

U.S. Department of Transportation National Highway Traffic Safety

Administration



1200 New Jersey Avenue SE. Washington, DC 20590

February 22, 2022

BY EMAIL

Mr. Mark Cherveny Manager, Global Regulations, Standards and Compliance The Goodyear Tire and Rubber Company 200 Innovation Way Akron, OH 44316-0001 mark.cherveny@Goodyear.com NEF-106RR PE17-009

Dear Mr. Cherveny:

On December 28, 2017, the Office of Defects Investigation ("ODI") of the National Highway Traffic Safety Administration ("NHTSA") opened Preliminary Evaluation ("PE") 17-009 to investigate an alleged safety-related defect concerning Goodyear G159 tire failures in Class-A motorhomes.

The subject tires of the investigation are G159 tires manufactured by Goodyear from 1996 through 2003, designed to be mounted to a 22.5" diameter rim, sold as either original or replacement equipment to recreational vehicle ("RV") manufacturers or owners, including but not limited to, tires designated as size 275/70R22.5, 275/80R22.5, 255/70R22.5, and 12R22.5.

As discussed more fully below, ODI believes that of the subject tires, the 275/70R22.5 size tire, when used on class-A motorhomes, contains a defect in performance related to motor vehicle safety. Accordingly, ODI requests that Goodyear initiate a recall of 275/70R22.5 size subject tires, in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act ("the Motor Vehicle Safety Act"), 49 U.S.C. §§ 30118-30120.

ODI's Investigation

During its investigation, ODI collected, reviewed, and analyzed information from several sources. It considered complaints and data provided by Goodyear and consumers. Furthermore, ODI compiled data, identified trends, and made comparisons to peer tires and other similar safety recalls. ODI considered Goodyear's responses to ODI's formal and informal requests for information, as well as technical briefing presentations made by Goodyear, and evaluated Goodyear's assertions.

The Safety Defect and its Frequency

ODI believes that there is a safety defect in the performance of the 275/70R22.5 size tire when used on class-A motorhomes. In this application, the tire experienced catastrophic tread separations and blowouts at higher speeds in highway use. These failures occurred relatively early in the service life of the tire and continued to increase as higher state speed limits led to motorhomes being driven farther and faster.

The G159 275/70R22.5 tire, introduced to the marketplace in 1996, was originally marketed for start-and-stop metro-style delivery service vehicles and was sold as a tire rated for roads with maximum speed limits up to 65 miles per hour (MPH) (as all of the roads were in 1996). The subject tires were later sold for and installed as original equipment on class-A motorhomes, which are large RVs. Unlike an RV, a start-and-stop metro vehicle drives locally for short distances and travels at lower speeds most of the time. Higher vehicle speeds combined with longer travel hours and less than perfect tire maintenance practices, typical of historical RV usage, increase the tire temperature and can have a negative and deteriorating impact on the tire's performance and life. Furthermore, available information raises serious concerns as to whether the G159 275/70R22.5 size tire can be safely operated at speeds above 65 MPH.

In a 1988 document, Goodyear engineers stated that prolonged operation of heavy-duty tires at temperatures above 90 degrees Celsius (194 degrees Fahrenheit (F)) would result in structural deterioration. In 2007, a Goodyear engineer also provided testimony in litigation regarding allegations that the G159 275/70R22.5 size tire was defective, that operation of heavy truck tires at temperatures above 200 degrees F could lead to performance issues, including tread separation. In August 1996, Goodyear's testing of the 275/70R22.5 size tire on a road wheel recorded temperatures well in excess of 200 degrees F at 50 MPH. The belt edge tire temperature at 50 MPH on the road wheel corresponds to the temperature experienced by the tire at 75 MPH speed on the highway. Goodyear has argued that the G159 275/70R22.5 size tire was designed to withstand temperatures in excess of 200 degrees F but has not provided other documentation regarding the temperature that the 275/70R22.5 size tire was designed to withstand.

In 1998, shortly after the G159 was introduced, states began introducing maximum speed limits of 75 MPH. 1998 is also the year in which Goodyear received the first significant injury claim related to a failure in the G159. As depicted in Figure 1.0, injury claims for the G159 increased dramatically after 1998, reaching a peak in 2003. Goodyear also received claims involving deaths each year from 2002 to 2006.



Figure 1.0 – Death and Injury Counts per Calendar Year

ODI learned that Goodyear manufactured three variations/builds of the G159 275/70R22.5 tires. These tires were manufactured at two manufacturing plants with different product codes, compounds, and configurations.

Wolverhampton, England:

o 275/70R22.5 with product code 756-919-903, approximately 2,050 tires

Danville, Virginia, USA:

- o 275/70R22.5 with product code 756-919-903, approximately 160,000 tires
- o 275/70R22.5 with product code 756-919-040, approximately 10,000 tires

The G159 275/70R22.5 tires with product code 756-919-903 were constructed in Danville and Wolverhampton. These tires had different tread compounds than the G159 275/70R22.5 tires with product code 756-919-040 and both were used on RVs in the U.S. While both the Danville and Wolverhampton tires had the same product code and were used on RVs, they had significant build differences. The Wolverhampton tires were larger in overall diameter than the Danville tires by approximately 0.59 inches, had a wider top belt, and had different belt configurations on the bottom. The Wolverhampton tire top belt ran differently than the Danville tire (756-919-903) top belt in relation to the shoulder groove.

