



**RUBBER**  
manufacturers  
association

1400 K Street, NW • Washington, DC 20005 • tel (202) 682-4800 • fax (202) 682-4854 • www.rma.org

August 21, 2009

National Highway Traffic Safety Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue, S.E.  
West Building Ground Floor  
Washington, DC 20590

RE: Tire Fuel Efficiency Consumer Information Program; Proposed Rule, 74 Fed. Reg. 29,542 et seq. (June 22, 2009), Docket No. NHTSA-2008-0121; RIN 2127-AK45

I am pleased to submit the attached comments of the Rubber Manufacturers Association (RMA)<sup>1</sup> on the above-mentioned notice of proposed rulemaking. As the sole industry to be substantively regulated by this proposed regulation, RMA tire manufacturer members have a keen interest in this rulemaking. The tire industry has long supported the concept of providing information to consumers about its products at point of sale and welcomes the opportunity to begin providing consumer information about a tire's contribution to vehicle fuel economy.<sup>2</sup> In fact, RMA and its members supported the enactment of the provisions in the Energy Independence and Security Act of 2007 (EISA),<sup>3</sup> which authorized this rulemaking.

RMA members believe that in order to establish effective consumer information requirements regarding tire efficiency, the program must meet the following:

- Provide information at point of sale;
- Provide meaningful information that is easy to understand by consumers;
- Provide a wide range of tire efficiency choices across the rating scale to each consumer about replacement tire choices appropriate for the consumer's existing vehicle;
- Be cost effective to minimize the cost effect of this information to consumers.

To summarize RMA's proposed approach, discussed in more detail throughout the RMA Comments and Appendices, RMA proposes the following (all premised on self-certification of ratings and no test value reporting or tolerance band-based compliance approach):

- **Scope of regulation:**
  - **Regulation should apply to all replacement tires not exempted by 49 CFR 575.104(c)(2).**
  - **Ratings should be given to each unique tire stock-keeping unit (SKU) subject to the regulation.**

---

<sup>1</sup> The Rubber Manufacturers Association (RMA) is the national trade association for the rubber products industry. Its members include more than 60 companies that manufacture various rubber products, including tires, hoses, belts, seals, molded goods, and other finished rubber products. RMA's eight tire manufacturer member companies operate 30 manufacturing plants, employ thousands of Americans and ship over 90 percent of the original equipment (OE) tires and 80 percent of the replacement tires sold in the United States. RMA's tire manufacturer member companies include Bridgestone Americas Inc., Continental Tire North America, Inc., Cooper Tire & Rubber Company, The Goodyear Tire & Rubber Company, Michelin North America, Pirelli Tire North America, Toyo Tire North America, Inc. and Yokohama Tire Corporation.

<sup>2</sup> Often referred to as tire "rolling resistance" or "tire efficiency;" these terms will be used interchangeably throughout the comments.

<sup>3</sup> Public Law 110-140, 121 Stat. 1492 (Dec. 18, 2007).

- **Tires designed for OE but sold in the replacement market would be considered replacement tires for purposes of this regulation and subject to its requirements.**
- **A replacement tire consumer information five category rating system containing:**
  - **Five category tire fuel efficiency rating based on rolling resistance coefficient.** This type of rating would give consumers more meaningful tire fuel efficiency choices of replacement tires appropriate for their existing vehicle.
  - **Five category wet traction rating based on peak coefficient of friction on wet asphalt and wet concrete.** RMA proposes a categorical rating that evaluates peak coefficient of friction ranges for wet concrete and wet asphalt separately based on ranges of actual wet traction data submitted by RMA.
  - **Five category treadwear rating based the Uniform Tire Quality Grading System (UTQGS) test procedure, although treadwear data should be evaluated based on individual SKU data to establish rating category boundaries.**
- **Tire manufacturer requirements:**
  - **Self-certify and report to NHTSA rating information** for all three rating categories for each tire SKU subject to the regulation.
  - **Develop consumer information and make available tire ratings to tire dealers** for use in educating consumers at point of sale.
  - **Do not require reporting of test values** used to derive reported ratings.
  - **Do not require color rating graphic on replacement tire labels**, since consumers will not see the information. RMA would support a requirement that new ratings replace current UTQG information on existing tire labels for dealer information (in black and white to minimize cost).
  - **Do not require tire manufacture date on label**, since it would duplicate sidewall information and not reach consumers.
- **Lead Time**
  - **24-month compliance lead time for tire manufacturers** to conduct necessary testing, rate applicable tires, self-certify ratings to NHTSA and provide ratings to tire dealers for use in educating consumers at point of sale.
  - **Compliance date for existing tires should be based on tire manufacture date** instead of tire sell date.
  - **Compliance date for new tires introduced should be six months after new product is introduced**, consistent with current UTQGS requirements.
- **Tire retailer requirements:**
  - **Display the NHTSA poster** discussed in the NPRM in the tire retail outlet showroom or customer waiting area.
  - **Make available consumer information on applicable tires at point of sale** using one of the options outlined in these comments (counter brochures, product catalogues, in-store online access to NHTSA website, tire manufacture websites or tire retailer website with ratings information, etc.).
  - **Link to NHTSA's website** on tire retailer's website if retailer has website.
- **Compliance Assurance**
  - **NHTSA should conduct periodic audits** through testing to assure compliance.
  - **NHTSA should investigate for potential non-compliance if audit test data would result in a rating that is lower than that certified by the tire manufacturer.**

- **NHTSA should seek data from the tire manufacturer supporting the rating certified by the manufacturer** in the case of alleged non-compliance based on a NHTSA audit.
- **RMA opposes the concept of compliance tolerance bands.**

RMA's submission includes several components, including this cover letter, a 15-page comment submission and nine appendices. For downloading and reviewing convenience, the cover letter and comments are submitted separately from each of the nine appendices. The Appendices are listed below:

<b>APPENDIX NUMBER</b>	<b>DOCUMENT NAME</b>
1	Compilation and Analysis of Data Related to the Rolling Resistance of Passenger Car Tires, ENVIRON International Corporation, April 22, 2009.
2	Rubber Manufacturers Association Assessment of NHTSA Consumer Research And Review of RMA Consumer Research, August 2009.
3	Legal Review of the Tire Fuel Efficiency Consumer Information Program Proposed Rule, Pepper Hamilton LLP and Rubber Manufacturers Association, August 2009.
4	Trend Poll Results, U.S. Drivers' Behaviors and Opinions Regarding Tire Pressure and Tire Maintenance, Fredrick Polls, May 2009.
5	Poll Results: U.S. Drivers' Behaviors and Opinions Regarding Tire Characteristics in Tire Purchase Decision Making, Fredrick Polls, June 2005.
6	Review of the Tire Fuel Efficiency Rating System Described in NHTSA's Notice of Proposed Rulemaking, ENVIRON International Corporation, August 21, 2009.
7	Technical Review of the Tire Fuel Efficiency Consumer Information Program Proposed Rule, Rubber Manufacturers Association, August 2009.
8	Comments on the Preliminary Regulatory Impact Analysis for the Notice of Proposed Rulemaking Replacement Tire Consumer Information Program Part 575.106, Environomics Incorporated, August 2009.
9	Rubber Manufacturers Association EISA Tire Maintenance Education Requirement Assessment, August 2009.

RMA looks forward to a dialogue with NHTSA officials regarding the comments, data and analyses submitted to this docket. Please contact me should any questions or need for clarification arise. I can be reached at (202) 682-4839 or [tnorberg@rma.org](mailto:tnorberg@rma.org).

Sincerely,



Tracey J. Norberg  
Senior Vice President

Attachment: RMA Comments (Appendices submitted as separate entries to Docket No. 2008-0121)

# Comments of the Rubber Manufacturers Association Tire Fuel Efficiency Consumer Information Program; Proposed Rule

74 Fed. Reg. 29,542 et seq. (June 22, 2009)

Docket No. NHTSA-2008-0121; RIN 2127-AK45 (“NPRM”)

The Rubber Manufacturers Association (RMA) appreciates the opportunity to provide comments on the above-referenced NPRM and more information about the components of our preferred approach. RMA is concerned that the NPRM does not meet these objectives and provides comments in several areas: (1) the proposed consumer rating and label approach; (2) technical issues associated with testing and rating tires for tire efficiency, traction and treadwear; (3) the proposed compliance approach; (4) the effects on the current UTQGS regulations; (5) lead time; (6) the costs and benefits associated with the proposed rule; (7) federal preemption issues associated with the proposed rule; (8) a national tire maintenance consumer education program and (9) technical inconsistencies and clarification RMA received on the NPRM.

