



August 21, 2023

The Honorable Steven S. Cliff, Ph.D.
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814
ATTENTION: Clerk's Office

RE: PUBLIC COMMENT: Second Notice of Public Availability of Modified Text and Availability of Additional Documents for the Advanced Clean Fleets Regulation

Dear Dr. Cliff:

On behalf of the American Bus Association (ABA) we submit the following comments on the California Air Resources Board's (CARB) Second Notice of Public Availability of Modified Text and Availability of Additional Documents for the Advanced Clean Fleets Regulation (ACF), published August 6, 2023.

The ABA represents the private over-the-road bus (OTRB) or motorcoach industry, including both vehicle manufacturers and motor carrier operators, along with those businesses who support motorcoach operations. Our operators provide scheduled-route and charter operations, providing transportation services for commuters, educational and recreational purposes, the military and emergency responders. Our manufacturers produce, distribute, and or maintain class 7/8 heavy-duty diesel engines and vehicles. Additionally, ABA represents group travel and tour entities, both public and private, who rely on motorcoach operations and their passengers.

Although this proceeding is intended to be limited to consideration of the modified text of the ACF, we believe the proposed changes, specifically changes to Section 2015.3, concerning the 5-day pass provision, are sufficiently broad to allow consideration of our request and comments. ABA believes finalization of the ACF should be delayed or, alternatively, further modified to fully exempt motorcoach fleets from the rule.

As an initial point, ABA supports the goal of emissions reduction within the transportation sector. Bus operations, by design, are one of the most environmentally sensitive forms of transportation. A motorcoach vehicle can take up to 50 personal vehicles off the road, providing both congestion relief and emissions reduction. Also, with the advent of cleaner burning fuels and advancement in emissions technology through the years, bus operations have increasingly become more efficient

and effective in reducing the industry's carbon footprint.¹ The OTRB industry is proud of these efforts and open to pursuing continued advancements to address climate change concerns, including the pursuit of zero-emission vehicles (ZEVs). However, from the outset, CARB's overall approach to accelerate a large-scale transition to ZEVs has largely focused on freight-carrying vehicles or trucks and has not considered the benefits OTRBs have contributed to the climate change fight or the impacts of their approach on the OTRB industry.

Delay Finalizing the ACF

In light of technological challenges and need for amendments to CARB's 2021 Heavy-Duty Engine and Vehicle Omnibus Regulation or Omnibus rule, which are currently ongoing, CARB should delay any further proceedings toward finalizing the ACF. The ACF, along with the Omnibus rule and the Advanced Clean Trucks Rule are significant, interdependent undertakings that require fundamental clarity on whether heavy-duty engine manufacturers (OEMS) have the ability to produce compliant engines, once the Omnibus rule is finalized and EPA has granted a waiver. Also, while there remains ongoing debate as to the appropriate ZEV technology for commercial heavy-duty vehicle operations, i.e., electric battery or hydrogen fuel cell, it would be prudent for CARB to suspend this rulemaking.

There are also valid concerns regarding refueling infrastructure. Currently, the infrastructure is not in place to power such ZEVs or support their operations on the scale necessary to support commercial operations. Although there is significant investment underway to build fueling infrastructure, it is not necessarily in support of commercial operations, where the technology question on whether to pursue electric battery or hydrogen fuel-cell technology remains open. Most infrastructure endeavors are focused on electric battery technology and targeted toward personal vehicle use. As for supporting commercial operations, even with significant funding incentives, construction of the infrastructure will take time. In the short term, if reliant on electrification technology, there are also valid concerns on the ability of California's power structure to meet the increased capacity necessary to sustain the levels of electrified commercial fleet operations mandated by the ACF. If CARB's broader strategy to deploy ZEV commercial vehicles is to succeed, more time is needed to work through these issues for commercial operations, particularly when it appears OTRB operations, specifically, were not considered.

There is also the issue of cost. While several ZEV funding and infrastructure programs are available in the state, few of them are available to OTRBs operators. The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) and the Carl Moyer programs are strong starts, but there is limited applicability to the motorcoach market. Historically, private motorcoach operators are not financially incentivized or supported in ZEV transitions, unlike highly subsidized public transit fleets who receive funding at the state and federal level. In more recent times, there is increasing financial support for private truck operations as well. However, this is not the case for the private motorcoach industry. With the significant increase in cost to invest in motorcoach ZEVs (in the range of \$1.3 million for an OTRB, compared to \$600,000 for a new internal combustion engine OTRB), along with the cost to invest in new infrastructure and personnel training for maintenance, the goal of CARB's ZEV transition will likely be frustrated. Motorcoach operators subject to the ACF will likely hold on to their existing vehicles much longer than planned and opt out of

¹ Updated Comparison of Energy Use and CO₂ Emissions from Different Transportation Modes, <https://www.buses.org/assets/images/uploads/general/2019%20UPDATE%20Comparative%20Fuel%20CO2%20FINAL-July%202019.pdf>

providing some of the essential emergency services they currently provide in the state, including evacuation movements for hurricane, fires and now flooding, as well as services to the military, which require newer vehicles by contract. Before finalizing the ACF or at a minimum applying it to motorcoaches, substantial funding assistance is needed.

