



June 4, 2021

Clerk's Office
California Air Resources Board
1001 I Street
Sacramento, CA 95814
Subject: Comments to hdomnibus2020

Re: Notice of Public Availability of Modified Text and Availability of Additional Documents, Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments

Allison Transmission, Inc. ("Allison") is pleased to comment on the California Air Resources Board's ("CARB's") proposed amendments to the Heavy-Duty Energy and Vehicle Omnibus Regulation and Associated Amendments ("HD Omnibus Amendments"). We appreciate the considerable effort that underpins these proposed regulatory changes and support the Agency's overall goal to clarify certain elements of the August 27, 2020 adopted rule and to increase compliance flexibility with regard to several provisions.

Allison is the world's largest manufacturer of fully automatic transmissions for medium- and heavy-duty commercial vehicles and is a leader in hybrid propulsion systems for city buses. Allison's AXE Electric Axle Series™ offers a "bolt-in" solution for current vehicle frames, suspensions and well ends that features fully integrated electric motors and a multi-speed gearbox. With a market presence in more than 80 countries, Allison's products are specified by over 250 of the world's leading vehicle manufacturers and are used in a variety of applications including refuse, construction, fire, pick-up and delivery, distribution, bus, motorhomes, defense and energy. Allison is headquartered in Indianapolis, Indiana and has over 1,000 dealer and distributor locations in the United States.

The proposed HD Omnibus Amendments are of great interest to our company both with respect to our automatic transmission product line, hybrid propulsion systems and electric propulsion systems. To summarize our comments with respect to the proposed amendments:

- Allison supports proposed exemptions for 2024-2026 heavy-duty engines at or above 525 brake horsepower ("bhp") based on supply and cost factors, but also on the basis of maintaining consistent federal-state requirements related to these engines.

- Allison also supports CARB’s proposed exemption for transit agency diesel-fueled buses and engines and believe this exemption is needed to reflect market realities and the substantial expenditures that are needed to integrate new technology.
- CARB’s proposed extension of intermediate useful life for vocational vehicles is also warranted and should be adopted to recognize the varied vehicle use patterns in the vocational versus long-haul truck market.
- Eliminating parts storage requirements as part of the Emissions Warranty Information Reporting (“EWIR”) regulations adopted in 2020 is also justified based on the cost and practicalities of storage as well as the availability of alternative mechanisms to ensure access to adequate information on part failures.
- Allison also appreciates CARB’s actions to update several regulatory provisions to be consistent with the federal Phase 2 program. We noted and approved of CARB’s technical amendments to transmission-related provisions.
- While Allison believes that proposed amendments represent improvements that should be adopted, CARB should also consider additional changes related to emission warranty and useful life provisions. Specifically:
 - CARB should reconsider regulatory amendments to 13 CCR §§2143, 2146 that lowered Emission Warranty Information Reporting thresholds and altered the regulatory consequences of exceeding such thresholds by effectively requiring that “automatic” corrective actions be taken.
 - CARB should also reconsider regulatory amendments to 13 CCR §2143 to eliminate the current “regulatory default” for recalls and to ensure CARB can consider existing recall criteria before recalls are ordered.
 - CARB should consider varying warranty periods to address different types of components and avoid a “one size fits all” approach to warranties.
 - CARB should reconsider and eliminate provisions in 13 CCR §2035(b) that extend warranty and useful life provisions to trailers and 2027 and later heavy-duty vehicles “regardless of whether they are registered in California.” CARB has not provided a sufficient legal or policy rationale for such requirements.

We thank you for your attention to our views regarding the proposed amendments and hope that further adjustments can be made prior to finalization. If there are any questions concerning this submission, please contact Barbara Chance at 317-280-6371 or at Barbara.chance@allisontransmission.com.