Due to the page limitation set for comments to the NPRM, RMA summarizes its main comments in this document but provides several appendices to these comments for further detailed data and analysis in support of the themes discussed here. RMA welcomes dialogue with NHTSA on the issues discussed in this submission. Although RMA’s request for an extension of the comment period for this NPRM was denied, RMA has sought to assemble significant data, research and analysis to assist the Agency in this rulemaking. RMA encourages the Agency to seek further information and clarification should additional information be indicated.

## **I. The Proposed Consumer Rating and Label Approach**

When consumers purchase a new vehicle, they are offered an array of vehicle options, with a wide range of fuel economy ratings. In contrast, when a consumer purchases replacement tires, the available choices are within a narrow range of tire types and sizes. Typically, it is recommended that a consumer purchase a replacement tire that is the same size and load carrying capacity as the OE tire fitment, with a speed symbol at least as high as the OE tire fitment. While some consumers may choose to “up-size”<sup>4</sup> when purchasing replacement tires, this phenomenon is limited to a small segment of the population, and even in this case consumers are limited in tire choice by speed symbol and load-carrying capacity, as well as size, to some extent, so that the tire can fit on the axle and into the wheel space of the vehicle, unless the consumer is extensively modifying the vehicle.

So, since consumers shopping for replacement tires are limited in their tire selections by requirements of their existing vehicle, it is important to design a rating system that maximizes the tire efficiency choices across the rating scale available to each consumer. In evaluating the rating proposal in the NPRM, this is a crucial criterion. In addition, it is important to separate designing an efficient and effective rating system from the potential for designing a fuel efficiency estimation tool (NHTSA uses the term “calculator”), contemplated by NHTSA in the NPRM, that could provide consumers with estimated potential fuel economy savings.

### **A. RMA supports a categorical tire efficiency rating system based on rolling resistance coefficient (RRC).**

RMA supports a five category rating system based on rolling resistance coefficient (RRC). RMA has conducted a comprehensive analysis of the test data collected by the California Energy Commission (CEC) and data compiled by RMA member companies.<sup>5</sup> This review, included as Appendix 1 to these comments, demonstrates the feasibility of this approach and illustrates that each consumer would have more meaningful choices among tire efficiency ratings of tires appropriate for his vehicle. As well, as discussed in more detail below, this type of rating can be used to estimate potential vehicle fuel savings among ratings.

---

<sup>4</sup> A small percentage of consumers choose to “up-size” their tires in purchasing replacement tires. Consumers in this situation typically purchase a tire with a larger rim diameter or lower aspect ratio for cosmetic reasons.

<sup>5</sup> See, Appendix 1, Compilation And Analysis of Data Related to the Rolling Resistance of Passenger Car Tires, ENVIRON International Corporation, April 22, 2009 (“Appendix 1”).

The rolling resistance of a tire is not a static number. Instead it is a dynamic measurement, varying with load, inflation pressure and speed. RRC is a unitless efficiency coefficient value, typically expressed in terms of kilograms per tonne or pounds per ton, which allows a comparison of tire rolling resistance on a constant load basis so that tires of different sizes and load carrying capabilities can be compared using the same scale. "Coefficient" is a typical method of characterizing tire performance efficiency values. For example, the wet traction ratings in the Uniform Tire Quality Grading System (UTQGS) program that form the basis of the wet traction rating proposal in this NPRM are based on coefficients of friction on asphalt and concrete surfaces, rather than braking force.

A tire rolling resistance categorical rating system based on RRC has several advantages over a rating system based on rolling resistance force such as proposed in the NPRM. First, an RRC-based rating system allows a consumer to compare how tires would perform with the same load applied to them. This makes sense, since any tire a consumer would buy would be installed on the same (his existing) vehicle. This allows a consumer to compare potential tire choices on the same scale, even if the tire choices' load carrying capacities are not the same.<sup>6</sup>

Second, since RRC is independent of load, a consumer could be able to choose across a larger portion of a rating scale. This is important, since the appeal of a rating system will depend on whether a consumer has "good" choices appropriate for his vehicle across the rating scale. RMA investigated the five category proposal to ensure that consumers purchasing tires on either end of the passenger tire spectrum would have a range of choices across the rating scale within a given size and speed symbol.

#### **B. RRC-Based rating could be used to estimate comparative fuel use of tire purchase options.**

The NPRM contemplates creating an interactive fuel savings tool that would allow a consumer to input his vehicle information (make, model, year, etc.), typical miles driven annually and compare replacement tire purchase options for annual fuel consumption estimated differences. However, the term "calculator" implies a level of precision unavailable due to variables such as typical driving routes (urban, highway, etc.), weather conditions, driver inputs (driving style), vehicle maintenance and repair, and rolling resistance testing uncertainty. "Estimator" would be a more appropriate term to call such a consumer tool, since it is important not to overpromise fuel economy savings by implying a level of certainty and precision that is impossible to deliver. If fuel economy savings were overpromised to consumers, tire manufacturers and NHTSA would receive consumer complaints based on the unrealistic consumer information provided. This situation can be avoided by providing an "Estimator" and appropriate disclaimers and qualifications. RMA would be pleased to work with NHTSA to develop such a consumer information Estimator tool.

A rating system based on RRC would form an appropriate basis for such an Estimator. This rating, plus the vehicle's gross vehicle weight (included in the computer model) could be used to estimate rolling resistance force specific to the consumer's vehicle and more accurately yield a fuel consumption estimate than tested RRF would. Remember, tested RRF using the ISO 28580 test procedure<sup>7</sup> is based on 70 percent of the maximum load carrying capability of the tire, *not* the load of a specific vehicle. Since RRC is a coefficient, it can be multiplied by the load of the vehicle to estimate the tire's RRF on the consumer's vehicle, rather than using a general RRF generated through testing at a load not specific to the consumer's vehicle.

#### **C. The Proposed Rating Approach would not provide consumers with useful information about tire efficiency of replacement tires suitable for their vehicles.**

The NPRM proposes a rating system that would rate tires on a 0 to 100 scale, using tested rolling resistance force (RRF) as a basis for the rating. However, the proposed rating system would not give *each* consumer purchasing replacement tires a choice across the 0 to 100 scale. Instead, a typical consumer shopping for a replacement tire for a specific vehicle would have a choice along approximately a 30 to 40 point spread along the

---

<sup>6</sup> Tire load index varies with tire size, because it is a function of contained air volume – the more air volume contained in the tire, the more vehicle load the tire can support. Even tires with the same dimensions can have slightly different load-carrying capacities, which would affect the rolling resistance force value of the respective tires and would not give consumers an accurate comparison. For example, a tire manufactured in a given size to the Tire and Rim Association (TRA) (United States) specifications would have a different load index than a tire designed to the European Tyre and Rim Technical Organisation (ETRTO) or Japan Automobile Tyre Manufacturers Association (JATMA) specifications.

<sup>7</sup> See *infra*, footnote 34.

100 point scale. Since RRF is the pounds force that must be overcome to move the vehicle forward, vehicle load or weight plays a significant role in the calculation of RRF. Typically, consumers purchasing larger, higher load-carrying capacity tires for larger vehicles would have such a choice along the lower end of the scale. Consumers purchasing smaller, lower load-carrying capacity tires for smaller vehicles would have choices along the upper end of the scale.

Since the proposed rating system is based on tested load (70 percent maximum load capacity of the tire), two tires with the same RRC but different load indices would be rated differently – the tire with the lower load index would be rated better than the tire with the higher load index. This communicates to the consumer that the tire with the lower load index would yield better fuel economy than the tire with the higher load index when installed on the same automobile. This simply is untrue. Two tires with the same RRC would yield the same steady state fuel economy when installed on the same vehicle, regardless of tire size or load carrying capacity. Likewise, if a tire has a lower RRC but a higher load index than another tire, when installed on the same automobile, the lower RRC tire would yield better steady state fuel economy, again regardless of tire size and load index. In both of these cases, the consumer would not get accurate information to assist in making a fuel efficient tire purchase choice from a rating based on RRF. While it is true that typically two vehicles in different vehicle classes moving at the same constant speed (steady-state) will achieve different fuel economy when equipped with tires of the same RRC, but the difference in fuel economy is due to the difference in vehicle weight, not the tire choice. The two tires are equally efficient for the load they carry, and this should be conveyed to consumers.

