Alliance OF AUTOMOBILE MANUFACTURERS

October 31, 2003

Jacqueline S. Glassman, Esq.
Chief Counsel
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Ms. Glassman:

RE: Request for Comments on Draft Interpretations of FMVSS No. 108, NHTSA Docket No. 03-15651, 68 Fed.Reg. 42454 (July 17, 2003)

The Alliance of Automobile Manufacturers, whose members are BMW Group, DaimlerChrysler, Ford Motor Company, General Motors, Mazda, Mitsubishi Motors, Nissan, Porsche, Toyota and Volkswagen, is writing in response to the Request for Comments on two draft interpretations of FMVSS No. 108 that was published in the Federal Register on July 17, 2003.

These comments will address two major themes: first, the comments will address the process of seeking comments on certain interpretations and second, the comments will address the substantive content of the proposed interpretations contained in the July 17 notice. Alliance responses to the "individual questions raised by the submitter" are provided in the attached Appendix A.

A. The Process of Seeking Comments on Certain Interpretations Is Welcome.

The Alliance commends the agency for instituting the process of seeking public comments on certain interpretations of its safety standards and regulations, particularly those that involve important novel issues or those that might have potentially broad impacts. While most interpretation requests are relatively straightforward, some few are not. When an interpretation request raises novel and important issues, or when the interpretation could affect the compliance

Ordinarily, the Alliance favors prompt responses to interpretation requests. Those requests that are straightforward should be answered promptly, in order to give swift guidance to the regulated industry about the agency's view of the meaning of a standard or regulation. This is important for the ongoing process of designing and certifying vehicles in compliance with applicable safety standards. On occasion, however, an interpretation request poses questions that are more complex or that have potentially broad applications. In those rare cases, the Alliance

supports the agency's decision to seek public comments to aid the agency in reaching a decision about the interpretation of the standard or regulation at issue. The addition of several weeks to the timeline for issuance of a final interpretation on a complex issue is not objectionable, given the potentially serious consequences that can flow from an uninformed interpretation that carries significant consequences for existing or planned motor vehicles.

As discussed in more detail in Part B, below, the agency chose wisely in seeking public comment on these two draft interpretations of FMVSS 108. The proposed interpretations would, indeed, have an adverse effect on a vibrant, existing market for aftermarket customization lighting equipment that, to the Alliance's knowledge, has not posed any safety hazards in the real world. The interpretations would also disrupt the vehicle conversion industry, and restrict the introduction of new technologies into the market. The agency should proceed cautiously when an interpretation would restrict design options in the marketplace, when there is no compelling evidence that the restriction is really needed for motor vehicle safety.

With this background, the Alliance will turn to the two specific interpretations for which NHTSA is seeking public comment.

B. The Substantive Content of the Proposed Interpretations of FMVSS No. 108 Is Seriously Flawed.

The Alliance objects to the proposed interpretations of FMVSS No. 108 for three reasons: (1) the proposed interpretations are inconsistent with the statutory imperative that safety standards be stated objectively in terms of performance; (2) the proposed interpretations are inconsistent with pre-existing NHTSA interpretations of FMVSS No. 108 permitting variations in replacement lighting equipment and would unreasonably interfere with the existing market in replacement lighting equipment; and (3) the proposed "standard"– that replacement lighting equipment comply with FMVSS No. 108 "in the same manner" as the original equipment it intends to replace – is ambiguous and incapable of reasonable application by manufacturers in the self-certification process.

We recognize that NHTSA has issued some recent interpretations that introduced the concept of requiring replacement lamps to comply "in the same manner" as original equipment; namely, a February 4, 2002, letter to Mr. Daniel Watt and a March 13, 2003, letter to Mr. Galen Chen. The Alliance believes that these interpretations are flawed, for the same reasons discussed in these comments, and that these interpretations should be superseded by an interpretation that confirms that replacement lighting equipment is subject only to the performance requirements actually stated in FMVSS No. 108.

The provision at issue is S5.8.1, which provides, in relevant part, as follows:

> "...each lamp, reflective device, or item of equipment manufactured to replace any lamp, reflective device, or item of associated equipment on any vehicle to which this standard applies, shall be designed to conform to this standard."

The provision says nothing about also conforming to the design, materials or styling choices made by the original vehicle manufacturer, and it should not be interpreted to add those requirements, for the following reasons.

1. The proposed interpretations and the referenced interpretations are inconsistent with the statutory directive for standards to be stated objectively in terms of performance.