Sincerely,



Barbara Chance
Allison Transmission, Inc.
Director, Mobile Source Emissions
Regulatory Compliance

Comments of Allison Transmission, Inc.
Proposed Amendments to Heavy-Duty Engine and Vehicle Omnibus Regulation
and Associated Amendments
(hdomnibus2020)
June 4, 2021

I. Allison Supports Proposed Exemptions for 2024-2026 Heavy-Duty Engines

CARB is considering amendments to 13 CCR §1956.8(a)(2)(C)1 to provide two exceptions for 2024 to 2026 Model Year (“MY”) heavy-duty diesel engines rated at or above 525 bhp from exhaust emission standards that would otherwise apply starting in 2024. In order to be able to use this exemption, manufacturers would need to meet applicable federal standards (for exhaust emissions, in-use, On-Board Diagnostics, and durability) as well as pre-2024 MY idling requirements and applicable California warranty periods. Manufacturers seeking to utilize this exemption would be further limited to selling 110 percent of their 2018 or 2019 MY sales volume.¹ The proposed amendments are consistent with the August 27, 2020 staff document that provided a general overview of proposed changes to the amendments previously adopted by CARB on August 20, 2020 through Resolution 20-23.

In proposing these changes, CARB notes that “manufacturers may find it difficult to find resources to redesign these engines while also managing design changes to their other more popular engine families.”² Additionally, an important significance is that EPA’s Cleaner Trucks Initiative cannot result in new federal NOx standards until the 2027 MY due to “lead time” requirements contained in the federal Clean Air Act. Thus, while Allison commends CARB for taking into account manufacturing difficulties, which may have been accentuated during the past year due to COVID-19, CARB and manufacturers benefit from the broader alignment of state and federal requirements. This alignment is of considerable importance in reducing the overall cost of the California program and promoting a consistent, national understanding of regulatory requirements affecting the heavy-duty sector.

II. Allison Supports CARB’s Proposed Exemption for Transit Agency Diesel-Fueled Buses and Engines

Allison supports CARB’s proposal to implement Board Resolution 20-23 in order to provide flexibility for transit agencies that are experiencing difficulty in purchasing diesel-fueled buses. As noted by CARB, this inability is due both to the availability of compliant vehicles and pricing. We would note that conditions listed in the proposed regulatory text may be onerous to applicants. Some applicants may find hardship meeting several eligibility requirements, including that a transit agency be subject to Innovative Clean Transit regulation, have completed

¹ Notice of Public Availability of Modified Text and Availability of Additional Documents (“Notice of Availability”) at 5. The proposed regulatory text requires the submittal of federal engine family certificates of conformity and providing emission warranty requirements for the applicable model year in accordance with 13 CCR §2036. *Id.* at 7.

² Attachment A at 1.

ICT reporting requirements and either have purchased or been exempted from purchasing zero-emission buses.

Allowing for flexibility in meeting new California mandates, however, does help to address market realities and the large investments that are needed by private industry to meet new regulatory requirements. Even while compliant technology may exist, integrating new technology into the engine and vehicle production process requires significant time and effort before such technology can be integrated into a commercial product.

III. Allison Supports Reduction in Intermediate Useful Life

CARB has proposed to modify intermediate useful life requirements from 10 years to 8 years. As noted in the analysis of this proposal, while line-haul tractors may reach the intermediate useful life period of 435,000 miles within 2 to 5 years, “vocational vehicles would take many more years than tractors to reach the intermediate useful life in miles since they are not driven as many miles per year as tractors.”³ This would result in more stringent in-use testing requirements for such vehicles since they would need to demonstrate compliance with the 0.020 g/bhp-hr NOx standard far longer than line-haul tractors.

Allison is a prime supplier of transmissions to the vocational vehicle market. In some sectors, such as school buses, Allison is the predominant supplier of new transmissions. The utilization of vocational vehicles is extremely varied and daily use of vehicles is driven solely by commercial and market considerations; there is virtually no “leisure” use of a vocational vehicle. Allison supports CARB’s recognition of this basic difference between line-haul and vocational use and encourages the Board to consider this differential with respect to other regulatory requirements, apart from the current differentiations made in federal and California Phase 2 GHG rules.