The proposed rating scale gives consumers an illusory view of the tire efficiency choices available to them for their vehicle and does not assist consumers in purchasing fuel efficient tires for their vehicle. On the other hand, this rating approach encourages consumers to purchase smaller tires and could promote the purchase of tires with inadequate load-carrying capacity to safely carry the load of the vehicle. Although many tire dealers would discourage and in many cases would not sell a tire with a rated load capacity insufficient for the vehicle, NHTSA should not promote a system that could lead to this type of safety concern.

NHTSA should develop a system that promotes tire efficiency, regardless of vehicle class. Unfortunately, since the proposed system would not favorably rate any tires suitable for larger vehicles, it would send the message to owners of these vehicles that they have no fuel efficient tire choices, so they should not base tire purchasing decisions on this information. The 0 to 100 scale will be perceived by many consumers as a percentage rating, like grades in school. If a consumer has rating choices between 40 and 60 appropriate for his vehicle, for example, it may be perceived that all are “failing grades.”

In terms of overall vehicle fuel consumption, our nation would save more gasoline by improving the fuel economy of larger and/or less fuel efficient consumer vehicles by a given percent than by increasing the fuel economy of small and/or more fuel efficient vehicles by that same percentage.<sup>8</sup> Since a significant portion of the American vehicle fleet is comprised of less fuel efficient, larger cars, SUVs and light trucks, it should be in the interest of the federal government to promote purchases of more efficient replacement tires for larger vehicles already in the American fleet in order to achieve the overall goals of the EISA and decrease our nation's dependence on fossil fuels.

#### **D. The NPRM does not justify the selection of an RRF-based tire fuel efficiency rating**

The NPRM does not provide accurate and supportable justifications for the proposed selection of an RRF-based tire fuel efficiency rating system. First, the NPRM chooses an extremely unlikely scenario to justify the use of an RRF-based rating system. The NPRM suggests that a fuel efficiency rating system would be used by consumers to purchase tires for “current and subsequent vehicles” and for “multiple vehicles in their family for which they purchase tires.”<sup>9</sup> While it is true that over time consumers may purchase tires for a variety of vehicles, consumers typically do not purchase tires for multiple vehicles in the same visit to the tire retailer.

---

<sup>8</sup> For example, if a consumer with a 20 mile per gallon (mpg) vehicle and a consumer with a 40 mpg vehicle each purchased replacement tires that achieved a five percent improvement in their respective vehicle's fuel economy, after driving the same number of miles (assume 10,000 miles in this illustration), the consumer with the lower fuel economy vehicle would save approximately 24 gallons of fuel, whereas the consumer with the higher fuel economy vehicle would save approximately 12 gallons of fuel, all vehicle maintenance and driving conditions being equal.

<sup>9</sup> 74 Fed. Reg. at 29,560.

Instead, in the experience of the tire industry, consumers most often visit a tire retailer to replace one or more tires that have worn out or been damaged by a road hazard for a single vehicle. If NHTSA possesses consumer research to the contrary, RMA requests that NHTSA submit that data to the docket for public comment. So, in order to develop a rating system that is “intuitive” to consumers, the focus should be placed on educating consumers about replacement tire choices appropriate for their existing vehicle. It follows, then, that the information should be presented in a manner that accurately rates tire choices when installed on the consumer’s vehicle. Only rolling resistance coefficient can accomplish this (or RRF-based estimate specific to the load of consumer’s vehicle, which is effectively the same as RRC, with the exception of instances where tires of the same size have a different load index).

Second, NHTSA supports its choice of a proposed RRF-based rating system by stating that “consumers may be confused by a tire fuel efficiency rating system where differences between ratings for different tire sizes represent different quantities of fuel saved, as they would in a rating system based on RRC.”<sup>10</sup> On the contrary, an RRC-based rating would allow a consumer to clearly compare all tire sizes and load indices appropriate for his vehicle based on the same scale. As discussed above, an RRF-based system would not rate tires in rank order according to how they would perform on a single vehicle. By using tested RRF as the basis of the rating system, the proposed rating would give consumers inaccurate comparative information about tire fuel efficiency as installed on a single vehicle and would encourage the selection of undersized replacement tires with insufficient load carrying capacity to support the consumer’s vehicle.

Third, NHTSA further justifies its selection of an RRF-based rating system by expressing the concern “that under a rating system based on RRC, a consumer who purchases tires for different vehicles would notice these differences in fuel savings for the same difference in ratings, and as a result, question the validity of these ratings.”<sup>11</sup> The consistency from rating to rating that NHTSA seems to be seeking can be achieved with an RRC-based rating system. The consistent message would instead be based on a percentage savings estimate, rather than on a fuel consumption basis. Consumers are aware of the typical fuel economy achieved by their vehicle and can simply estimate potential savings based on the fuel savings percentage.

Fourth, NHTSA expresses a desire to communicate a “general rule of thumb” to consumers about fuel savings.<sup>12</sup> As described above, this general rule of thumb can be based on a percent fuel savings with an RRC-based rating system. NHTSA discounts the ability to create a “general rule of thumb” for an RRC-based rating system by stating that “the rule of thumb” would “differ depending on the test load of the tire.”<sup>13</sup> This statement is patently false. First, a reliable “rule of thumb” estimate based on savings percentage can be easily developed for an RRC-based rating system. Additionally, as discussed in Section I.B. of these comments, an RRC-based rating can be used by a computer-based Estimator to give consumers an estimate of fuel savings for their vehicle. Second and more importantly, the “rule of thumb” contemplated by NHTSA is based on “test load” of the tire, so it would not give consumers accurate comparative information about different tires installed on the same vehicle. Tested load is only *tested* load – it does not represent the load of the consumer’s vehicle. When comparing two tires with different load indices, the *tested* load will be different, resulting in different ratings, even when installed on the same vehicle. The type of “rule of thumb” NHTSA contemplates would only be accurate if used by a consumer to compare tires of the same size and load index. If a consumer were to use such a “rule of thumb” to compare tires with different load indices (as described in footnote 6, *supra*, even tires of the same size can have different load indices, and therefore different tested load), it would provide the consumer with inaccurate comparisons.

#### **E. Consumers favor a categorical “ five star” rating system**

NHTSA conducted focus group research to assist the Agency in selecting the proposed rating system label. However, such qualitative consumer research does not reflect or indicate consumer preferences.<sup>14</sup> Instead, focus group discussions are useful in identifying potential trends in consumer preferences and also allow for useful input for follow-up research. As stated by Strat@comm, “qualitative research offers insight into the

---

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> Docket Number NHTSA-2008-0121-0018, NHTSA Rolling Resistance Focus Group Report, presented by Strat@comm, 3.

thematic and directional information of the participants.”<sup>15</sup> Undertaking additional quantitative and qualitative research would have been helpful to better understand consumer preferences. Based solely upon focus group research, NHTSA cannot say that any single label choices presented to a mere 54 focus group participants represents actual consumer preference. The margin of error for such a small sampling is over 13%.

RMA conducted consumer research during the comment period to provide quantitative data to assist in the evaluation of tire rating options. That research is summarized and presented in Appendix 2.<sup>16</sup> The sampling size of 1,000 respondents has a margin of error of only 3% and the respondents were screened to represent a cross section of the U.S. driving public. Unlike the NHTSA consumer research, RMA’s findings do not indicate a preference for a 0 to 100 rating scale as presented in the NHTSA NRPM. Consumers found other tested rating systems in the RMA research to be easier to understand, better able to communicate information and more visually appealing.

When told that the 0 to 100 scale would not deliver greater precision than the other rating options, respondents to the RMA survey overwhelmingly stated that another label choice should be used. While 29% of respondents chose the 0 to 100 rating as their most preferred, this support drops to 19% when respondents are informed that it would not precisely rate tires. “Stars” emerged as the label preferred most in the RMA survey when respondents evaluated all five choices. “Stars” also scored highest when compared to the other labels for “easiest to understand,” “most consumer friendly,” and “communicates most effectively.” Based on RMA’s research, consumers express a preference for tire information to be communicated using a star rating.

## **F. Issues associated with the tire label itself**

### **1. Label terminology**

RMA is concerned about the use of “safety” and “durability” in the proposed tire rating system label. RMA recommends that the tire rating system label identify these ratings as “Wet Traction” and “Treadwear.” Using “Wet Traction” and “Treadwear” on the proposed rating label would meet the intent and plain language of EISA.<sup>17</sup> RMA supports providing wet traction and treadwear information to consumers using the UTQGS system as a basis for these ratings, but RMA is concerned that including “safety” and “durability” in the labels would mislead consumers.

