RUBBER
manufacturers
association

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December 23, 2016

The Honorable Gina McCarthy
Administrator
Air and Radiation Docket and Information Center
U.S. Environmental Protection Agency
Mail code: 28221T
1200 Pennsylvania Ave. NW.
Washington, DC 20460

The Honorable Mark Rosekind, Ph.D.
Docket Management Facility, M-30
U.S. Department of Transportation
West Building, Ground Floor, Rm. W12-140
1200 New Jersey Avenue SE.,
Washington, DC 20590

Dear Administrator McCarthy and Administrator Rosekind:

RE: Petition for Reconsideration and Amendment of Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, Final Rule, 81 Fed. Reg. 73478 (October 25, 2016), RIN 2060–AS16; RIN 2127–AL52 (Docket Numbers EPA–HQ–OAR–2014–0827 and NHTSA–2014–0132; FRL–9927–21–OAR)

I. Introduction

The Rubber Manufacturers Association ("RMA")[1] petitions the Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) to reconsider the above-captioned final rule. As companies that manufacture tires for use on new medium and heavy-duty vehicles, RMA members have a direct interest in this rulemaking. Overall, RMA supports the goals of this rulemaking and appreciates the opportunity to partner with other stakeholders in contributing to better fuel economy and GHG emission reductions. RMA also appreciates several changes to the rule, addressing issues raised in RMA comments on the proposed rule and notice of data availability, such as the changes incorporating tire-pressure monitoring systems ("TPMS") into the greenhouse gas emission model ("GEM") and basing EPA's recall authority on the plain language of the Clean Air Act. But, RMA believes that on several other issues such as, lab alignment, standards for non-box and non-aero box trailers, SAE J1025 and J2452, and speed limited tires, the agencies should reconsider their approach.

[1] RMA represents the tire companies manufacturing tires in the United States. RMA's membership includes: Bridgestone Americas; Continental Tire the Americas, LLC; Cooper Tire & Rubber Company; Kumho Tire U.S.A., Inc.; Michelin North America, Inc.; Pirelli Tire North America, Inc.; Sumitomo Rubber North America, Inc.; The Goodyear Tire & Rubber Company; Toyo Tire Holdings of Americas Inc. and Yokohama Tire Corporation.

II. The Agencies Should Establish a Reference Laboratory

In the proposed rule, the agencies proposed to continue to allow use of either STL or Smithers in testing based on their conclusion that lab-to-lab variability is "very small" and "would not significantly affect RRc values." 80 Fed. Reg. 40243. Also, in the preamble discussion for the final rule, the agencies mistakenly noted that they "*did not receive any comments on the issue*." 81 Fed. Reg. 73625. Emphasis added. But, as the agencies noted in the response to comment document, RMA submitted extensive comments and data advocating for the establishment of an alignment machine and challenging the Agencies' assertion that lab-to-lab variability is very small. RMA Comments on Proposed Rule at 2-9 (Oct. 1, 2015). For example, RMA provided test data showing that while the labs are correlated, they do not produce the same results, as some tires perform better at one lab, while others perform better at the other.

While the agencies, in the response to comment document, seemed to acknowledge potential compliance concerns, noting that tire manufacturers may select trailer tire rolling resistance level (TRRL) values identical to the measured rolling resistance or any higher value, RMA members may still feel compelled to correlate to both labs to avoid any potential compliance issue. Response to Comment Document at 1820. Additionally, at section 1037.520(c)(2), the regulation requires that rolling resistance test results not be "biased low," but the agencies do not define or explain what that means. Even small differences in test results can be very meaningful to a tire company, particularly in business, auditing, or compliance contexts. It would be helpful for the agencies to establish a reference machine to address this issue.

III. The Agencies Should Reconsider the Rolling Resistance Limit Values for Non-Box and Non-Aero Box Trailers

In the proposed rule, the agencies proposed to set rolling resistance limit values for non-aero and non-box trailer tires at 6.0 for 2017, 5.1 for 2018-2021, and 4.7 for 2024-2027. In the final rule, the agencies split out the standards for non-box trailers and for non-aero box vans. The final rule raised the limit values for non-box trailers from 5.1 to 6.0 for 2018-2020 and from 4.7 to 5.1 for 2024+. However, the non-aero box standards were unchanged from the proposed values of 5.1 for 2018-2020 and 4.7 for 2021+. In the discussion about non-box trailers, the agencies noted that while they agree with RMA and Michelin comments that "the baseline tires for non-box trailers should have a higher rolling resistance" than what was proposed, the agencies asserted that they "did not receive any that included C_{RR} data." 81 Fed. Reg. 73652. This appears to be an oversight by the agencies as this issue does seem to be addressed in the response to comment document.

In RMA's comments, RMA recommended the following limit values for non-aero and non-box trailer tires: 7.0 in 2018, 6.5 in 2021, 6.1 in 2024, and 5.8 in 2027. RMA based these recommended values on rolling resistance data collected on a range of tires used for non-aero vans and non-box trailers, which were included in RMA's comments. See RMA Comments on Proposed Rule at 21-25 (Oct.