The Vehicle Safety Act defines a "motor vehicle safety standard" as a minimum standard for "motor vehicle or motor vehicle equipment ***performance***." See 49 U.S.C. § 30102(a)(9). FMVSS No. 108 identifies performance (i.e., photometric, color, etc.) requirements for replacement lighting equipment that should be fully satisfactory to meet NHTSA's safety concerns. Expanding the requirements of FMVSS No. 108 to specify that replacement lighting equipment meet those requirements "in the same manner" as the original equipment is an unnecessary intrusion into the design flexibility granted to replacement equipment manufacturers by the Vehicle Safety Act's dictate that safety standards are to be written in terms of "performance," and not design.

Moreover, the effort to restrict the design flexibility of replacement equipment manufacturers is a significant, precedent-setting policy change that has far-reaching implications for other sectors of the replacement equipment market. For example, NHTSA does not require replacement tires to comply with tire performance requirements "in the same manner" as original tires. Rather, the agency requires replacement tires to comply with the specified tire performance requirements in any manner that the tire manufacturers choose. Likewise, NHTSA has never required replacement glazing to comply "in the same manner" as the original vehicle glazing, nor has this principle been extended to replacement brake hoses, brake fluid or other items of equipment to which an FMVSS applies. NHTSA's approach to regulating replacement equipment has been to establish performance requirements and allow the replacement equipment manufacturer to satisfy those performance requirements in "any manner" he chooses, as long as the applicable FMVSS's performance requirements are met. That policy should apply to replacement lighting equipment, as well.

2. The proposed interpretations are inconsistent with prior NHTSA interpretations of FMVSS No. 108 permitting variations in replacement lighting equipment and will unnecessarily disrupt the well-established aftermarket lighting equipment and vehicle modification industries.

In contrast to the proposed interpretation, and the referenced Watt and Chen interpretations, NHTSA has previously interpreted FMVSS No. 108 as permitting the aftermarket installation of replacement lighting equipment that complies with the standard in a different manner than the original vehicle. For example, in the context of the Center High Mounted Stop Light (CHMSL) requirement, NHTSA has agreed that manufacturers of aftermarket spoilers that might block the originally installed CHMSL may install a second CHMSL in the spoiler. See, e.g., interpretation letter to Mr. Eric Williamson of Gulf States Toyota, Inc., April 8, 1998. NHTSA has also permitted the replacement of an original CHMSL with a replacement CHMSL of a different size, shape or style. See, e.g., interpretation letter to Mr. Shlomo Zadok of Zadok Research Laboratories, August 20, 1996 (novelty CHMSL replacements permissible as long as they meet the requirements of S5.1.1.27 of FMVSS 108 and

do not impair the effectiveness of required lighting equipment). Thus, NHTSA has explicitly permitted aftermarket accessory manufacturers to self-certify compliance with FMVSS No. 108 as an equipment standard for replacement lighting equipment in a different "manner" than that chosen by the original vehicle manufacturer. Now, under the proposed interpretation requiring compliance "in the same manner" as the original vehicle manufacturer chose to comply, these spoilers and other aftermarket replacement lamps would presumably be non-compliant.

Similarly, a popular aftermarket option of retrofitting certain vehicles with alternative lighting equipment would apparently be rendered illegal under NHTSA's proposed interpretations. There is a vibrant market for aftermarket retrofitting of lamps, especially taillamps, with alternative lamps that differ in styling from the lamps installed by the original vehicle manufacturer. Of course, these replacement lamps must comply with the photometric and other specified performance requirements of FMVSS No. 108. Until now, however, there has been no thought that these alternative designs violate FMVSS No. 108 merely because they differ in styling or exact "manner" of compliance from the original lamps. As noted above, NHTSA has previously interpreted FMVSS No. 108 to permit novel lighting designs as replacement equipment, as long as the photometric and other specifications are satisfied. But to the extent these alternative designs meet the standard's requirements "in a different manner" than the original equipment lighting chosen by the original vehicle manufacturer, they would not be consistent with the proposed interpretations.

The Alliance does not know of any safety need to prevent the sale of these replacement lighting systems. In the context of using different light sources in replacement lamps, NHTSA raised concerns about the potential that replacement lighting equipment incorporating different light sources could present a risk of overloading the vehicle electrical system or a risk of fire. The Alliance submits that the risk of overloading the vehicle electrical system or causing a fire is not inherent to whether the light source matches the one selected by the vehicle manufacturer but rather is a function of proper circuit design and protection and robust lamp design. In any event, NHTSA has ample authority under its safety defect responsibilities to address any such problem of electrical overload or fire presented by replacement lighting equipment, should it actually arise.