Certainly, wet traction is an important performance attribute in tire design and relates to overall vehicle safety. However, as recognized by NHTSA, wet traction is not the only measure of safety.<sup>18</sup> RMA members do not want to over communicate to consumers about what wet traction ratings represent or that wet traction encompasses the entirety of a tire’s safety. Furthermore, all tires sold in the United States are certified to meet all Federal Motor Vehicle Safety Standards (FMVSS)<sup>19</sup>, so it is inaccurate to present to consumers a “safety” rating that could be construed to represent a tire’s overall safety performance. This type of over representation of wet traction ratings would mislead consumers by providing unrealistic expectations of overall tire performance. Consequently, RMA advocates that NHTSA simply identify the rating as a “Wet Traction” rating in the final rule.

Likewise, RMA advocates that NHTSA remove the reference to “Durability” in the proposed rating label, instead identifying the rating as a “Treadwear” rating. It is true that treadwear is a measure of a tire’s durability, but as recognized by NHTSA, it is not the only measure.<sup>20</sup> Consumers would more clearly understand the label if the information did not use the term “Durability.” Since UTQGS ratings are available for use in this rulemaking, and since consumers consistently identify wet traction and treadwear as important tire attributes they consider in their tire purchases, these terms would be more appropriately used in the proposed rating label.

Second, RMA is concerned about the placement of the tire fuel efficiency rating graphic on the proposed label. The proposed label would show the tire fuel efficiency information first, above the other two tire ratings.

---

<sup>15</sup> *Id.* at 4.

<sup>16</sup> Rubber Manufacturers Association Assessment of NHTSA Consumer Research And Review of RMA Consumer Research, August 2009 (“Appendix 2”).

<sup>17</sup> See detailed discussion of this point in Legal Review of the Tire Fuel Efficiency Consumer Information Program Proposed Rule, Pepper Hamilton LLP and Rubber Manufacturers Association, August 2009 (“Appendix 3”).

<sup>18</sup> 74 Fed. Reg. at 29,570.

<sup>19</sup> *See, e.g.*, 49 CFR 571.139.

<sup>20</sup> *Id.*

This placement suggests that tire fuel efficiency is the more important tire trait. RMA and tire industry consumer research consistently show that consumers consider treadwear and traction attributes of tires more often when purchasing tires than fuel economy. RMA conducts consumer research every year in conjunction with National Tire Safety Week. In its last consumer survey conducted in May 2009,<sup>21</sup> RMA found that drivers rate tire treadlife higher than other factors, followed by traction, price, handling in severe weather and fuel efficiency in that order. When asked to rate tire attributes by importance when purchasing new tires, 57 percent of consumers rated tire life in their top two choices, followed by 42 percent for traction, 37 percent for price and 28 percent for handling in severe weather. A distant 19 percent rated fuel efficiency in the top two choices. These findings were not changed significantly due to the change in fuel prices between 2005 and 2009. RMA conducted a similar survey in May 2005 and reported similar results.<sup>22</sup> Given that consumers place the most importance on treadwear characteristics, followed by traction and then fuel economy, RMA recommends that NHTSA list the tire rating information in that order. This rating order is consistent with consumer tire purchasing priorities and highlights the importance of tread life and traction to consumers. However, if NHTSA chooses to retain the term “safety (wet traction)” in the label, RMA recommends that safety appear first in the rating label.

Third, RMA is concerned by the proposed title of the rating label – “Government Rating.” This title does not accurately represent the rating. The rating contemplated in the NPRM would not be assigned by the “Government.” Instead, the burden to provide rating information is placed on tire manufacturers. The title does not convey which “Government” is providing the rating either. A more appropriate title would be something like “Tire Rating” or “Consumer Tire Rating.”

Fourth, RMA is concerned by the terminology and placement of information on the proposed rating system label.<sup>23</sup> RMA recommends that the “Fuel Efficiency and Greenhouse Gas Rating” terminology be changed to “Fuel Efficiency.” As discussed in more detail in Appendix 3, EISA Section 111 does not address the issue of greenhouse gas emissions or mandate that consumers be provided with any information about greenhouse gas emissions associated with a specific replacement tire. The term “fuel efficiency rating” adequately communicates the information being provided to consumers in this rulemaking and meets the requirements of EISA Section 111.

## **2. Proposed Rating System Label would not provide point of sale consumer information**

The NPRM proposes that “each tire manufactured on or after the effective date of these amendments shall have affixed to its tread surface so as not to be easily removable”<sup>24</sup> the proposed rating system label.<sup>25</sup> Since tire rolling resistance force, even within a single tire line, varies by tire size and load index, each tire in a given line may well have a distinct tire fuel efficiency rating.<sup>26</sup> A typical tire line may have as many as 30 or more different sizes and load indexes, and could be appropriate fitments on vehicles ranging from subcompact automobiles to large sports utility vehicles. A typical tire retail outlet may sell 30 or more such lines, which means that each tire dealer could sell 900 or more unique tires or stock-keeping units (SKUs). It is not typical, nor is it practicable for a tire retailer to display all of the available tire line/size combinations in a tire showroom, due to space limitations. For this and other logistics reasons, retailers typically have a display of the available tire lines or models with a sample tire of each model, often mounted or glued and possibly painted into a display for the consumer to observe the tire’s tread pattern, sidewall, etc. Consumers usually do not see the actual tires that have been purchased until they are installed on their vehicle and the transaction has been concluded.<sup>27</sup>

The NPRM would require “each tire retailer” to provide rating information for each passenger car tire offered for sale.<sup>28</sup> The proposed regulatory text continues to require the tire retailer “not to remove the label containing the ratings graphic . . . until the tire is sold.”<sup>29</sup> However, there is no specific requirement for the tire rating label on the tire to be shown to the consumer at any point in the transaction process, much less at point of sale. In

---

<sup>21</sup> See, Trend Poll Results, U.S. Drivers’ Behaviors and Opinions Regarding Tire Pressure and Tire Maintenance, Fredrick Polls, May 2009 (“Appendix 4”).

<sup>22</sup> See, Poll Results: U.S. Drivers’ Behaviors and Opinions Regarding Tire Characteristics in Tire Purchase Decision Making, Fredrick Polls, June 2005. (“Appendix 5”).

<sup>23</sup> 74 Fed.Reg. at 29,587.

<sup>24</sup> 74 Fed. Reg. at 29,585.

<sup>25</sup> *Id.* at 29,587.

<sup>26</sup> See, *id.* at 29,559.

<sup>27</sup> This situation may not be the case in a warehouse “big box” store type tire store, where stacks of tires are often visible to consumers as they make their purchasing decision.

<sup>28</sup> 74 Fed. Reg. 29,586.

<sup>29</sup> *Id.*

fact, the preamble states the opposite – “we [NHTSA] are not proposing to require that tire retailers must show consumers the label for the tire they are going to purchase, but merely that the label is kept on the tire until sale.”<sup>30</sup>

Given the realities of the tire retail business and this admonition in the preamble, coupled with ambiguous regulatory requirements, most consumers will never see the proposed tire rating system label on the tire, the supposed main communication vehicle for individual tire rating information. Of course, consumers may visit websites prior to arriving at a tire retailer, and a tire retailer may voluntarily offer Internet access to view individual tire ratings online, but since neither of these is mandatory nor *at point of sale*, they do not satisfy the provisions of the EISA, as discussed in Appendix 4. The effectiveness of this program is seriously hampered by not mandating point of sale information to consumers to assist them in making more educated tire purchasing decisions.

### **3. RMA Recommends that NHTSA consider other options to provide information at point of sale**

RMA opposes the proposed tire rating system label as a means of providing point of sale information to consumers. The proposed label would be extremely costly to produce, especially in full color, and would lead to little if any environmental benefit, since consumers would be unlikely to see the label, much less base a purchasing decision on it. RMA estimates that the annualized costs to tire manufacturers would exceed \$14 million (without including the date of manufacture on the label).<sup>31</sup> Instead, NHTSA should require that the rating information be made available to consumers at point of sale in a manner that has some likelihood of reaching consumers.

