehicles-Diagnostics on Controller Area Network (CAN) - Part 4: Requirements for emissions-related systems" (1/2005)
- J1939 “Recommended Practice for a Serial Control and Communications Vehicle Network” (3/2009)
- J1939-1 “Recommended Practice for Control and Communications Network for On-Highway Equipment” (9/1/2000)
- J1939-11 “Physical Layer, 250K bits/s, Twisted Shielded Pair” (9/2006)
- J1939-13 “Off-Board Diagnostic Connector” (3/2004)
- J1939-15 “Reduced Physical Layer, 250K bits/sec, UN-Shielded Twisted Pair (UTP)” (8/2008)
- J1939-21 “Data Link Layer” (12/22/2006)
- J1939-31 “Network Layer” (4/2/2004)
- J1939-71 “Vehicle Application Layer (Through February 2008)” (1/20/2009)

- J1939-73 “Application Layer - Diagnostics” (9/8/2006)
- J1939-81 “Network Management” (5/2003)
- SAE J1939-84 “OBD Communications Compliance Test Cases For Heavy Duty Components and Vehicles” (12/2008)
- SAE J1699-3 “OBD II Compliance Test Cases” (5/2006)
- SAE J1699-3 “OBD II Compliance Test Cases” (12/2009)
- SAE J2534-1 “Recommended Practice for Pass-Thru Vehicle Programming” (12/2004)
- Attachment E: CAL ID and CVN Data of ARB Mail-Out #MSC 06-23 (12/21/2006)
- Attachment A of ARB Mail-Out #95-20 (5/22/1995)
- Attachment A: Misfire Disablement and Detection Chart of ARB Mail-Out #06-23 (12/21/2006)
- Attachments F and G of ARB Mail-Out #MSC 06-23 (12/21/2006)
- Attachment D: Rate Based Data of ARB Mail-Out #06-23 (12/21/2006)
- EMFAC2000 “Public Meeting to Consider Approval of Revisions to the State’s On-Road Motor Vehicle Emissions Inventory: Technical Support Document, Section 7.1, ‘Estimation of Average Mileage Accrual Rates from Smog Check Data’” (5/2000)
- SAE J1979 “E/E Diagnostic Test Modes” (2/2012)
- SAE J1930-DA “Electrical/ Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms Web Tool Spreadsheet” (3/2012)
- SAE J2012-DA “Digital Annex of Diagnostic Trouble Code Definitions and Failure Type Byte Definitions” (7/2010)
- ISO 15765-4 “Road Vehicles-Diagnostics Communication over Controller Area Network (CAN) - Part 4: Requirements for emission-related systems” (2/2011)
- SAE J1939 “Recommended Practice for a Serial Control and Communications Vehicle Network” (4/2011)
- SAE J1939-1 “On-Highway Equipment Control and Communication Network” (5/2011)
- SAE J1939-13 “Off-Board Diagnostic Connector” (10/2011)
- SAE J1939-21 “Data Link Layer” (12/2010)
- SAE J1939-31 “Network Layer” (5/2010)
- SAE J1939-71 “Vehicle Application Layer (Through May 2010)” (3/2011)
- SAE J1939-73 “Application Layer – Diagnostics” (2/2010)
- SAE J1939-81 “Network Management” (6/2011)

- SAE J1939-84 “OBD Communications Compliance Test Cases For Heavy Duty Components and Vehicles” (12/2010)
- ARB Mail-Out #MSC 09-22 (7/7/2009)
- Attachment A of ARB Mail-Out #MSC 09-22 (7/7/2009)
- Attachment C of ARB Mail-Out #MSC 09-22 (7/7/2009)
- Attachments D and E of ARB Mail-Out #MSC 09-22 (7/7/2009)
- Attachment F of ARB Mail-Out #MSC 09-22 (7/7/2009)
- Attachments G and H of ARB Mail-Out #MSC 09-22 (7/7/2009)
- EMFAC2007
- ARB "Emissions Warranty Parts List” (dated 12/14/1978, as amended 2/22/1985)
- 40 CFR, Part 86, Subpart N (7/1/1999)
- 40 CFR 86.098-24 (2013)
- 40 CFR 1037.120 (11/14/2011)
- SAE 2403 “Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature” (2/2011)
- 40 CFR 86.085-2 (11/16/1983)
- 40 CFR 86.1839-01 (1/17/2006)
- “Emissions-Related Parts List” (11/4/1977, last amended on 6/1/1990)
- 40 C.F.R. § 80.125 (1/19/2007)
- U.S. EPA OMS Advisory Circular A/C No. 17F (1/21/1988)
- “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles” (12/6/2012)
- ASTM E29-67
- “California Exhaust Emission Standards and Test Procedures for 2009 through 2017 Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes” (adopted 12/17/2008 and last amended 9/3/2015)
- “California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes” (adopted 3/22/2012 and amended 12/6/2012)
- “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust

Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" (3/22/2012)