The Alliance also objects to the fact that the proposed interpretations would explicitly preclude replacement lighting equipment from incorporating new lighting technologies that may have been developed after the original equipment was designed and installed. For example, the interpretation would appear to preclude a replacement equipment manufacturer from offering a replacement headlamp that would allow a vehicle owner to upgrade from incandescent to halogen bulbs, or from offering a replacement taillamp that incorporates a new type of plastic material in the lens. Indeed, proposed interpretation No. 2 expressly precludes providing a lamp incorporating sealed LED light sources as a replacement for a lamp with incandescent light sources. The Alliance does not know of any safety need to prevent new materials or technologies from entering the replacement lamp marketplace.

The proposed interpretations would also disrupt the well-established industry that converts completed vehicles into different vehicles, such as converting vans into ambulances or other special purpose vehicles. The lighting needs for these converted vehicle applications often

differ significantly from the lighting configurations installed on the original vehicle. For this reason, entities performing those conversions frequently replace the original lamps with configurations that differ significantly from the lamp configurations of the original lamps, and have never thought that they were obliged to match the exact "manner" of compliance that was chosen by the original vehicle manufacturer. Under the proposed interpretations, they could not change the "manner" in which the original vehicle complied with FMVSS No. 108. This is an unreasonable restriction on that industry.

In short, the proposed interpretations would disrupt many well-established industries, including the manufacturers of replacement lighting equipment and the businesses that convert vehicles into special purpose vehicles, for no safety benefit.

3. The proposed "standard" for evaluating replacement lighting equipment – i.e., that the replacement equipment complies with the standard in the "same manner" as the original equipment it intends to replace – is itself ambiguous and introduces unacceptable compliance risks.

Finally, the proposed "standard," i.e., that replacement lighting equipment comply with the standard "in the same manner" as the original equipment it intends to replace, is itself ambiguous and not "objective" in the meaning of the Vehicle Safety Act. What exactly does it mean to comply "in the same manner" as the original equipment? The Alliance has discussed at length above why it is unnecessary and unreasonable to restrict the design, styling and material choices of replacement lamps that otherwise comply with the performance requirements of FMVSS No. 108. Even if a replacement lamp was designed with the same light source, the same styling and the same materials as the original lamp, it is likely to comply "in a different manner" than the original lamp, due to variations in bulbs, lenses and other components. If the proposed interpretations would require the replacement lamps to have identical photometric output as the original lamps, that is an impossible compliance burden. For that matter, original equipment lamps themselves comply with the standard "in a different manner" from one another when photometric output is compared, due to the inherent manufacturing variability in lighting equipment.

It is also unclear how the proposed interpretations would apply to replacement equipment that is generic, and not intended for installation on a single make/model vehicle. An example would be a generic replacement side marker or a generic sealed beam headlamp. What is the benchmark for comparing its performance, for purposes of complying with the proposed interpretation? If it is capable of installation on numerous makes/models, it cannot be held to a requirement to comply "in the same manner" as all of those makes/models and the proposed interpretation would thus impose an impossible compliance burden.

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The Alliance urges NHTSA not to adopt the proposed interpretations of FMVSS No. 108. If NHTSA believes that there is a safety need to regulate the performance of replacement lighting equipment more stringently than currently regulated by FMVSS No. 108, NHTSA should conduct rulemaking to amend the standard, rather than use the interpretation process to make such a significant change in the standard that would have such broad implications for the lighting sector of the motor vehicle industry.

Sincerely,

Robert Strassburger
Vice President, Safety and Harmonization
Alliance of Automobile Manufacturers

APPENDIX A

ALLIANCE RESPONSES TO THE INDIVIDUAL QUESTIONS
RAISED BY THE SUBMITTER

Draft Interpretation #1

1. *Are replacement lamps required to have all of the functions of original lamps?*

Alliance Response: The Alliance is sympathetic with the agency's concerns about this issue. If a single original lamp contains all the functions required by FMVSS 108, then a replacement lamp set for that original lamp should also contain all the same functions.

However, the Alliance does not believe that a replacement lamp set should have to distribute and locate all the functions present in the original lamp in the same manner as they are distributed and located in the original lamp(s). Specifically, the Alliance does not agree that a replacement lamp for a single, combination lamp must also be a single, combination lamp. Rather, FMVSS 108 should be interpreted to permit replacement lamp sets that separate the functions included in a combination original lamp (such as providing a separate reflex reflector instead of combining it with a turn signal). Not only is this flexibility consistent with the Vehicle Safety Act's mandate for performance standards, it is also essential to permit manufacturers to offer replacement lamp sets in various world markets that comply with local standards for such attributes as reflex reflector color. If manufacturers could not separate functions in replacement lamp sets and configure those sets differently for different world markets, manufacturers would be required to develop a "U.S.-only" replacement lamp, increasing consumer costs and depriving manufacturers of the benefits of a "performance" standard. While it is true that the vehicle owner might not correctly install a separate component, that potential for human error exists with any replacement of lighting equipment. FMVSS No. 108 should not be interpreted to preclude a manufacturer of a replacement lamp set from separating and/or reconfiguring the functions of the original lamp, as long as all of those functions are made available in the replacement lamp set.