Specifically, RMA proposes that NHTSA mandate that tire retailers display the NHTSA tire efficiency program poster and make the rating information available to consumers in the dealer showroom or waiting area. RMA recommends that NHTSA give tire retailers options for making this information available and require that each retailer choose one or more options that suits their business model and needs. Options could include: tire manufacturer brochures, tire manufacturer product catalogues, in-store online access to the NHTSA website, tire manufacturer websites or the tire retailer's website containing the rating information. Another exciting option would be for NHTSA to produce a tire fuel efficiency program booklet, as NHTSA produces for the UTQGS program. According to the Preliminary Regulatory Impact Analysis,<sup>32</sup> NHTSA very efficiently provides the UTQGS booklets to tire dealers nationwide at an annual cost of \$3,190. NHTSA estimates that there are 60,000 tire dealers nationwide. This small government investment would be beneficial to educate consumers about tire ratings and assist in more fuel efficient tire purchases.

### **4. RMA opposes the concept of a combined rating**

Consumer needs vary when choosing replacement tires. Some tire consumers may value wet traction or treadwear characteristics more highly than fuel economy, while others may value fuel efficiency more than other attributes. Some consumers may comfortably accept a trade off among these characteristics, while others may choose a premium tire that does not require such a trade off in tire characteristics. Consumers should be allowed to make that determination after weighing the consumer information available to them in a manner that fits their needs.

### **5. RMA opposes inclusion of tire manufacture date on tire rating system label**

While not included in the proposed regulatory text in the NPRM, NHTSA solicits comments on the idea of “including a statement like ‘made in week xx of year yy,’ where the ‘xx’ and ‘yy’ would be numerals from the tire identification number (TIN).” The concept would be to include the week and year of a tire's manufacture on the proposed tire rating label affixed to each subject tire. RMA opposes this concept for several reasons. First, this information is already molded on the sidewall of all tires available for sale in the United States, mandated by

---

<sup>30</sup> 74 Fed. Reg. at 29,572.

<sup>31</sup> See, Appendix 8.

<sup>32</sup> See, NHTSA Preliminary Regulatory Impact Analysis: Notice of Proposed Rulemaking Replacement Tire Consumer Information Program Part 575.106 at 92 (Docket No. NHTSA-2008-0121-0015.1).

NHTSA<sup>33</sup> – the same tires on which the proposed label would be affixed. No additional benefit would be achieved by including the same information twice on the same tire. Second, as discussed above, most consumers would never see the proposed label at all, so any perceived benefit from including this information on the proposed label in more consumer-friendly language would be negated by the fact that consumers largely would not see it.

Third, the inclusion of this information would require a new label for every tire SKU to be produced every week, which would increase the costs to tire manufacturers of compliance with this regulation without *any* additional benefit to consumers. Fourth, this contemplated requirement is beyond the scope of the EISA. If NHTSA would like to pursue the idea of mandating that consumers be provided tire manufacture date information in a retail context, RMA recommends that NHTSA convene a separate rulemaking under separate authority, assuming such authority exists, and give all interested stakeholders an opportunity to provide meaningful input into the rulemaking process. Currently, tire distributors and dealers are required to include the entire tire identification number (TIN) on the tire registration form, including the tire manufacture date, which is required to be provided to tire customers at point of sale.<sup>34</sup> Alternatively, if NHTSA's goal is to provide consumers with consumer-friendly information about tire manufacture date at point of sale, NHTSA could consider including a short statement on how to read the TIN on a tire on the proposed tire fuel efficiency consumer information poster that would be mandated to display at tire retailers. As well, although NHTSA currently includes this information on its website, NHTSA could include such an explanation in the website for this program.

## II. Technical issues associated with testing and rating tires

### A. Rolling Resistance

#### 1. RMA supports full adoption of ISO 28580 rolling resistance test procedure

RMA supports the designation of ISO 28580<sup>35</sup> as the test procedure for use in this regulation. As discussed in the NPRM, five test methods exist to assess tire rolling resistance.<sup>36</sup> NHTSA correctly notes that “all of the rolling resistance test methods ha[ve] very low variability and could be cross correlated to provide the same information about individual tire types.”<sup>37</sup> Some of these test methods are single-point tests, while others are multi-point tests. Significant research completed by the California Energy Commission and NHTSA show that both types of tests can accurately produce tire rolling resistance data and that tires tested using either type of test procedure rank order the same. Single point tests are far less costly to administer, while producing the data necessary to compare the rolling resistance of various tires for the purposes of this rulemaking. For these reasons, RMA recommends that NHTSA adopt a single point test procedure.

The ISO 28580 test procedure, developed most recently,<sup>38</sup> contains one component that is absent in all of the earlier test procedures. ISO 28580 contains a machine alignment method (discussed in the NPRM), which makes it the strongest candidate for use in this regulation. It is important to remember, however, that this machine alignment method reduces uncertainty, but it does not eliminate it. As is discussed later in this document, multiple sources of test variation exist. The ISO International Standard creates a framework to minimize variation from machine to machine and laboratory to laboratory but does not address the other types of variation.

RMA advocates that NHTSA adopt the ISO 28580 test procedure in its entirety in this regulation. In the NPRM, NHTSA proposes to adopt only certain aspects of the ISO 28580 test procedure, specifying only two of the four acceptable measurement methods in the ISO 28580 test procedure and limiting the test surface to the

---

<sup>33</sup> See, 49 CFR Part 574.

<sup>34</sup> 49 CFR 574.10.

<sup>35</sup> *International Organization for Standardization (ISO), International Standard ISO 28580: Passenger car, truck and bus tyres – Methods of measuring rolling resistance – Single point test and correlation of measurement results*. Please note that throughout the NPRM, both in the preamble and proposed regulatory text, the name of this international standard is cited incorrectly. The correct name is provided here. NHTSA should ensure that the correct name is reflected in the final rule.

<sup>36</sup> See, 74 Fed. Reg. 29,555.

<sup>37</sup> *Id.* at 29,558.

<sup>38</sup> Note that the NPRM refers to the ISO test procedure as a “final draft international standard” (See, e.g., 74 Fed. Reg. at 29,558). However, the standard was published on June 24, 2009, two days after the publication of the NPRM in the Federal Register. The final rule should reflect the fact that ISO 28580 is now a published international standard.

80-grit surface, when the ISO 28580 test procedure specifies a smooth wheel but allows 80-grit as well. Limiting which aspects of the ISO 28580 test procedure would be adopted would severely undercut the ability of the global tire industry to comply with this regulation, since different measurement methods are available to the tire industry internationally. Tire manufacturers need to have the flexibility to conduct testing in the region where the subject tires are produced, not solely in the United States. Should NHTSA limit the application of the ISO 28580 test procedure in the manner proposed, tire testing costs would need to be increased beyond either NHTSA's or RMA's estimates to reflect a vast expansion of test capacity using only the two specified measurement methods and 80-grit surface.

NHTSA justifies "allowing only the force or torque method during the test procedure" by stating that these two methods are the "the only two types of machines available to NHTSA in the U.S.,"<sup>39</sup> which does not provide a substantive reason not to allow all four measurement methods allowable in ISO 28580. ISO 28580 recognizes that different reliable test methods exist internationally to measure tire rolling resistance, so it specifies acceptable equivalent methods in the test procedure. Any company applying the test procedure must meet the same repeatability standards, regardless of the method used. The machine alignment method would further assure comparable results, regardless of method used. With respect to test wheel surface texture, NHTSA cites U.S. availability and concerns with slippage as reasons to limit the acceptable test surface to 80 grit. While 80-grit may be more available in the United States, smooth surface test wheels are the norm in other tire producing regions. NHTSA also expresses concern about potential "slippage" of smooth, steel-surfaced test wheels. NHTSA refers to experiences during the NHTSA Phase I test project involving deep lug tires. Deep lug tires are light truck (LT) tires, which are not subject to this rule, but were included in the Phase 1 project since it was initiated before the passage of the EISA. Of course, NHTSA is free to limit its compliance testing to 80-grit surfaces, in which case any tire manufacturer rating based on testing on a smooth wheel would need to comport with compliance testing conducted on an 80-grit test wheel.

RMA also cautions about the implementation status of the ISO 28580 test procedure. Tires that qualify as Alignment Rolling Resistance Reference Tires (ARRRTs) will be available by the end this year. Further, although the ISO 28580 provisions lay out requirements for a reference laboratory or reference laboratories, it is beyond the scope of the standard to establish and assign reference laboratory designations. Instead, the standard contemplates that governments would identify reference laborator[ies] for use in complying with a specific regulatory requirement. In order to utilize the reference laboratory portion of the ISO 28580 International Standard, NHTSA would need to specify a reference laboratory in its regulation. RMA recommends that NHTSA coordinate with ISO on this issue. This kind of designation should be proposed in a supplemental notice for public comment.

