



December 20, 2023

Keith Roderick
Air Resources Engineer Staff Lead
California Air Resources Board

David Chen
Advanced Emission Control Strategies Section Manager
California Air Resources Board

Re: Lung Health Groups in Support of Zero-Emission Forklift Proposal

Dear Mr. Roderick and Mr. Chen:

On behalf of the undersigned health organizations, we write to urge the California Air Resources Board (CARB) to strengthen and approve the proposed rulemaking for Zero-Emission Forklifts (ZEF). Off-road equipment, such as forklifts, is becoming a larger percentage of emissions from mobile sources, releasing large amounts of smog-forming emissions and particle pollution that threaten public health.

Our organizations support CARB's work to develop a rule that will spur the transition to zero-emission technologies to reduce harms caused by burning of fuels in combustion engines and call on CARB to further strengthen the proposal to increase the health benefits of the rule.

The American Lung Association's [State of the Air 2023](#) report found that California is home to six of the ten cities with the worst ozone in the United States, and six cities for annual particle polluted.¹ Breathing ozone and particle pollution can lead to significant health emergencies and premature death. The impacts of these pollutants are especially harmful on our most vulnerable populations including children, seniors, those with existing health conditions, lower-income communities and communities of color. The proposed rule would transition forklifts from combustion to zero-emission at the point of sale and over time, and will meet a commitment made in the 2016 State Implementation Plan for Ozone.

We support the phasing out of Large Spark Ignition (LSI) forklifts to ZEF in California but urge CARB to strengthen the proposal to realize health benefits sooner. We recommend CARB set a timeline that phases out old equipment earlier and ensures a nearer-term transition to zero-emission technologies. CARB should limit compliance

¹ American Lung Association. State of the Air 2022. Most Polluted Cities List. April 2022.
<https://www.lung.org/research/sota/city-rankings/most-polluted-cities>

extensions and limit the addition of older/used engines into fleets. These steps would help to ensure more complete fleet turnover to zero-emissions, which CARB should accelerate to 2035 (rather than 2038) in accordance with Governor Newsom's Executive Order N-79-20 which called for all off-road equipment to be zero-emission by 2035. We appreciate the improvements made to date in the scope of the proposal and urge the agency to continue to evaluate opportunities to strengthen the rule.

There are significant health benefits to be gained from transitioning forklifts from combustion to zero-emissions. This ZEF rule is projected to provide \$7.49 billion in health benefits from 2026 to 2043, with specific health benefits anticipated to include:

- 544 fewer cases of cardiopulmonary mortality
- 115 fewer hospitalizations for cardiovascular disease
- 148 fewer cases of cardiovascular ED visits
- 321 fewer cases of respiratory ED visits
- 42 fewer cases of lung cancer incidence
- 1,295 fewer cases of asthma onset
- 109,800 fewer cases of asthma symptoms
- 80,635 fewer work loss days

We thank CARB for expanding the health outcomes in the analysis of this rule, especially as it relates to respiratory illnesses and emergencies, and asthma onset cases. We look forward to seeing the expanded health analysis included in future rulemakings and planning documents to demonstrate that there is a strong link between public health and meeting our clean air and climate standards.

In closing, we urge CARB to strengthen and ultimately approve the ZEF rule as an important public health opportunity. We thank you for your work on this regulation to ensure emissions are reduced from the forklift sector. Please contact Mariela Ruacho at the American Lung Association with any questions at Mariela.Ruacho@lung.org.

Sincerely,

Mariela Ruacho, Senior Manager, Clean Air Advocacy
American Lung Association

Kevin D. Hamilton, RRT, ACS, Co-Executive Director
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Long Beach Alliance for Children with Asthma

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