2015); RMA Comments on NODA p. 3-4 (Apr. 2016). RMA also noted that the application of low rolling resistance tires to non-box and non-aero trailers may present conflicts in ultimate service and application. For example, trailers used on variable terrain often demand deeper tread depths and sidewall scuffing resistance such that typical highway-type low rolling resistance tire may not provide optimal service performance. In addition to potential performance issues, RMA members may not have enough lead time to meet these standards for non-box trailers and non-aero box vans. It would be helpful for the agencies to raise the rolling resistance limit values to align them with rolling resistance values that can be feasibly met in the future.

IV. The Agencies Should Reconsider Incorporating the SAE J1025 Standard

While RMA appreciates the agencies' attempt to clear up confusion regarding use of the terms "static loaded radius" and "loaded radius," the SAE J1025 standard for revolutions per mile is problematic. 81 Fed. Reg. 74076. In RMA's comments on the proposed rule, RMA noted that truck tire revolutions per mile can be measured using SAE 1025-2012, but RMA also highlighted that this test method could cause variations among similar tires depending on load and pressure, tread wear, tread geometry, driving and braking torque, and type and condition (wet, dry) of the pavement. RMA Comments on Proposed Rule at 30. The implications here are that vehicle manufacturers may ask RMA members to conduct additional testing based on a standard that has historically been based on engineering practices. RMA members are aware of only one facility that conducts this SAE J1025 testing and RMA is concerned that there may be limited capacity as well as a significant financial burden associated with such testing.

RMA advocates that the agencies allow tire manufacturers to rely on engineering practices to develop an estimate for static loaded radius and revolutions per mile. For example, the Tire and Rim Association has published "Guidelines for Static Loaded Radius (SLR_R) for Radial Truck-Bus Tires." In addition, The European Tyre and Rim Technical Organization (ETRTO) published a calculation for Theoretical Rolling Circumference. Tire manufacturers commonly use such engineering estimates. Tire companies also use other similar, equivalent formulas. RMA is interested in discussing with the agencies ways to incorporate accepted engineering practices that would provide the agencies with information essentially equivalent to results from J1025 testing.

V. The Agencies Should Reconsider Incorporating the SAE J2452 Standard

The agencies essentially created a modified version of the SAE J2452 coast down tire rolling resistance test for use with truck tires that is likely not technically valid and is outside the scope of the original SAE J2452 standard. 81 Fed. Reg. 73626, 73676, 74085. Beyond the agencies' generic discussion about coast down test procedure improvements, the agencies never discussed the specific possibility of relying on the J2452 standard in the proposed rule or in the notice of data availability. RMA members are concerned that they were not provided notice of the agencies consideration of the J2452 standard. The issue here is that the agencies have taken a test for passenger tires and applied it to truck tires,

changing loads and pressures, but not the warm-up time or adjusting the coast down profile to match that of truck tires.

It is not appropriate to apply a test method designed for light duty vehicles and apply it to medium and heavy duty vehicles or their components without evaluating the method's application to other vehicles, considering adaptations and validating the method. Given these issues, RMA members are concerned about the reliability and accuracy of such testing and therefore RMA recommends that this test be removed from the final rule. RMA is interested in discussing with the agencies alternative ways to provide the agencies with information essentially equivalent to results from J2452 testing.

VI. The Agencies Should Reconsider Removing the Exemption for 55-mph Speed Rated Tires

In the proposed rule, the agencies proposed to discontinue the criterion for exemption based solely on use of tires with maximum speed rating at or below 55 mph. 80 Fed. Reg. 40295. RMA commented that these tires typically are designed to achieve tire performances such as high load carrying capacity and durability that are specific to the vehicles on which they are installed, which often are used in off-road applications. RMA also noted that a tire that is appropriate for use on a vehicle used for off-road applications would not see a meaningful fuel consumption benefit due to the use of low rolling resistance tires as its typical drive cycle is at low speeds on aggressive terrain. Also, a speed restricted tire would not be suitable for use on a vehicle that does not specify these tires.

While acknowledging RMA's comments, the agencies ultimately were not persuaded that it would be detrimental for a vehicle to drive above 55 mph with speed-limited tires. The agencies' incorrectly assumed that vehicles that have the potential to travel at high speeds over 55 mph may be fitted with 55-mph speed rated tires that could later be removed. This assumption is mistaken because 55-mph speed rated tires are only installed on vehicles that do not have the capacity to safely travel at speeds over 55 mph.

As the Federal Motor Carrier Safety Administration noted in its recently issued final rule Parts and Accessories Necessary for Safe Operation, vehicles should be equipped with tires that have the proper speed rating for the vehicle's intended use because operating a vehicle at speeds that exceed the specified tire speed rating could create a potential safety issue. 81 Fed. Reg. 47728. Moreover, FMCSA adopted language in 49 CFR § 393.75 prohibiting the use of speed-restricted tires labeled for 55 mph or less, in accordance with S6.5(e) of FMVSS No. 119, on vehicles that operate at speeds that exceed the rated limit of the tires. Id. Therefore, the concern that this type of tire could be installed on a vehicle that could exceed such speed limits is not founded because speed restricted tires would not perform appropriately with and are prohibited on vehicles that exceed such limits.