However, despite the advantages of designating ISO 28580 as the reference method for this regulation, logistical considerations regarding ARRRTs and reference laboratory indicate that it would be difficult if not impossible to meet the compliance date set forth in the proposal (12 months from promulgation of the rule). RMA estimates that a minimum of 24 months are required obtain reference tires, correlate to a reference laboratory, conduct sufficient testing, rate existing tires and report ratings to NHTSA. RMA requests that the compliance date for the rule be tied to the availability of suitable ARRRTs and the specification and availability of a suitable reference laboratory.

## **2. Significant uncertainty and variability exists in rolling resistance testing**

In order to characterize the uncertainty in rolling resistance testing, RMA commissioned ENVIRON Corporation to statistically analyze the various sources of variability based on a well-developed automotive industry procedure for analysis of measurement systems. The results of this analysis are presented in Appendix 6 and summarized here.<sup>40</sup> Four primary sources of uncertainty exist associated with the proposed tire fuel efficiency rating system: repeatability, product variation, lab-to-lab variation, and rounding. The levels of uncertainty due to repeatability and lab-to-lab variation are expected to change after ISO standard 28580 is adopted and implemented, so the level of residual lab-to-lab variation cannot be accurately predicted at this time.

---

<sup>39</sup> 74 Fed. Reg. at 29,559.

<sup>40</sup> Review of the Tire Fuel Efficiency Rating System Described in NHTSA's Notice of Proposed Rulemaking, ENVIRON International Corporation, August 21, 2009 ("Appendix 6").

The available data obtained from tests of multiple tires representing the same SKUs suggest that the coefficient of variation of a typical product is about 2 percent, although some products are more variable. The tire fuel efficiency proposed rating system implies a capability that is beyond current testing technology, resulting in the misclassification and improper relative rating of many SKUs. Because of misclassification and improper ranking, many consumers will not select the most fuel efficient tire for their vehicle. This will reduce fuel savings and other benefits that would otherwise be realized by the consumer and the general public.

The RMA has developed and proposed a system based on classification into five bins based on RRC. Adoption of such a system will mitigate the problems and negative consequences that should be expected if the system described in the NPRM is promulgated. The fuel efficiency rating system should be based on RRC, not RRF, because rankings based on RRF may lead many consumers to purchase a less efficient tire. Tires selected based on RRF may also be less safe. The accuracy with which fuel efficiency ratings can be assigned to tire SKUs depends on the accuracy of the rolling resistance measurements and the number and size of the rating bins. The NPRM anticipates a single measurement per SKU; for many SKUs, the resulting rolling resistance measurement will not provide an accurate estimate of the mean value for all tires in the SKU. The solution to this problem is to use fewer, larger rating bins.

### **3. The proposed RRF range that forms the basis of the fuel economy rating does not reflect the range of RRF values in the US tire market or the ISO 28580 test procedure**

In the NPRM, NHTSA selects five to 25 pounds force (lbf) as the range of RRF values representing the proposed 0 to 100 tire fuel economy rating scale.<sup>41</sup> NHTSA indicates that it set the range at these levels because “the high end of the rolling resistance scale range should be set at close to the level of the current worst performing tires” and the low end should “allow sufficient room” to demonstrate improvements in rolling resistance.<sup>42</sup> Unfortunately, the proposed range of five to 25 pounds force does not capture the current diversity of RRF values in the tire marketplace, much less allow for room for improvement. RMA has collected rolling resistance data on nearly 1,000 tire SKUs, which shows an RRF range of 5.17 to 31.77 lbf using the SAE J1269 single point test method.<sup>43</sup> Using the proposed rating formula, these tires would be rated from -34 to 99 on the 0 to 100 scale. To further exacerbate this problem, NHTSA’s proposed rating scale is based on data collected using the SAE J1269 single point test method but proposes compliance with the rating program using the ISO 28580 test procedure, which causes the RRF range represented by the proposed rating scale to further misalign with potential compliance data. NHTSA estimates that rolling resistance values for the same tire are about 12 percent higher using the ISO 28580 test procedure than when using the SAE J1269 single point test procedure. Therefore, SAE J1269-based data must be adjusted to be comparable to ISO 28580 test data. NHTSA recognizes this in the NPRM,<sup>44</sup> and estimates the difference between the two tests at 12 percent, although some industry studies estimate this difference at 18 percent. Using the 12 percent estimate, the RRF range observed in the RMA data becomes 5.79 to 35.58 lbf, yielding ratings of -53 to 96 on the proposed rating scale. NHTSA should reevaluate its proposed rating scale based on the RMA data and adjusting to the ISO 28580 test conditions to assure that the rating scale would allow all subject tires to be rated.

## **B. Wet Traction Ratings**

RMA has identified several concerns related to the wet traction ratings proposed in the NPRM, which are detailed in Appendix 7<sup>45</sup> of these comments and summarized here. The NPRM contains several aspects that are not supported by data in the docket. First, NHTSA proposes to use numerical constants to adjust the measured average peak coefficients for asphalt and concrete.<sup>46</sup> NHTSA offers no scientific or technical basis for the selection of these numerical constants. Second, the NPRM proposes a complex formula to derive overall wet traction ratings from the adjusted wet traction coefficients for asphalt and concrete with no technical support or

---

<sup>41</sup> 74 Fed. Reg. at 29563.

<sup>42</sup> *Id.*

<sup>43</sup> These data are included in Appendix 1 and have previously been provided to NHTSA as well, although potentially not in time to affect the NPRM. SAE J1269 is a test procedure for measuring tire rolling resistance published by SAE International. The data contained in Appendix 1 were obtained using single point variation specified in the SAE J1269 test procedure.

<sup>44</sup> *Id.*

<sup>45</sup> Technical Review of the Tire Fuel Efficiency Consumer Information Program Proposed Rule, Rubber Manufacturers Association, August 2009 (“Appendix 7”).

<sup>46</sup> 74 Fed. Reg. at 29,564.

explanation.<sup>47</sup> Third, the proposed rating formula is designed to penalize a tire's wet traction rating if there is a difference between its peak coefficients on concrete and asphalt. NHTSA does not give a science-based rationale for this approach. RMA requests that NHTSA provide the scientific bases for these aspects of the proposed wet traction rating approach and the opportunity for public comment.

The NPRM proposes minimum and maximum values of 0.6 and 2.6 for coefficients of traction as the basis for the 0 to 100 scale wet traction ratings.<sup>48</sup> During the comment period, RMA sought the basis for the proposed range of coefficients of traction, but NHTSA has not been able to produce the data to support this proposed range. RMA has compiled a significant volume of wet traction data, which supports a lower maximum value for the wet traction range than that proposed in the NPRM.

RMA proposes a five category rating system for wet traction based on peak coefficients of friction. RMA notes that since this new rating system would be based on a different test criteria, some products rated highly in the current UTQGS system could rate lower under a new peak coefficient of friction-based system, which may lead to consumer confusion. RMA proposes that a separate range be established for peak coefficients of friction on wet asphalt and wet concrete surfaces, allowing room at the maximum end of the range for future improvement, similar to the current UTQGS grading framework. These ranges should be allocated to five categories, establishing a categorical rating for wet traction based on peak coefficient.

### **C. Treadwear Ratings**

The NPRM proposes to base the new treadwear 0 to 100 rating on UTQGS treadwear grades. Basically, the existing grades, which range from 0 to 800, would be divided by 10.<sup>49</sup> The new range would be 0 to 100. Instead of this approach, RMA proposes a five category rating system for treadwear based on the current UTQGS test procedures. As an illustration, a categorical system using the current, often line-based UTQGS treadwear ratings, a five category rating could be developed that would look like this: 0 – 199, 200 – 399, 400 – 599, 600 – 799 and 800 and over. However, since many manufacturers currently rate tires for UTQGS treadwear by tire line, it is difficult to assess how tires would be rated for UTQGS treadwear under the new, proposed SKU-based rating system, since some tires within the same line may be rated differently under this new approach. RMA members continue to evaluate how to categorize UTQGS treadwear ratings based on individual tire SKUs to ensure both consumer choice and an adequate margin for technological improvement and welcome the opportunity for dialogue with NHTSA on this issue.

