



October 28, 2024

Chair Liane Randolph and
Members of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Via Electronic Submittal

Re: Modified Regulation Language for On-Road Motorcycle Emission Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle Requirements

Dear Chair Randolph and Members of the Board:

Earthjustice appreciates the opportunity to comment on the proposed modifications to the On-Road Motorcycle (motorcycles) Emission Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle (ZEM) Requirements. We continue to support the California Air Resources Board's (CARB) efforts to clean up motorcycles and advance the adoption of ZEMs, and we value your role in this process. However, we are concerned about the substantive changes proposed by the recent regulatory modifications. We acknowledge the importance of supporting manufacturers (such as offering strong incentives) in order to encourage the transition to cleaner motorcycles. Nevertheless, the hearing postponement and subsequent regulatory modifications further delay much-needed progress in reducing toxic emissions and advancing market adoption for ZEMs. We urge CARB not to delay the adoption of this crucial rule any longer.

I. CARB Cannot Afford Further Delays in Cleaning Up Dirty Motorcycles and Encouraging the Transition to ZEMs.

Motorcycle standards were last amended in 1998.¹ For context, in 1998, Titanic won the Best Movie Award, and Google was founded. Technology has drastically advanced since then, yet motorcycles will continue to be held to outdated standards and allowed to emit high levels of toxic emissions until 2029. When CARB adopted its last Mobile Source Strategy, it promised all Californians that it would deliver regulations to address pollution from various sources, including motorcycles. The need to adopt this rule is clear. California must reduce Reactive Organic Gas (ROG) and Oxides of Nitrogen (NOx) to achieve ozone attainment. In 2020, motorcycles made up

¹ CARB on Road Motorcycle (ONMC) Rulemaking Public Workshop (June 2023), available at https://ww2.arb.ca.gov/sites/default/files/2023-06/ONMC%20Workshop_060723.pdf.

a mere 0.4 percent of total vehicle miles traveled (VMT) yet accounted for 2.2 percent of all NOx and ROG emitted from mobile sources across the state.² Since the postponement of the public hearing, the Environmental Protection Agency (EPA) strengthened the Clean Air Act standard by lowering the annual air standard for PM2.5 pollution from 12 micrograms per cubic meter to 9 micrograms per cubic meter.³ EPA's recent changes to the nation's ambient air quality standards reinforce CARB's responsibility to update this long overdue regulation. We are concerned about the regulatory modifications, such as the delayed start date for the emissions standards for motorcycles powered by internal combustion engines (ICE), resulting in a current proposal projected to have fewer emissions reductions compared to the proposal shared in November.

Table 2. Cumulative Change in Projected Emissions Reductions Through 2045.

	NOx (tons)	ROG Exhaust (tons)	ROG Evap (tons)	CO (tons)	PM2.5 (tons)	GHG (MMT)
Current Proposal	4,617	8,994	7,812	126,480	33	0.64
Original Proposal	4,805	9,121	7,416	132,351	28	0.58
Difference	-188	-127	396	-5,871	5	0.06

II. ZEM Sales Baseline Projections Should Reflect Multi-Year Trends Rather Than Single Year Sales Records.

We are concerned with the modifications to the ZEM sales baseline projections. It is our understanding that trend data from the Department of Motor Vehicles (DMV) collected through 2022 by Staff demonstrated that the proposed sales targets “slightly underestimated ZEM sales growth.”⁴ However, because individual ZEM manufacturers and the Motorcycle Industry Council (MIC) recently provided data on declined ZEM sales for 2023, Staff chose to adjust the baseline to reflect MIC data. Basing the ZEMs sales baseline on single-year sales records from MIC resulted in “significant changes in ZEM baseline population out to 2050 and a decline of approximately 8,000 ZEMs,” which had important implications for the credit formulas and obligations.⁵ Although we support the use of incentive programs to assist the transition to ZEMs, we are concerned that these changes will reduce the potential of the ZEM credit program by facilitating the build-up of

² CARB, Public Hearing to Consider the Proposed Amendments to On-Road Motorcycle Emission Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle Requirements Staff Report: Initial Statement of Reasons, November 28, 2023.

³ EPA, “EPA finalizes stronger standards for harmful soot pollution, significantly increasing health and clean air protections for families, workers, and communities,” February 7, 2024, available at <https://www.epa.gov/newsreleases/epa-finalizes-stronger-standards-harmful-soot-pollution-significantly-increasing#:~:text=By%20strengthening%20the%20annual%20health,to%204%2C500%20premature%20deaths%20and>.

⁴ Attachment F, Supplement to Economic Impact and Emissions Assessment, October 11, 2024, p. F-2.

⁵ Ibid.

a credit surplus that can be used to delay compliance with targets that we believe are already not ambitious enough.

III. More Ambitious ZEM Standards are Possible.

We continue to encourage CARB to set more ambitious ZEM sales targets closer to the 100 percent target proposed by the recent draft of CARB's 2020 mobile source strategy.⁶ Cars and trucks will be 100 percent zero-emission vehicles by 2035 and 2036, respectively. In the same timeframe, motorcycles are only expected to reach 50 percent. CARB's analysis of the alternatives considered continues to demonstrate the more significant benefits in both emissions reduction potential and cost-effectiveness of more aggressive ZEM sales targets (Alternative 2); see tables below.⁷ Furthermore, California's significant investments in widespread availability of charging infrastructure will further facilitate and encourage the transition to ZEM adoption. Earthjustice encourages CARB to, at minimum, consider a review of ZEM sales targets well in advance of the interim year targets to allow for more ambition in this rule.

Table 5. Total Statewide Emissions Reductions Comparisons through 2045.

Scenario	NOx (tons)	ROG Exhaust (tons)	ROG Evaporative (tons)	CO (tons)	PM2.5 (tons)	GHG (MMT)
Proposal	4,617	8,994	7,812	126,480	33	0.6
Alternative 1	3,997	7,203	4,813	116,392	0	0
Alternative 2	5,449	11,731	13,143	130,037	92	2.19

Table 6. Summary of Costs and Benefits of Proposal and Alternatives (2020\$Millions).*

Scenario	Costs	Benefits	Net Cost
Proposal	\$605	\$974	\$281
Alternative 1	\$449	\$531	\$445
Alternative 2	\$1,085	\$1,817	\$166

Overall, Earthjustice continues to support CARB's efforts to clean up ICE motorcycles and advance the adoption of ZEMs. Thank you for considering our comments.

Respectfully,

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Earthjustice

⁶ CARB, Zero-Emission Motorcycles, available at <https://ww2.arb.ca.gov/zero-emission-motorcycles>.

⁷ Attachment F, Supplement to Economic Impact and Emissions Assessment, October 11, 2024, p. F-5.