VII. The Agencies Should Consider Directing Consumers to RMA Member Websites for Information on Rolling Resistance

In the proposed rule, the agencies proposed to determine that tire rolling resistance measurements would not be considered confidential business information. Ultimately, the agencies chose not to pursue a public database through this rulemaking. As RMA commented, RMA members consider rolling resistance test data to be confidential business information and while RMA appreciates the interest EPA expresses in educating vehicle operators about rolling resistance, releasing this data would not contribute to that goal. Instead, RMA recommended that the agencies consider an alternate approach, which RMA affirms again, that directing consumers to RMA member website fuel economy calculators would be valuable as these websites are good sources of information for tire replacements and comparisons.

VIII. The Agencies Should Ensure that Tire-Pressure Monitoring Systems for Trailers Provide a Visual Telltale to the Driver While the Vehicle Is in Motion

In the proposed rule, the agencies did not include a greenhouse gas emission model (GEM) reduction value for tire pressure monitoring systems (TPMSs). 80 Fed. Reg. 40187, 40218. But, the agencies requested comment on this approach and sought data from those in support of a GEM reduction value. In comments, RMA expressed support for a GEM credit for TPMS similar to the credit proposed for automatic tire inflation systems (ATIS). RMA also cited to a NHTSA study on the effectiveness of FMVSS 138, which mandates that TPMS be installed as original equipment in all passenger cars, multipurpose passenger vehicles and trucks and buses with a gross vehicle weight rating (GVWR) of 10,000 pounds or less and manufactured on or after September 1, 2007. In the NHTSA study, the agency found that the presence of TPMS led to a 55.6 percent reduction in the likelihood that a vehicle would have one tire that is significantly underinflated (25 percent or greater) and that TPMS saves $511 million in fuel costs across the vehicle fleet. RMA Comments at 25-28.

In the final rule, the agencies adopted provisions allowing manufacturers of tractors, trailers, and vocational vehicle chassis to input a percent decrease in overall fuel consumption and CO_2 emissions into GEM if the vehicle includes either an ATIS or a tire pressure monitoring system. 81 Fed. Reg. 73545, 73592-93. The agencies noted that they found the comments submitted, including those from RMA to be persuasive. The RMA commends the agency for adding tire pressure monitoring systems in the Phase 2 GEM. The use of these systems will provide a substantial improvement in vehicle efficiency as well as improve tire performance and extend tire life through more frequent and proper maintenance.

RMA, however, recommends that the agencies ensure that TPMS visual telltales for trailers are provided to the driver while the vehicle is in use. The final rule states that heavy duty trailers must use TPMSs "as specified in S4.3 and S4.4 of 49 CFR 571.138," citing to FMVSS 138, a TPMS standard for passenger vehicles, trucks and buses. 49 CFR Section 535.5(e)(2)(ii)(A). FMVSS 138 S4.3 and S4.4 requires that the low pressure warning telltale be mounted inside the occupant compartment, in front of and in clear view of the driver, and illuminated when the ignition locking system is on, whether or not the engine is running.

The issue here is that, unlike passenger or vocational vehicles, trailers make up part of a unit and due to the design of the vehicle manufacturers may seek to utilize TPMS at the tire not visible to the driver while driving. RMA cautions against such systems as they may not provide an adequate warning of pressure loss and could eliminate the benefits of the system. Instead, as required under FMVSS 138, RMA recommends that any tire pressure monitoring system use low pressure warning and malfunction telltales in clear view of the driver while the vehicle is in operation, such as communication/telematics within the cab or by additional telltale visual warnings.

IX. The Agencies Should Provide Relief for Adjustable Spread Axle Trailers

In the response to comment document, the agencies noted that because trailers with large spread axles are more susceptible to scrubbing, trailers with axle spreads greater than 120 inches are exempted from the rule. Response to Comments at 1035. But, the regulatory exemption states that "in the case of adjustable axle spacing, this refers to the closest possible axle positioning," meaning that if it is possible to narrow the axle gap to under 120 inches, the exclusion would not apply. 40 C.F.R. § 1037.5(h)(3). This regulatory exemption does not appear to have been raised by the agencies in the proposed rule or notice of data availability.

While RMA appreciates the agencies providing some relief for spread axle trailers, the agencies should expand the exemption to more broadly cover trailers with adjustable axles, which make up the great majority of spread axle trailers. As the agencies acknowledged, scrubbing is an issue for spread axle trailers, but the relief provided does not completely address the issue. RMA looks forward to discussing potential solutions with the agencies.

X. Conclusion

RMA appreciates the opportunity to submit this petition and looks forward to working with the agencies on potential changes to the regulation.

Sincerely,

Tracey J. Norberg
Senior Vice President & General Counsel
Rubber Manufacturers Association