

October 28, 2024

Chair Lianne Randolph
California Air Resources Board
1001 "I" Street
Sacramento, CA 95812
Via ONMC 15-day Board Comments Docket

Re: Zero Emission Motorcycles in the proposed On-Highway Motorcycle Regulations

Dear Chair Randolph and Members of the Air Resources Board:

Zero Motorcycles is a rapidly growing business that has created hundreds of green jobs in California over the last eighteen years. We make high performance zero emissions electric motorcycles which are extremely sought after and environmentally friendly. We appreciate the opportunity to provide comments on driving forward California regulations for motorcycles, specifically electric motorcycles.

We strongly support the ARB Staff efforts to include Zero Emission Motorcycles (ZEMs) in the proposed On-Highway Motorcycle (ONMC) Regulations. California's motorcycle emissions regulations haven't been updated in over 25 years. ARB staff has worked diligently over multiple years to come up with new regulations which are both fair and balanced. With the original ONMC proposal and the 15-day Modifications, they have created a set of regulations which will allow traditional motorcycle manufacturers (OEMs) to deliver to California their much cleaner motorcycles manufactured to the European Union's EURO5 standards, while also implementing a ZEM requirement over time with very flexible compliance pathways, creating a win-win for all motorcycle OEMs.

Zero has shipped thousands of electric motorcycles to customers in California and across the entire world. We are second only to Tesla in terms of manufacturing electric vehicles in California. Over 100 police and public safety departments in California including LAPD, cities across the Central Valley, and our California Parks have deployed Zero motorcycles. And these motorcycles emotionally resonate with motorcycle riders, which is key to expansion of the market for zero emission vehicles.

Highway capable Zero Emission Motorcycles can significantly impact ARB's goals to both reduce overall VMT and improve air quality. With an EPA UDDS range of over 200 miles and a top speed of 125 mph, our Zero motorcycles are all freeway capable and could serve more than 80% of California commuters. Tens of thousands of motorcycles are sold each year in California, often to replace cars for commuting. In terms of air pollution this becomes even more important as ARB considers regulations for motorcycle emissions reductions and expansion of ZEV programs to include electric motorcycles. ARB staff has recently stated that internal combustion motorcycles have become a significant and disproportionate source of mobile source emissions – especially



criteria pollutants. Using ARB's own EMFAC model, we determined that while internal combustion (ICE) motorcycles will have much smaller volumes and overall miles traveled (by factors of 27 and 127 respectively), they will combine to pollute 16% more than the total population of ICE cars. Cars have become so much cleaner while motorcycles now represent an ever expanding source of both on and off-road mobile emissions. On a per vehicle basis, each ICE motorcycle under the current regulation contributes 30 times more air pollution.

How can we help solve this problem? In two key ways – set standards to reduce emissions from ICE motorcycles in similar ways to how ARB has been successful with cars, and accelerate the shift to zero emissions motorcycle technology using appropriate regulations such as those developed by ARB staff. Zero Motorcycles and others in the motorcycle industry are already manufacturing and selling electric motorcycles today which have the performance of their equivalent internal combustion counterparts. And the technology is accelerating rapidly, benefiting from the advances made in battery and other key technologies found in ZEV light-duty vehicles. Within five years, with the new ZEM regulation in place, we strongly believe there will be both cost and range competitiveness with ICE motorcycles.

The State of California has ambitious goals for both air quality improvement and GHG reduction. Zero Motorcycles and other electric motorcycle manufacturers can make a meaningful contribution with the help of these regulations. The time is now to enact these well-balanced regulations and dramatically reduce the mobile source emissions contribution of the motorcycle market.

Please feel free to contact me if you have any questions and thank you again for all the great work you to improve our air quality.

Sincerely,

Jay Friedland

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cc: Jason McPhee, California Air Resources Board Scott Bacon, California Air Resources Board