

June 5, 2024

California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Comments on the proposed Zero Emission Forklift Regulation

Dear CARB Board Members,

Thank you for the opportunity to provide comments on the California Air Resources Board's (CARB) proposed Zero Emission Forklift (ZE Forklift) regulation. TRC is a leading environmental consulting firm with more than 30 years of experience in low-emission and low-carbon technology adoption for the commercial fleet sector, including extensive electrification and hydrogen project implementation. TRC's team of regulatory specialists provide compliance planning and reporting services for more than 50,000 vehicles and 50 warehouses. TRC's clients are at the forefront of the transition to zero-emission medium- and heavy-duty vehicles and include public and private fleets, nearly every major electric OEM, utilities, infrastructure providers, public agencies, and community partners. TRC has successfully developed California's largest and most high profile zero-emission truck projects including: the Daimler Trucks North America Innovation and CX Fleet projects; the Frito Lay ZANZEFF project in Modesto, CA; the Volvo LIGHTS project; the JETSI project; and many others. The TRC team excels at helping clients across the zero-emission ecosystem accelerate adoption through identifying technology rollout plans, grant funding, technology procurement, LCFS credit management, marketing and customer engagement, and program management of large-scale ZEV pilot and deployment programs.

TRC's focus on identifying and overcoming barriers to ZEV adoption has provided a unique and extensive perspective into the opportunities and challenges facing the state of California as it moves to a fully zero-emission transportation system. TRC hosts the annual ACT Expo, which is a one-stop-shop educational forum (conference and trade show) attended by thousands of medium- and heavy-duty fleets looking to learn about today's array of zero-emission truck and infrastructure technologies. TRC also created and manages the ACT Fleet Forum, an educational network of the industry's most innovative commercial fleets working to share best practices and evaluate opportunities to successfully deploy the latest advanced clean transportation technologies. TRC's comprehensive clean fleet services also include proactive regulatory planning and ongoing compliance management efforts for numerous clients. TRC hopes its experience as ZEV project and regulatory compliance consultants provides an important perspective on strategies CARB can utilize to improve the ZE Forklift rulemaking, so the shared goal of a large-scale, near-term transition to zero-emissions can be achieved.

Lower Phase-Out Percentage Cap for Large Fleets

While the most recent amendments added an option to utilize a percentage phase-out cap in lieu of the model year phase-out, TRC believes the current cap of 50% for large fleets still constitutes an undue burden on California companies. For reference, some of TRC's large fleet clients will still see a significant phase-out obligation in 2028 even if they utilize the percentage phase-out cap option. For example, this would require one fleet to phase out and replace nearly 100 forklifts by 2028, with another 100 scheduled for 2031.

As a result, TRC is recommending setting the percentage phase-out cap for large LSI fleets to 25% for the 2028 compliance year for Group IV forklifts and 2030 for Class V forklifts. Additionally, TRC recommends extending the percentage phase-out cap to allow for a 25% cap in all subsequent compliance years to allow for sufficient capital planning to meet the requirements.

Infrastructure Construction Delay Extension

TRC acknowledges CARB staff have made several improvements to the infrastructure delay extensions language when compared to previous versions of this and other zero-emission regulations. However, consideration should be given to the non-LSI forklift Zero-Emission regulations and the compliance dates associated with them when qualifying LSI fleets for an Infrastructure Construction Delay Extension. Specifically, the Advanced Clean Fleets and Zero-Emission Transport Refrigeration Unit Regulations both require extensive investment in charging infrastructure and considerable utility engagement to meet the requirements for each. Reprieve from the infrastructure requirement for one regulation should be automatically granted to fleets with locations subject to infrastructure requirements under multiple transportation asset categories, given that utility delays will apply uniformly to each property regardless of end-use technology. The requirements for an infrastructure delay should be uniform across these regulations as many of the constraints transcend their individual regulations.

In Section 3007(b)(3)(A)(1)(b), it states “For Fleets experiencing delays due to landlord-tenant issues regarding the installation of charging or fueling infrastructure, in lieu of a construction permit or construction permit application, the Fleet Operator demonstrates that necessary architectural and engineering plans were completed at least 18 months prior to the upcoming compliance date.” Instead of requiring architectural and engineering plans 18 months in advance to qualify for this extension, TRC recommends fleets show they submitted a formal request to the landlord to install the charging or fueling infrastructure to qualify for this extension. Asking fleets to incur the significant cost of having architectural or engineering plans drafted for a project that may not be approved by the site’s landlord is not a reasonable requirement.

Additionally, TRC requests objective clarification on the draft language within this extension. In Section 3007(b)(3)(A)(1)(d), it states “If the Fleet Operator operates at multiple sites, the Fleet Operator has relocated Forklifts to the extent possible to maximize compliance across its sites.” The requirements of this provision require specific definitions.

Infrastructure Site Electrification Delay Extension

In Section 3007(b)(3)(b)(1), the draft language identifies the following as a qualifying requirement for the Site Electrification Delay Extension: “The electric utility provider has notified the Fleet Operator that it cannot provide the requested power prior to the upcoming compliance date.” As fleets cannot control how or when a utility will respond to their request, TRC recommends changing the language to the following: “The electric utility provider has not notified the Fleet Operator that it can provide the requested power prior to the upcoming compliance date.” This demonstrates the fleet has done its due diligence to comply with the regulation and does not penalize the fleet if the utility is being non-responsive.

In summary, TRC respectfully requests that the Board not adopt the proposed Regulation in its current form. The concerns outlined in this letter should be addressed through changes to the proposed regulation. TRC requests that the phase-out cap for large fleets be set at 25% and that those caps are extended to subsequent compliance deadlines, rather than only applying to the first compliance deadline for each forklift class. Also, the language for the Infrastructure Delay Extensions requires further clarification and additions to reflect both the reality of the tenant-landlord relationship and potential response times from utilities.

Thank you for your consideration to this request. Please feel free to contact me at 310 573-8546 if you require additional details.

Sincerely,



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