### **III. Proposed Compliance Approach**

#### **A. RMA supports self-certification of minimum rating achieved**

The Agency states in the NPRM that it is "proposing to require the ratings reported by a manufacturer under this proposed rule must be less than or equal to the rating determined by the agency using the procedures specified in the rule,"<sup>50</sup> an approach akin to the approach used for UTQGS, where NHTSA audits a sample of tires and challenges the rating should NHTSA's test data not reflect a rating that is as good or better than the rating identified by the tire manufacturer. RMA supports this approach, a self-certification of a minimum rating but opposes reporting measured or calculated test values, for reasons outlined below.

As described in more detail in Appendix 3, the self-certification compliance system mandated in NHTSA safety and consumer information regulations efficiently ensures compliance with NHTSA regulations while minimizing costs to manufacturers and other regulated entities. If NHTSA finds, through auditing, a concern about compliance, NHTSA can request a tire manufacturer to submit test data voluntarily or order the submission of data to enforce the rule. Requiring tire test data or calculated values to be submitted to NHTSA to assure compliance is overly broad, costly and unnecessary to meet the requirements of the EISA or ensure compliance. Furthermore, reporting this type of information would cause tire manufacturers to suffer competitive harm because a company's approach to risk would be accessible by competitors. The tire industry has a long history of compliance with all tire safety and consumer information regulations. In fact, tire manufacturers routinely

---

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* At 29,565.

<sup>50</sup> 74 Fed.Reg. at 29,580.

voluntarily self-disclose a non-compliance to NHTSA and work cooperatively with the Agency to remedy the situation.

RMA advocates that tire manufacturers be required to self certify the minimum rating of each tire SKU for fuel efficiency, traction and treadwear. Under this system, NHTSA would audit a sample of tire SKUs to assure compliance. NHTSA would notify a tire manufacturer of an alleged non-compliance if an audited tire would be rated lower, based on NHTSA's testing, than the rating assigned by the manufacturer. NHTSA would then seek additional information and test data from the tire manufacturer during the course of the compliance investigation. If ultimately the tire manufacturer is found to be in non-compliance, NHTSA could assess penalties per the applicable provision in the statute.

### **B. RMA supports interpolation-based ratings**

In the NPRM, NHTSA seeks comments on "the appropriateness of using interpolated values . . . to provide tire ratings." RMA supports the ability for tire manufacturers to provide predicted (interpolated) tire ratings. As NHTSA correctly describes, tire manufacturers routinely develop and utilize accurate computer models to predict tire performance of tires not physically tested, using proprietary information about tire chemistry, design, construction and test data available for similar tires. This ability allows a tire manufacturer to efficiently rate the affected tires while minimizing costs. In the preamble to the NPRM, NHTSA states the manufacturer "is not required to conduct the specific test in the regulation," but the regulatory text is not clear on this point.<sup>51</sup> RMA recommends that NHTSA modify the proposed regulatory text to make clear that interpolation is acceptable as a basis for tire ratings.

### **C. RMA opposes the tolerance band concept as a method of compliance**

Although the NPRM proposed regulatory text does not include tolerance bands, the NPRM "requests comments on a requirement which would require the ratings reported by a manufacturer to be within a specified tolerance limit as explained below for each rating."<sup>52</sup> RMA opposes the concept of tolerance bands for the areas to be regulated in this rulemaking for the reasons summarized below and described in greater detail in Appendix 7. It is unclear from the regulatory text whether the proposed tolerance band would apply to the rating or the RRF of a tire.<sup>53</sup> RMA sought clarification from NHTSA staff and was told that the tolerance band would apply to the RRF tested value. A self-certification system without test value reporting or tolerance bands would satisfy the requirements of the EISA.<sup>54</sup>

The tolerance band approach would require testing of most if not all SKUs in order to assure compliance. This conflicts with NHTSA's assumptions in calculating the proposed lead time, costs and benefits of the regulation, where NHTSA assumed that tire manufacturers would be able to test 25 percent or fewer tires to comply with this regulation. If NHTSA desires to promulgate a cost effective rule with less lead time, the tolerance band concept should be abandoned. According to the NPRM, "the deadlines imposed in EISA indicate a desire to have information available to consumers as quickly as possible."<sup>55</sup> A tolerance band-based compliance approach is in direct conflict with this desire.

Despite all of the significant concerns with the tolerance band approach, if NHTSA decides nonetheless to pursue tolerance bands, RMA requests an opportunity to review the data supporting the proposed tolerance band widths. Since NHTSA did not provide the data to evaluate the derivation of its proposed tolerance bands, it is impossible to assess their appropriateness. RMA requests an opportunity to review and comment on the data and technical bases for the proposed tolerance band widths, should the Agency choose to proceed with this concept. The variability and uncertainty inherent in rolling resistance testing should be considered in evaluating potential rolling resistance tolerances. If the compliance program described in the NPRM is promulgated with a 5.5 percent tolerance, the frequency of noncompliance may be much higher than suggested by the NPRM. Use of a one-sided tolerance limit (rather than a two-sided tolerance band) would allow tire manufacturers to better control the likelihood of noncompliance without removing the incentive for manufacturers to assign high ratings to

---

<sup>51</sup> See, Appendix 3.

<sup>52</sup> *Id.* at 29,580.

<sup>53</sup> See, Appendix 3.

<sup>54</sup> *Id.*

<sup>55</sup> *Id.* at 29,579.

their fuel efficient tires.<sup>56</sup> As well, an initial review of available industry wet traction data suggests that a tolerance band of at least 0.08 would be warranted. However, tire manufacturers do not necessarily document peak coefficient of traction values for all tires tested since UTQGS ratings are based on slide coefficients, so further data review is necessary on the question of potential wet traction tolerances. The proposed tolerance band for treadwear would appear to capture the expected variability in treadwear testing, although it should be noted that treadwear testing varies highly with road surface, weather conditions, etc.

#### **D. RMA requests clarification on how NHTSA intends to apply the civil penalties authorized by the EISA.**

As discussed in more detail in Appendix 3, RMA requests that NHTSA clarify how it intends to apply the statutory provisions authorizing civil penalties for non-compliance. The EISA provides that “[a]ny person who fails to comply with the national tire fuel efficiency information program under section 32304A is liable to the United States Government for a civil penalty of not more than \$50,000 for each violation.” The term “each violation” is not defined, and no legislative history is available to serve as a guide. RMA suggests that in the context of a consumer information program, the intent is to penalize the error or the decision which lead to a noncompliance. Therefore, RMA recommends that NHTSA define “each violation” to mean when a tire rating is improperly reported to NHTSA for a tire SKU. “Each violation” should not be interpreted to apply to each tire sold after that tire SKU is improperly rated. RMA asks NHTSA to clarify its intent in a proposed rulemaking so that tire manufacturers and other interested parties would have the opportunity to comment.

#### **IV. Effects on current UTQGS regulations**

NHTSA solicits comments on two different alternatives pertaining to the current UTQGS requirements. The first alternative contemplates removing the existing UTQGS requirements, while the second contemplates replacing the existing UTQGS traction and treadwear ratings with the ratings imposed by this regulation, and removing the temperature rating. RMA supports the second approach, since RMA questions whether the EISA gives NHTSA new authority to create traction and treadwear ratings.<sup>57</sup> RMA supports the removal of temperature grades from UTQGS requirements and the removal of the requirement that traction and treadwear grades must be molded on the tire sidewall. RMA agrees with NHTSA’s interpretation of the current DOT Appropriations Act language that NHTSA has the authority to make the changes to the UTQGS regulation contemplated by the second alternative.

RMA recommends that NHTSA apply a phased approach to transitioning to the new traction and treadwear ratings, since existing tires contain current UTQGS grades on the sidewall of the tire. RMA opposes any requirement that would mandate that tire manufacturers remove UTQGS grades from existing tire molds. The existing molds will be replaced by attrition over time, and it would be costly and unnecessary to remove those grades from the sidewall of existing tire models prior to that time. Since consumers typically do not consult tire sidewalls when making tire purchasing decisions, continued UTQGS sidewall grades for some time would cause minimal if any consume confusion. The new ratings, of course, could be provided at point of sale once the new regulation is implemented.

#### **V. Lead Time**

The NPRM proposes to “require tire manufacturers to report on all existing tires within 12 months of the issuance of the final regulation.”<sup>58</sup> Several factors described in this document make this lead time impracticable. First, the lack of a proposed reference laboratory makes this lead time impossible.<sup>59</sup> Second, restrictive application of ISO 28580 would require significant capital investment to acquire sufficient test capacity to test applicable tires to the two specified measurement methods using an 80-grit surface.<sup>60</sup> Third, basing the wet traction rating on peak coefficient of friction, rather than the current slide coefficient of friction-based wet traction rating system under UTQGS, will require additional testing of existing tires, since tire manufacturers do not have peak data available on sufficient existing tires to interpolate wet traction ratings.