IV. Allison Supports Eliminating Requirements for Parts Storage

In regulations adopted by CARB last August, changes to Emission Warranty and Reporting (“EWIR”) requirements were adopted that required manufacturers to store “all emission related component(s)” that were used to analyze a failure and the probable cause of the failure “for a minimum of 2 years after the Field Information Report is submitted for an engine family or test group.”⁴ These requirements, in connection with other EWIR requirements, imposed a substantial, ongoing burden on the manufacturers of such parts involving both physical storage and associated recordkeeping.

CARB’s proposal to amend 13 CCR §§ 2141(f)(1) and 2145(b)(5) to require the storage of failure mode and part analyses information (including identifying information) in lieu of actual part storage, represents a significant improvement to EWIR requirements. The proposed amendments ensure that sufficient information will be available to CARB for confirmation of warranty reports without imposing an unnecessary burden. We encourage CARB to adopt the amendments as proposed.

³ Notice of Public Availability at 15.

⁴ 13 CCR §§2141(f)(1), 2145(b)(5).

V. Allison Supports CARB Amendments to Conform Regulations to EPA's Phase 2 Technical Rule

CARB has proposed technical amendments to §1037.550 in order to conform to newly revised federal procedures for powertrain testing, which are designed to reduce variability of emission test results and improve lab-to-lab variability. CARB is also amending §1037.55 for engine-based simulation of powertrain testing well as testing provisions for axle and transmission efficiency, again in an effort to align state regulations with federal standards (§§ 1037.560, 1037.565). Allison supports all of these revisions.

Of considerable interest to Allison are the proposed revisions to 1037.570 for the characterization of torque converters. The federal Phase 2 technical amendments included an option to map additional test points for greenhouse gas emission testing in order to provide for international harmonization. The technical amendments also made several clarifications to test procedures, including minimum idle speed, and optionally allowed for higher gear ratios where output torque may exceed dynamometer torque limits. Allison is a leading supplier to the vocational vehicle market where commercial demands vary widely based on the intended end-use of a vehicle. We therefore appreciate CARB's adoption of the federal technical amendments not only in the interest of harmonizing requirements across the United States, but also to incorporate the flexibility that is necessary in order to provide the most efficient solutions for the vocational vehicle fleet.

VI. CARB Should Consider and Implement Additional Changes to Emissions Warranty and Useful Life Provisions

In previously filed comments, Allison indicated that CARB should not adopt a "one size fits all" approach to emissions warranty and useful life regulations. While CARB expressed several worthy policy goals with regard to the amendments that were adopted in 2020 – *e.g.*, to avoid lengthy operation of vehicles with faulty components producing elevated emissions -- the changes made to warranty and useful life provisions were not simple clarifications of manufacturer responsibilities, but represented a fundamental shift in both regulatory burden and enforcement. This shift, in essence, created a "regulatory default" to vehicle and engine recalls based solely on numerical indicators (failure levels) without allowing for a more comprehensive assessment of the factors involved in the reported failures and their relative importance to air quality.

Despite receiving written comments on these issues, CARB staff did not recommend revision of these provisions as part of the current rulemaking effort. Nor did CARB articulate any specific reasons why arguments that Allison and others raised with respect to emission warranty and useful life provisions were rejected. We believe that CARB should revisit these issues and reconsider prior amendments to 13 CCR §2143 that would both preserve CARB policy prerogatives while avoiding automatic recalls that in many instances may be unwarranted. As explained in more detail below, CARB should also consider further tailoring of warranty requirements and reconsider provisions that extend warranty provisions to vehicles located outside of the state.

A. CARB Should Reconsider Changes to Emission Warranty Information Reporting and Resulting Actions

Allison's 2020 comments criticized CARB's proposed changes to California Emissions Warranty Information Reporting ("EWIR") regulations. Specifically, 13 CCR §2144 requires manufacturers to retain records if the number of claims made for emissions-related components exceed certain thresholds. Reports are also required to be filed for vehicles within a family or test group⁵ and additional requirements apply for Field Information Reports ("FIRs") that contain unverified warranty claims.⁶ In 2020, CARB proposed and the Board adopted changes to these regulatory provisions that lowered the reporting threshold for EWIR from 1% or 25 claims to 1% or 12 claims, whichever is greater -- a 50% reduction in the level triggering reporting.

