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October 29, 2021

California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

**Ref: Additional Comments on Advanced Clean Fleets Relating to Technology Readiness and ZEV Costs (September and October 2021 Workshops)**

Via electronic mail [zevfleet@arb.ca.gov](mailto:zevfleet@arb.ca.gov)

Dear Air Resources Board:

The Western States Trucking Association (WSTA) and CleanFleets.net provide these comments. Our prior comments of December 8, 2019, April 8, 2021, and September 27, 2021 are incorporated by reference. WSTA is a non-profit organization whose members would be impacted by the ACF proposal. CleanFleets.net has been our endorsed CARB Consultant to the membership for over a decade and has been extensively involved in the CARB zero emission vehicle (ZEV) planning process for trucking since it began in 2016. The ACF proposal presented at the September and October 2021 public workshops continues to be infeasible for the trucking industry in general and WSTA members in particular. CARB continues to perpetuate the myth that WSTA members would experience favorable economic results from switching from traditional conventional trucks to ZEVs. CARB's assumptions of ZEV truck readiness and the total cost of ownership to trucking fleets that would own and operate ZEV trucks are not supported by the every day experience of our members.

### **ZEV Truck Readiness**

WSTA members operate severe service heavy duty trucks (e.g. dump trucks, water trucks, waste collection/rolloff trucks) in urban and rural areas of the western states. These are highly customized specialty vehicles that our members rely on to profitably serve customers. The battery systems that we are aware of result in a heavier truck that reduces the carrying capacity (or payload) which has negative financial effects on our members. The truck manufacturers have communicated to CARB the state of ZEVs:

“Unfortunately, compared to traditional vehicles, ZEVs currently (i) cost a trucking company more to purchase, (ii) are not able to perform the same amount of work as traditional trucks, (iii) require new maintenance facilities and equipment investments, (iv) have lower residual values, and (v) require the build-out and maintenance of a completely new electricity charging or hydrogen fueling infrastructure.”<sup>1</sup>

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<sup>1</sup> See Truck & Engine Manufacturers Association comments filed with CARB today at <https://www.arb.ca.gov/lists/com-attach/105-acf-comments-ws-V2VUYIBjVjRSC1Bh.pdf>

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## **Comments on Total Cost of Ownership Discussion Document**

WSTA observes the following deficiencies in this document:

1. CARB provides no analysis of construction vehicle types (e.g. dump trucks, water trucks, concrete pumps, drill rigs, etc).
2. The analysis appears to rely on revenue to the truck owner from the CARB Low Carbon Fuel Standard to offset operating costs. We believe this is highly speculative, uncertain and not a perpetual funding source our members could rely upon.
3. The analysis assumes a higher ZEV truck residual value than that of a conventional truck. This assumption is counter to the Truck & Engine Manufacturers conclusion cited earlier.
4. The analysis assigns a \$0 “midlife costs” to battery-electric vehicles however we understand that battery systems typically required replacement at some time prior to ten years in service. This assumptions is overly aggressive in our opinion.
5. The calculated “payback period vs Diesel (yr)” shows up to 11.2 years as the period that a vehicle owner would recapture the electric truck infrastructure cost. WSTA members do not have the ability to borrow the staggering amount of capital required for this item. Note that the transit agencies estimate in the range of \$50,000 to \$100,000 per transit bus to obtain infrastructure. It is not feasible to expect small businesses to “front” the capital, wait for payback and struggle with the operational limitations of ZEV trucks that are likely to reduce the revenues and borrowing capacity.

WSTA also supports the comments from the Truck & Engine Manufacturers dated today:

“By way of examples, the draft cost discussion document for the ACF rule makes the following inaccurate assumptions:

- ZEV purchase costs that are too low.
- ZEV residual values are too high.
- No lost productivity to charge a ZEV.
- Average mileage will be adequate, when trucks are often needed for peak operation.
- Charger costs based on power ratings that are too low for heavy trucks.
- No infrastructure costs for sleeper cab tractors.
- No maintenance costs for infrastructure.

Based on overly-optimistic assumptions, the draft cost discussion document concludes that cost parity between ZEVs and traditional vehicles will occur soon. We request that CARB validate the assumptions in the draft cost discussion documents by conducting case studies of the medium- and heavy-duty ZEV pilot and demonstration projects that are underway in California.”<sup>2</sup>

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<sup>2</sup> See Truck & Engine Manufacturers Association comments filed with CARB today at <https://www.arb.ca.gov/lists/com-attach/105-acf-comments-ws-V2VUYIBjVjRSC1Bh.pdf>

**Conclusion**

The onus is on CARB, the governor, the legislature and electric utility providers to identify the timeline and sources of public funding to accomplish ZEV truck deployment over the proposed ACF phase in period. There is currently no business case, savings or cashflow model presented by any of these entities that maximizes ZEV deployment while ensuring that WSTA members that support goods movement, construction & demolition or waste removal can remain in business if the ACF is adopted by the Board as proposed. The Administrative Procedures Act and Government Code require a thorough analysis of the costs to regulated entities and the environmental benefits of the regulatory proposal and any alternatives. WSTA demands this as well. We may be reached via electronic mail at [LeeBrown@westrk.org](mailto:LeeBrown@westrk.org) and [Sean@CleanFleets.net](mailto:Sean@CleanFleets.net).

Sincerely,



Lee Brown  
Executive Director  
Western States Trucking Association



Sean Edgar  
Director  
CleanFleets.net LLC  
Endorsed Consultant, Western States Trucking Association

cc: WSTA Executive Committee  
Construction Industry Air Quality Coalition  
Ellison Wilson Advocacy, LLC