---

<sup>56</sup> See, Appendix 6.

<sup>57</sup> See Appendix 3.

<sup>58</sup> *Id.*

<sup>59</sup> See, *infra*, Section II.A.1.

<sup>60</sup> *Id.*

The NPRM is not clear as to whether testing is required to comply with the proposed regulation.<sup>61</sup> If testing is required, the lead time for this rule must be adjusted to reflect the time necessary to test all tires subject to the regulation, which NHTSA cited as “up to 2.7 years to test one tire of each SKU once.”<sup>62</sup> However, “based on [NHTSA’s] research, NHTSA estimates it may be possible that less than 25 percent of the affected tires will have to be tested with the ISO 28580 procedure in order to rate them for this program.” The proposed lead time and cost estimates in support of the proposal are based on testing one quarter or fewer of that population. RMA requests that NHTSA clarify in the regulatory text whether it intends to require tire testing to demonstrate compliance or whether interpolation is acceptable to calculate information required to be submitted to NHTSA. If interpolation is not allowed, the lead time for compliance should be revised beyond the proposal below.

RMA recommends a lead time of 24 months from the promulgation of a regulation specifying a reference laboratory for ISO 28580 testing to comply with the manufacturer requirements portion of the rule, premised on a rule with self-certification of tire ratings and no requirements to report tire test values and no tolerance band compliance approach. RMA recommends that NHTSA require compliance with the new traction and treadwear ratings at the same time. Although tire manufacturers could potentially comply with the new traction and treadwear rating requirements more quickly, rolling out the two ratings first would not satisfy the intent of EISA, which is designed to provide consumers with tire fuel efficiency information, especially since tires are already rated for wet traction and treadwear.

RMA recommends that the compliance date for manufacturer reporting and consumer information available be based on tire manufacture date, as is proposed in the NPRM regulatory text for the tire label,<sup>63</sup> rather than any other criteria. RMA would recommend specifying in the regulatory text that the requirements apply to “each rated replacement passenger tire manufactured 24 months [specify actual date] after the effective date of these regulations,” where the effective date is the date when a regulation containing the specification of a reference laboratory for ISO 28580 is promulgated. This type of approach is consistent with current UTQGS regulations.<sup>64</sup> For tires introduced into the market after the implementation date of the regulation, RMA recommends that NHTSA allow tire manufacturers six months after the introduction of a new tire in a new tire line to begin reporting tire ratings to NHTSA and tire retailers, consistent with the current UTQGS regulations.<sup>65</sup>

If NHTSA decides to proceed with a final rule that requires reporting of test values and a tolerance band-based compliance system, RMA requests that NHTSA allow five years from the date of promulgation of the final rule (containing the specification of a reference laboratory for rolling resistance testing). Significant traction and treadwear testing would be required under this scenario to assure compliance. Limited availability and capacity of the wet traction and treadwear courses in Texas would limit the volume of testing that tire manufacturers would be able to conduct annually. Furthermore, several tire manufacturers would have to make capital investments in rolling resistance test equipment should NHTSA require test value reporting and base compliance audits on tolerance bands. As well, if NHTSA chooses to limit the ability of the tire industry to utilize all of the tire measurement and test wheel surfacing options specified in the ISO 28580 test procedure, the industry’s ability to comply in a timely and cost effective manner would be hindered.

## **VI. Costs and Benefits associated with the Proposed Rule – Assessment of the Preliminary Regulatory Impact Analysis**

On behalf of RMA, Environomics, Incorporated conducted a comprehensive review of the Preliminary Regulatory Impact Analysis (PRIA) NHTSA prepared in support of the NPRM.<sup>66</sup> This review is included in this submission at Appendix 8. In summary, the review found several deficiencies in the PRIA. First, substantial uncertainties and gaps in the PRIA undermine NHTSA’s conclusions regarding the proposed program. Second, the PRIA relies heavily on assumptions that significantly affect the benefit cost analysis, some of which have no basis or are based on flawed logic. Third, the PRIA presents relatively small net benefits that could change from

---

<sup>61</sup> See, Appendix 3.

<sup>62</sup> *Id.* at 29,554.

<sup>63</sup> *Id.* at 29,585.

<sup>64</sup> See, 49 CFR 575.104(d)(B)(1).

<sup>65</sup> See, 49 CFR 575.104(d)(A).

<sup>66</sup> Comments on the Preliminary Regulatory Impact Analysis for the Notice of Proposed Rulemaking Replacement Tire Consumer Information Program Part 575.106, Environomics Incorporated, August 2009 (“Appendix 8”).

positive to negative with a more complete analysis that includes disbenefits that were not included in the PRIA analysis. Fourth, NHTSA could ensure positive benefits by crafting a rule that is as efficient, effective and balanced as possible. This goal can be achieved by minimizing the tire testing burden on tire manufacturers, limiting information requirements to those that are justified and ensuring consumers receive complete information about tires to help avoid inadvertently increasing disbenefits.

RMA collected data from its member companies and estimated the cost to the entire tire manufacturing industry to comply with the proposed rule, which are presented in Appendix 8. In summary, NHTSA vastly underestimated the costs associated with compliance with the NPRM. RMA estimates that initial cost for manufacturer testing and reporting would range from \$14,657,250 to \$53,157,440, while annual costs range from \$12,280,322 to \$34,745,722. Initial costs for the proposed tire labeling requirements would range from \$21,921,745 to \$30,641,745, while the annual cost estimates range from \$11,543,764 to \$16,782,340.

## **VII. Federal Preemption and State Programs**

The NPRM solicits comment on “the scope of Section 111 generally, and in particular on whether, and to what extent, Section 111 would or would not preempt tire fuel consumer information regulations that the administrative agencies of the State of California may promulgate in the future pursuant to California’s Assembly Bill 844.”<sup>67</sup> RMA has conducted a comprehensive analysis of the issues associated with this question and presents that analysis at Appendix 3. In summary, RMA’s analysis concludes that the EISA, in combination with other Federal law preempts California from promulgating tire fuel efficiency information regulations under AB 844. The Staff Draft Proposal drafted by California Energy Commission (CEC) staff conflicts with the NHTSA NPRM, which would undermine the federal program and lead to fewer environmental benefits derived from either program. RMA urges NHTSA to declare that the proposed rules preempt California State regulation under AB 844, other than regulations that are identical to the federal regulations. Please see Appendix 3 for a full discussion of this issue.

## **VIII. NPRM should propose a national tire maintenance consumer education program**

As part of the rulemaking, the EISA directs NHTSA to establish “a national tire maintenance consumer education program including information on tire inflation pressure, alignment, rotation, and tread wear to maximize fuel efficiency, safety, and durability of replacement tires.”<sup>68</sup> The NPRM recognizes this directive.<sup>69</sup> However, much of the NPRM description of agency education efforts is focused on informing consumers about the new rating system for tire fuel efficiency, rather than tire maintenance. As a requirement under EISA, NHTSA should have included proposals to describe how the agency would educate motorists about tire maintenance. RMA and its members have extensive experience in tire maintenance education and stand ready to assist NHTSA’s effort to educate motorists in accordance with EISA. RMA has enjoyed prior cooperative efforts with the agency and looks forward to continued efforts to advance important tire maintenance messages. To assist the agency in these efforts, NHTSA needs to propose a plan to implement an education program and provide public notice and the opportunity to comment on it.

## **IX. Technical inconsistencies and clarification received on the NPRM**

As discussed in this comment document and several of its appendices, the NPRM contains several technical inconsistencies, ambiguity and missing data. During the comment period, RMA has received some clarification and technical data from NHTSA staff. RMA appreciates NHTSA’s assistance with these requests. Unfortunately, however, the totality of the inconsistencies, ambiguity and missing data have posed unique challenges in reviewing the NPRM and preparing meaningful comments.<sup>70</sup> These challenges and the legal implications associated with them are presented in Appendix 3.

---

<sup>67</sup> *Id.* at 29,552.

<sup>68</sup> Public Law 110-140, 121 Stat. 1492 (Dec. 18, 2007).

<sup>69</sup> 74 Fed. Reg. at 29,544.

<sup>70</sup> *See*, Appendix 3.