These changes were proposed on the basis of a generalized concern that the previous warranty/recall process was too lengthy and administratively cumbersome (since CARB had the burden of showing a defective component caused excess emissions). CARB claimed this regulatory system delayed any required corrective actions. In particular, the reductions in EWIR reporting thresholds were justified by CARB on the basis that the existence of small volume engine manufacturers and engine families with less than 2,500 engines meant lower thresholds were needed so that CARB could be promptly be informed of warranty claims.⁷

As referenced below, Allison commented that the multiple changes to EWIR and other provisions represented a fundamental shift in enforcement strategy, not a simple "tweaking" of thresholds to address low volume manufacturing. While CARB represented that the changes would result "in a small increase in warranty reporting for the manufacturers"⁸ no data was presented to support this claim. And, pursuant to 13 CCR §2146(a)(1), small manufacturers or manufacturers producing a limited amount of components are required to submit corrective action plans within 90 days of exceeding a corrective action threshold (which were also adjusted downward for the first 5-7 years under the 2020 amendments).

Allison request that CARB once again review EWIR changes for their reasonableness and effectiveness. Together with the changes in recalls based on warranty claims addressed below, the regulations create a system whereby an evaluation of the emission impact (and hence, any actual need for corrective actions/recalls) is conjoined with a mandatory corrective action plan with its implementation date.⁹ This process presumes the outcome of unverified warranty claims rather than allows for a considered evaluation of whether corrective actions are indeed necessary. While Allison recognizes that CARB has an interest in ensuring the effectiveness of its emissions standard and ensuring the durability of emission control components, the changes adopted last year tilt too far towards requiring actions that may not be needed to ensure the performance of emission control components. Just as CARB addressed various concerns regarding the previously adopted regulations in this pending action, the Board may certainly evaluate other aspects of its 2020 actions that are problematic.

⁵ *Id.* §2144(a).

⁶ *Id.* §2145(a).

⁷ Initial Statement of Reasons at III-61

⁸ *Id.*

⁹ 13 CCR 2146(a)(7)-(8), Proposed Regulation Order, June 23, 2020.

B. CARB Should Not Mandate Recalls Solely on Warranty Claims

Allison's 2020 comments also called on CARB to refrain from mandating recalls based solely on warranty claim records.¹⁰ In the current rulemaking effort, however, it appears that CARB has not proposed to make any changes to the relevant regulatory provisions. As Allison previously pointed out, the changes to 13 CCR §§2143 and 2144 fundamentally transform CARB's program away from one that is focused on emissions to one that is directed at reported numbers without a consideration of relative emission impacts. While this procedure may result in faster recalls, CARB should not conflate administrative ease with reasonable and rational results. The automatic nature of the regulatory requirements on recall -- without review of associated emission impacts -- is fundamentally at variance with a system designed to address issues of air quality. More recalls of relatively minor effects on emissions can both add to regulatory burdens for manufacturers and the administrative burdens borne by CARB without, in many cases, measurable and meaningful results.

All warranty claims are not fundamentally alike. CARB should therefore further modify Failure Level and EWIR provisions to explicitly require an assessment of emissions impact. As CARB modified 13 CCR §2143, an engine or vehicle family is *subject to recall* unless the Executive Officer determines the recall is unnecessary pursuant to criteria in §2148(a) and (b). But 13 CCR §2143 also provides that vehicles and engines *shall be recalled* at specified failure levels.

A relatively simple and straightforward regulatory language to the language of §2143 could avoid this automatic result, while preserving CARB's full authority to order a recall:

“An engine family, test group, a vehicle family, a trailer family or a subgroup shall be considered for recall when the number of failures of a specific emission-related component exceeds the failure level set forth below, unless the Executive Officer determines from the emission information report that a recall is unnecessary pursuant to the criteria set forth in Section 2148(a) and (b). Vehicles or engines in an engine family or test group may be subject to recall at the following failure levels . . .”