2. *Whether replacement lamps for the rear of a vehicle may have the reflex reflectors in a location that is inboard from that in the original lamps?*

Alliance Response: Yes, FMVSS 108 permits such design flexibility. Although NHTSA pointed to the language that requires reflex reflectors to be "as far apart as practicable" as a reason to preclude relocating the reflex reflectors in a replacement lamp system, NHTSA has never enforced this literally. In a 1997 interpretation to Mr. Gorzkowski of Transport Canada, NHTSA pointed out:

> "all front and rear lighting equipment required to be provided in pairs must be located 'as far apart as practicable.' Literal compliance with this requirement could mean that lamps and reflectors would have to be stacked vertically at the extreme edges of a vehicle. But we have never sought to enforce the location requirements of Standard 108 in that manner."

NHTSA agreed that any effort to make the paired lamp separation requirements more specific or objective would require rulemaking. The Alliance also agrees that NHTSA should undertake rulemaking if there is a need to specify more objectively the separation requirements for reflex reflectors, or any other paired lighting equipment. In fact, NHTSA's traditional deference to the good faith of vehicle and lamp manufacturers in specifying the location of pairs of required lighting equipment has worked well, including in the replacement lamp sector. The Alliance knows of no safety reason to impose this design constraint on replacement lamp manufacturers.

Draft Interpretation #2

1. *May a lamp manufacturer design a replacement lamp to use a different wattage bulb, such as switching from an 1157 to a 2057?*

Alliance Response: The Alliance believes that most lamps can tolerate some variation in wattage without adversely affecting performance, and that FMVSS No. 108 should not be interpreted to preclude the use of different wattage bulbs in replacement lamps (as long as the replacement lamp continues to meet all performance and operating requirements of FMVSS 108 in the system installation.)

2. *May a lamp manufacturer design a replacement lamp to use a different color bulb? Some manufacturers are switching from a clear bulb behind a red or amber rear turn signal lens to an amber bulb behind a clear lens.*

Alliance Response: As to the specific question, FMVSS 108 requires that the light output from the replacement lamp meet certain color requirements, as specified by SAE J578c. NHTSA should not preclude a replacement lamp from inverting the light source /lens color choice made by the vehicle manufacturer (or original lamp manufacturer), as long as the replacement lamp set meets FMVSS 108's requirement for the color of light output.

It should be noted that most amber and clear incandescent bulbs are interchangeable and some OE lamps have been designed to meet the color requirements, as specified by SAE J578c, with an amber bulb and an amber lens such that an unintended mis-build would not result in a non-compliant vehicle.

3. *Some manufacturers of replacement lamps are completely changing the bulbs used including wattage, color and base type by including a replacement wiring harness and sockets. Is this permitted?*

Alliance Response: As long as the replacement lamp meets all of the applicable FMVSS 108 specifications and operating and performance requirements in the system installation, there should be no reason to preclude the replacement lamp from providing a different bulb wattage, color, base and/or wiring harness and sockets.

4. *Some manufacturers of replacement lamps change the source type from incandescent to sealed L.E.D. Is this permitted?*

Alliance Response: Yes, this should be permitted. Many vehicle models are offered with an option of a halogen or high intensity discharge headlamp. Under the proposed interpretation, an owner of a vehicle with high intensity discharge head lamps who is in a frontal collision could not choose to replace the high intensity discharge head lamps with less expensive halogen lamps, of the type that were available as an option on the new vehicle. This proposed interpretation seems unnecessarily restrictive on consumer choice. As long as the replacement lamp with the different source type still meets the photometric and other requirements of FMVSS 108, there should be no restriction on changing the source type.

If it is the Agency's intent to prevent sale of aftermarket lighting equipment designed to permit installation of light sources or light source/socket combinations different from that designed for the lamp, it should utilize its current enforcement capabilities or issue a narrowly focused interpretation rather than the proposed broad prohibition. For example, we do not support modification kits that would override designs intended to ensure noninterchangability of incompatible bulbs (per Part 564 of NHTSA's regulations). We understand that NHTSA has directed enforcement resources against such products, and should continue to do so.