- 40 CFR 86.1811-04(c) (2/10/2000)
- "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles" (10/21/2014)
- "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles" (adopted 12/12/2002, 10/21/2014)
- "California Non-Methane Organic Gas Test Procedures" (adopted 7/12/1991, last amended 12/6/2012)
- "Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the 'LEV III' Amendments to The California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards and Test Procedures and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and to the Evaporative Emission Requirements for Heavy-Duty Vehicles" (12/7/2011)
- SAE J1634 "Battery Electric Vehicle Energy Consumption and Range Test Procedure" (10/2012)
- SAE J2572 "Recommended Practice for Measuring Fuel Consumption and Range of Fuel Cell and Hybrid Fuel Cell Vehicles Fueled by Compressed Gaseous Hydrogen" (10/2008)
- SAE J2727 "(R) Mobile Air Conditioning System Refrigerant Emission Charts for R-134a and R-1234yf" (2/2012)
- ISO 13837:2008 "Road vehicles - Safety glazing materials - Method for determination of solar transmittance" (4/15/2008)
- "EPA Vehicle Simulation Tool" 40 CFR 86.1 (76 Fed. Reg. 74854, 75357 (12/1/2011))
- "Intergovernmental Panel on Climate Change (IPCC) 2007: Climate Change 2007 – The Physical Science Basis." S. Solomon et al. (editors), Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, UK and New York, NY, USA, ISBN 0-521-70596-7
- "2017 through 2025 MY National Greenhouse Gas Program" (75 Fed. Reg. 25324, 25677 (5/7/2010))
- 40 CFR Part 86, Subpart S (last amended 10/25/2016)
- SAE J2765 "Procedure for Measuring System COP of a Mobile Air Conditioning System on a Test Bench" (10/2008)
- ASTM E903-96 "Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres, DOI: 10.1520/E0903-96"

- ASTM E1918-06 “Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field, DOI: 10.1520/E1918-06”
- ASTM C1549-09 “Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer, DOI: 10.1520/C1549-09”
- ETA-NTP002 (revision 3) “Implementation of SAE Standard J1666 May 93: Electric Vehicle Acceleration, Gradeability, and Deceleration Test Procedure” (12/1/2004)
- ETA-NTP004 (revision 3) “Electric Vehicle Constant Speed Range Tests” (2/1/2008)
- SAE J1772 “Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charger Coupler” (1/2010)
- “California Motor Vehicle Emission Control and Smog Index Label Specifications for 1978 through 2003 Model Year Motorcycles, Light-, Medium- And Heavy-Duty Engines And Vehicles” (3/1/1978, last amended 9/5/2003)
- “California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles” (12/6/2012)
- “California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric and Other Hybrid Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes” (adopted 10/24/2002, last amended 10/21/2014)
- “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles” (adopted 12/27/2000, last amended 10/21/2014)
- “California Smog Index Label Specifications for 2004 Through 2009 Model Year Passenger Cars and Light-Duty Trucks” (adopted 5/2/2008, last amended 5/2/2008)
- “California Environmental Performance Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles” (adopted 5/2/2008, last amended 3/22/2012)
- 40 CFR 86.413-78 (10/28/1977)
- SAE J1979 “E/E Diagnostic Test Modes – Equivalent to ISO/DIS 15031-5: April 30, 2002”(4/2002, amended 5/2007)
- SAE J1939-73 “Application Layer - Diagnostics” (9/8/2006)
- SAE J1930 “Electrical/Electronic Systems, Diagnostic Terms, Definitions, Abbreviations, and Acronyms - Equivalent to ISO/TR 15031-2: April 30, 2002” (4/2002)
- SAE J2403 “Medium/Heavy-Duty E/E Systems Diagnosis Nomenclature” (8/2004)
- SAE J2534-1 “Recommended Practice for Pass-Thru Vehicle Programming” (12/2004)
- Technology and Maintenance Council's (TMC) Recommended Practice RP1210A, “WindowsE Communication API” (7/1999)

- SAE J1939-71 “Vehicle Application Layer (Through May 2010)” (12/2003)
- SAE J1939-81 “Network Management” (5/2003)
- 40 CFR 86.130-78 through 86.143.90 (7/1/1989)
- “California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles”
- “California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles” (adopted 8/5/1999, last amended 12/6/2012)
- “California Evaporative Emission Standards and Test Procedures for 1978-2000 Model Motor Vehicles” (adopted 4/16/1975, amended 8/5/1999)
- American National Standards Institute/American Gas Association Standard for Compressed Natural Gas Vehicle Fueling Connection Devices, ANSI/AGA NGV1 standard 1994
- “California Refueling Emission Standards and Test Procedures for 1998-2000 Model Year Motor Vehicles” (amended 8/5/1999)
- “California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles” (adopted 8/5/1999, last amended 3/22/2012)
- 40 CFR 1037.120 (as adopted 11/14/2011)
- ARB “Emissions Warranty Parts List” (2/22/1985)
- “California Test Procedures for Evaluating Substitute Fuels and New Clean Fuels through 2014” (amended 3/22/2012)
- “California Test Procedure for Evaluating Substitute Fuels and New Clean Fuels in 2015 and Subsequent Years” (amended 3/22/2012)
- “California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles” (adopted 10/21/2014)
- 40 CFR 86.085-2 (11/16/1983)
- 40 CFR 86.415-78 (4/15/1978 and 7/7/1986)
- 40 CFR 86.416-80 (4/15/1978 and 7/7/1986)
- “California Certification Procedures for Light-Duty Engine Packages for Use in New Light-Duty Specially-Produced Motor Vehicles for 2019 and Subsequent Years” (6/17/2019)
- 50 CFR 679.2 (as adopted 6/19/1996)
- 46 CFR 69.51-.61 (as adopted 9/12/1989)
- “Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles” (76 Fed. Reg. 57106 (9/15/2011))

- “California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles” (adopted 10/21/2014)

These documents were incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to publish them in the CCR. In addition, some of the documents are copyrighted, and cannot be reprinted or distributed without violating the licensing agreements. The documents are lengthy and highly technical test methods and engineering documents that would add unnecessary additional volume to the regulation. Distribution to all recipients of the CCR is not needed because the interested audience for these documents is limited to the technical staff at a portion of reporting facilities, most of whom are already familiar with these methods and documents. Also, the incorporated documents were made available by CARB upon request during the rulemaking action and will continue to be available in the future. The documents are also available from college and public libraries or may be purchased directly from the publishers.