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Clerk of the Board
California Air Resources Board
Byron Sher Auditorium
1001 I Street
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Subject: Proposed Amendments to On-Road Motorcycle Emissions Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle Regulations

Harley-Davidson Motor Company (HDMC) welcomes this opportunity to comment on the recently proposed Amendments to the On-Road Motorcycle (ONMC) Emission Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle Requirements that will be considered by the California Air Resources Board (CARB) at the January 25, 2024 hearing.

HDMC is supportive of the effort to update the amendments to address public health concerns and provide safe clean air to all Californians. HDMC appreciates CARB's efforts to harmonize with the European Commission Delegated Regulations (EU) No. 134/2014 and (EU) No. 168/2013, however, has considerable concerns where CARB has notably diverged from harmonization.

Amendment-specific comments:

Upon review of the proposed amendments, HDMC respectfully offers the following comments:

1. IUMPR language needs further development to provide practical and legal certainty for manufacturers.

Harley-Davidson (H-D) supports CARB's alignment with functional In-Use Performance Monitoring Requirements (IUMPR) as specified in (EU) No. 44/2014, however, H-D has concerns with a few of the proposed unique requirements and has recommendations on where CARB should provide clarifying information to the industry.

- a. In Section §1958.2 (e)(2)(C) and per the table below, CARB proposes utilizing the annual sales of motorcycles in California, in a given model year, as the mechanism to calculate the IUMPR sample size for each certified OBD family. CARB defines "annual sales" as the total number of street-use motorcycles produced and delivered for sale in California in a given model year. H-D produces and delivers street-use motorcycles for sale to H-D dealerships in California who are then positioned to sell to end-customers at their own discretion.

Minimum Sample Size for IUMP

<u>Total Annual Sales*</u>	<u>Minimum IUMPR Sample Size</u>
<100	No IUMPR Data Submittal Required
100-249	3 motorcycles
250-499	6 motorcycles
500+	10 motorcycles

IUMPR, by definition, requires collecting data from bikes that have experienced on-road usage to obtain the required minimum ratio of 0.100. It is not reasonable to consider “annual sales” of motorcycles by the OEM. This suggests that the population may include unsold motorcycles located at the dealerships, which would not yet have any on-road usage. Including such vehicles in the sample size requirement calculation may require manufacturers to test a larger quantity of vehicles. It may also cause difficulties for manufacturers to obtain the required quantity of motorcycles with on-road usage data. EU 44/2014 requires vehicles which have been registered to be subject to IUMPR testing, therefore ensuring on-road usage data is available and subsequently applying a practical approach to satisfying the requirement.

- b. In Section §1958.2 (e)(2)(C) CARB has not provided any definitions or guidelines for “California motorcycle usage patterns and ambient temperatures” to make clear what these conditions represent. Without clear definitions, manufacturers will be separately challenged to design to these unknown specifications. In fact, some diagnostics have strict operating conditions. While the EU regulations include defined running conditions, the California running conditions are not yet defined, which could cause unintended non-compliance or a less than robust design that may drive a re-evaluation or re-design of parameters causing manufacturers to spend unplanned time, money, and resources.
 - To mitigate these concerns and to support the successful implementation of IUMPR in California, H-D believes that CARB should replicate the IUMPR requirements as specified in EU 44/2014, concerning the use of “registered” vehicles for the sample size and for the definitions of motorcycle usage patterns and ambient temperatures.

2. **Proposed new evaporative emissions tests are too costly, at too short notice. More stringent HC limits would be as effective and more in-line with CARB's stated aims of pursuing “cost-effective reductions”.**

H-D appreciates CARB’s phase-in approach to meet the new proposed Amendments starting with 30% compliance in MY2028, 60% in MY2029, and MY100% in 2030. However, H-D is concerned that CARB has severely underestimated the implementation timing and costs of the proposed evaporative emissions test procedure, TP-934.

Section §1976. (c)(4) reads in part: *The test procedures for determining compliance with standards applicable to 2028 and subsequent model year vehicles are set forth in TP-934, “Test Procedure for Determining Evaporative*

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Emissions for On-Road Motorcycles”, adopted by the state board on [Adoption Date], which is incorporated herein by reference.

- a) **Timing:** Manufacturers will first need to evaluate their current evaporative emissions system performance to determine if changes are needed to meet the new standards. H-D estimates that to meet MY28 certification timing, exploratory testing must start in early CY24 to enable suitable evaporative and vehicle architecture design changes. CARB’s latest time states that the Amendments will not be officially incorporated into the Code of Regulations until Summer 2024, therefore, H-D would incur the unacceptable risk of spending time and resources preparing for a regulation that is not finalized and could potentially change.
- b) **Costs:** H-D estimates a spend of \$5.7M in product development costs, test facility upgrades, and additional full-time employees just to implement the proposed TP-934 and be prepared for MY28 certification. In addition, it also contradicts CARB’s overall stated objectives of minimizing costs by aligning standards with other jurisdictions where possible and requiring additional cost-effective reductions in subsequent years.
 - To mitigate these concerns, H-D suggests that CARB continues to harmonize with EU evaporative emissions test procedures. H-D strongly recommends CARB evaluates a more stringent limit to achieve a greater reduction in HC emissions that would attain similar multi-day diurnal results. This method would greatly reduce the financial and resource burden on manufacturers and provide more cost-effective options to meet the more stringent limit. The significant money and resources to implement TP-934, as currently proposed, will reduce focus on developing electric motorcycle product offerings, an area CARB is encouraging manufacturers to develop.

3. **Costly and burdensome duplicative testing by both CARB and the EPA must be avoided through CARB’s application for a waiver of the preemption to enforce the new standards.**

During the June 7th, 2023, *Public workshop to discuss proposed On-Road Motorcycle (ONMC) Regulatory Amendments*, it was stated that manufacturers will be required to demonstrate compliance with both EPA and CARB regulations for motorcycles for sale in California even though the CARB regulations will be more stringent. This duplicative testing is an additional and significant burden of workload and expense on manufacturers. Not all manufacturers will offer the same emissions hardware and software configured motorcycles for California and the rest of the United States.

- To mitigate these concerns, when California applies a waiver of the preemption to enforce these new standards, CARB should emphasize that the proposed regulations will be significantly more stringent than EPA standards and even though the CARB/EU certification protocols differ from those of the EPA, manufacturers should not be penalized with duplicative testing.

4. **Model years 2024-2030 should have increased multipliers by at least a factor of 2, to account for expected uptake levels of ZEMs. A review should be made in 2034 to assess ZEM sales and to review the ZEM mandate for 2035 and beyond.**

H-D is concerned that customers will not purchase ZEMs at a rate that will enable manufacturers to consistently meet ZEM credit obligations.

- To mitigate these concerns, CARB should consider increasing the multipliers by at least 2 for model years 2024-2030 and strongly consider continuing higher multipliers for model years 2036 and beyond, until

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sufficient customer data is available demonstrating high value multipliers are no longer necessary to meet the obligations.

Conclusion:

HDMC appreciates CARB considering our feedback on the above amendments to the On-Road Motorcycle (ONMC) Emission Standards and Test Procedures and Adoption of New On-Board Diagnostics and Zero-Emission Motorcycle Requirements. While we believe the overall framework and approach is solid, there are some very real needs and opportunities to refine the draft to achieve CARB's intended objectives. We look forward to continued engagement with CARB on the issues raised herein.

January 16, 2024.

Best Regards,

Leslie Slavik

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