This regulatory language would allow the Executive Officer to consider the recall criteria already contained in 13 CCR §2148 in all instances. But it would eliminate any express or implied duty to recall all vehicles or engines solely based on exceedance of specified failure rates. Requiring an individual determination to recall engines or vehicles based on regulatory factors, including emissions impact, preserves the purpose of the recall provisions while avoiding recalls with potentially minimal impact on air emissions. As revised per above, there would also be no impact of the Executive Officer's ability to move quickly on recalls provided that there was consideration of factors that have been determined to be relevant as to whether a recall should be ordered. We urge CARB to consider such a revision, either as part of the current regulatory amendments or in a future action.

¹⁰ *Id.*

C. CARB Should Vary Warranty Periods Across Different Types of Components

We are attaching comments that Allison filed last year with respect to CARB's general approach to emission warranty and useful life periods.¹¹ In these comments, Allison suggested that CARB investigate mechanisms to vary the length of warranty periods across different types of components.¹² CARB has not proposed any additional flexibility with respect to the length or warranty periods with respect to various components and the amendments to 13 CCR §2143 adopted last year -- that indicate vehicles or engines in an engine family or test group "shall be recalled" at various failure levels -- remain. This latter provision also serves to trigger corrective actions.

Consistent with the comments above regarding automatic recalls, Allison would urge CARB to consider varying warranty periods based on the vehicle components covered. Allison recognizes that CARB's regulatory objective is to ensure engines and vehicles meet emission requirements for their full useful life, but different components present widely different challenges in terms of ensuring durability and performance. In some cases, there may be inordinate costs with meeting a warranty period for a component that may be relatively easily attained by another component. CARB should explore whether there are other regulatory mechanisms may be available to address the issue of maintaining emission performance apart from the generic tactic of requiring each and every emission-related component to meet the same requirements.

D. CARB Should Reconsider Extension of Warranty and Useful Life Requirements to Vehicles Registered Outside of California

CARB has not proposed any further adjustment to the regulatory language of 13 CCR §2035(b) which, as amended in 2020, extends to all "California-certified 2027 and subsequent model heavy-duty vehicles, regardless of whether they are registered in California" and all 2020 and subsequent model trailers subject to 17 CCR 95683(c) "regardless of whether they are registered in California." In previously-filed comments, Allison questioned Health and Safety Code sections cited by CARB as authority to extend state requirements to entities that exist and/or operate beyond the borders of the state -- or vehicles owned and registered in other states -- simply on the basis of such a vehicle having, at one point, obtained California certification. CARB largely justified these provisions on the theory that *some* of these vehicles *may travel* into California at some point in the future¹³ and did not assess either the likelihood of this event nor the projected environmental implications thereof. In addition, with reference to the warranty and useful life provisions, Allison questioned CARB's economic assumptions regarding cost-recovery based on projecting that the used-vehicle market would assign value to the existence of a California warranty.¹⁴

CARB has not responded to these comments, nor provided any supplementation to its cited legal authority to apply state requirements out-of-state. It appears that the only response to comments

¹¹ Attachment 1.

¹² *Id.* at 4.

¹³ ISOR at III-42.

¹⁴ Allison Comments at 6.

issued by CARB in the HD Omnibus Amendments is with regard to comments received on the environmental analysis for proposed 2020 amendments.¹⁵ And even within this analysis, CARB did not respond to comments similar to Allison filed by the Truck and Engine Manufacturers Association on out-of-state application of warranties.¹⁶ Allison would respectfully request that CARB further consider this matter and provide a public response to the comments filed.

¹⁵ Attachment B: Response to Comments on the Environmental Analysis for the Proposed Heavy-Duty and Vehicle Omnibus Regulation and Associated Amendments. This document indicates that CARB has no obligation to respond to comments under generally-applicable CEQA provisions, but nonetheless responds to certain issues related to the Environmental Assessment for the Omnibus Regulation. *Id.* at 1. Allison would suggest that other issues raised during the 2020 public comment period are also deserving of response whether or not CARB is under a legal obligation to provide a response.

¹⁶ *Id.*, Attachment 1, Comments of the Truck and Engine Manufacturers Association, August 13, 2020 at 93.