Motorcoach Exemption

As part of this proceeding to modify ACF, CARB is making changes to the five-day pass provision, intended for facilitate non-compliant vehicles to enter California without being considered as part of a California fleet, under Section 2015 for High Priority and Federal Fleets. ABA believes CARB should consider additional changes to this Section 2015.3 “High Priority and Federal Fleets Exemptions and Extensions”² to provide a full exemption from the ACF for OTRBs.

The rationale underpinning the ACF is to accelerate the market for zero-emission trucks, vans, and buses by requiring fleets that are “well suited for electrification” and that can be “easily converted.” But this is not the case for OTRBs. Currently, technology for producing viable zero-emission motorcoach vehicles (ZEMVs) does not exist at the scale necessary to comply with the rule. Motorcoach manufacturers are actively working to develop feasible and operational ZEMVs for the marketplace. At this time, there are only 2 manufacturers who have a ZEMV model on the commercial market, although there remain continuing issues as to their viability for full scale operation. However, even combined production by these 2 manufacturers would be insufficient to support the volume of vehicles needed to comply with the ACF high priority fleet mandates under either option 1 or option 2. In fact, there were less than 10 new ZEMVs available for California operations over the past 4 years, and more than 10 times that number would be needed in 2024 to comply with the ACF. The ACF ZEV Purchase Exemption would not really provide relief either, because it would be overly burdensome to require all impacted motorcoach operators to pursue the exemption individually to address a lack of inventory.

Also consider the focus of the ACF is to target truck types that pollute the most, Class 7-8 tractors, which operate within less than a 100-mile radius on a daily basis. First, motorcoaches are not a significant polluter; motorcoaches remove cars from the roadways, thus reducing congestion and emissions. Further, based on investment in technological retrofits since 2001, all current engines are cleaner than the ambient air. As previously stated, the OTRB industry emissions reduction efforts. Second, motorcoach operations do not fit the same operational profile as the targeted operations. Instead, motorcoaches are more often used for long distance travel (more than 300 miles) in daily operations and do not return to a home terminal at the end of day, unlike employee shuttle operations. Although CARB considered and accounted for public transit fleets, school bus operations and shuttle bus operations, its review of longer distance operations appears to be restricted to freight carriage, which does not account for the unique needs of long-distance intercity or charter and tour motorcoach operations. Motorcoach operators must make the needs of their passenger’s paramount, including their health and safety, which is dependent on reliable equipment and tight time schedules. This is something that is challenged by the current charging infrastructure and technology, leading to more than 4-hour charging times, if an OTRB can even fit into a charging facility (<https://youtu.be/RtOStuAOoQo>). These types of delays are something our

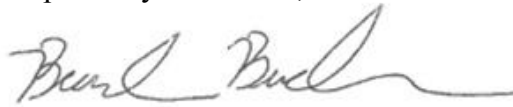
² [Appendix A-2](#), Second Notice of Public Availability of Modified Text and Availability of Additional Documents, p. A-2-32

passengers can't accommodate in their time-dependent schedules.

It is premature for CARB to proceed with finalizing the ACF, considering the "open for comment" status of the Omnibus Low NOx rule and issues regarding viable technology and infrastructure development. The ABA therefore requests the rule proceeding be delayed until these matters can be resolved, and to enable CARB to gain a better understanding of motorcoach operations.

Alternatively, because Motorcoach operations contribute to environmentally responsible transportation efforts, they are not heavy polluters but instead mitigators and are more similar to public transit operations (without the fully subsidized support); and because motorcoaches are not well suited for electrification, at this time, ABA seeks an exemption for motorcoaches from the ACF. The ABA looks forward to seeing the industry advance toward ZEVs in a responsible manner, but it must be done in a reasonable and economically feasible manner to be successful.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Brandon Buchanan". The signature is fluid and cursive, with a long horizontal stroke at the end.

Brandon Buchanan
Director of Regulatory Affairs