ODI believes that since the G159 275/70R22.5 Wolverhampton tires with product code 756-919-903 were brought into the U.S. market and used/mixed with the G159 275/70R22.5 Danville tires with the same product code, it was possible that the increased height could result in some uneven wear when the tire is installed on a vehicle where the other tires on the vehicle were from Danville build. Uneven tire wear can decrease the lifespan of the tire and lead to leaking and potential blow outs.

Failures Rate Based on Years in Service

During its investigation, ODI learned that the failure rates in the first six years in service for 275/70R22.5 tires used on class-A motorhomes were much higher than the peer G159 tires of different sizes made by Goodyear. Other G159 tires of different sizes were also fitted to RVs but had significantly lower failure rates. The rates on the 275/70R22.5 were not only higher, but, as shown in the graph below, rose much more rapidly than comparable peer tires. Therefore, the subject tires not only failed more often, they failed much earlier in their service lives. In NHTSA's view, this failure pattern provided Goodyear with substantial notice of a product defect. The analysis below includes tires in all applications. The failure rates would be substantially higher if the analysis was restricted to RV applications. Figure 2.0, based on available information, shows the 275/70R22.5 (represented in blue) is a significant outlier.



Figure 2.0 – Failures Rate Based on Years in Service (NHTSA analysis based on the IR response)

The Safety Consequences and Precedent

Failure of the 275/70R22.2 size tire on a class-A motorhome can cause a loss of vehicle control, increasing the risk of a crash, and result in deaths and severe injuries. In particular, catastrophic failure of a front tire can lead to loss of control, departure from the roadway and/or collisions or rollover.

One RV crash in particular, after which the driver and his family sued Goodyear alleging that the 275/70R22.2 size tire was defective, illustrates the disastrous consequences that can result from tire failure while traveling at high speed. The driver and his family were returning from a vacation **and the second seco**

NHTSA data indicate the existence of other similar RV crashes attributable to a failure of a 275/70R22.2 size tire. A review of the data gathered by NHTSA reveals that the failure of G159 275/70R22.5 size tires installed on RVs has caused multiple fatalities. Alleged defects in the G159 tire were at the center of 41 lawsuits involving 98 deaths and injuries filed between 1999 and 2016. Many of these cases were resolved through confidential settlement agreements forbidding the parties from revealing information obtained during litigation.

Furthermore, Goodyear routinely obtained protective orders forbidding release of the records and information obtained in litigation. In one noteworthy case, **better** *v. Goodyear* (Circuit Court of the Sixth Judicial District in and for Pasco County, Florida No. **better (Circuit Court**), a jury returned a \$6.5 million dollar verdict based on its finding that the G159 was defective. In lieu of appealing that verdict, Goodyear settled the case for an undisclosed sum through a confidential settlement agreement and successfully persuaded the court to seal the record of the trial.¹ Indeed, as late as 2015, Goodyear continued to object to requests that information collected in litigation be released to NHTSA despite the limited degree of competitive harm that could follow from the disclosure of confidential business information about a 19-year-old tire design.

Goodyear's penchant for secrecy undoubtedly provided an ancillary benefit in preventing injured litigants and their counsel from providing information about G159 related crashes to NHTSA. Indeed, NHTSA was not alerted to the extraordinary failure rate of the subject tires until it received Goodyear data in July 2017 as a result of the plaintiff's attorney in the Arizona case of *v.Goodyear* (*Goodyear* (*Goodyear*) Maricopa County Superior Court) obtaining a court order allowing disclosure of the information to NHTSA.² After review of the materials provided to the agency, NHTSA opened this investigation and continues to pursue it because the unique circumstances of RV service suggests that some of the subject tires may still be in use.

¹ An internal settlement memorandum seeking approval by Goodyear leadership noted maintaining confidentiality of company information as a major consideration in resolving the case.

² The degree to which Goodyear and its counsel strove to hide information about the G159 is fully outlined in the decision issued by the Ninth Circuit Court of Appeals in v. *Goodyear Tire & Rubber Co.*,

While ensuring through protective orders and confidential settlement agreements that claimants in civil cases could not share information with NHTSA, Goodyear has consistently represented to the agency and others that the subject G159 tires failed because RV owners failed to properly maintain their tire pressures and that the RVs were often overloaded. However, underinflation and overloading are common tire problems found among RV owners/operators, not just ones equipped with the subject tires. Despite this foreseeable misuse, Goodyear continued to sell the subject tires in the RV market. There is little question that Goodyear was specifically aware of the risk that RV manufacturers and users might overload and underinflate tires during the years in which it continued to sell the subject tires for RV use.

On October 5, 1999, Fleetwood Enterprises ("Fleetwood") filed a recall notice with NHTSA (99V-277) stating that the company was recalling 3,746 model year 1996 through 2000 class A motorhomes to remedy tire failures caused by underinflation and overloading. The notice further stated that Fleetwood was aware of two fatal crashes caused by this condition. Documents obtained from Goodyear establish that it became aware of failures of the subject tires on Fleetwood motorhomes in October 1998. By February 1999 Goodyear's analysis of failed tires from Fleetwood motorhomes led the company to conclude that the tires were failing due to underinflation and overloading. In June of 1999, Goodyear had concluded, based on use data, Fleetwood information and its own analysis, that "the current tire does not offer enough margin for operational loads" and recommended that Fleetwood replace the 275/70R22.5 G159 on the affected vehicles with the larger aspect ratio 275/80R22.5 size G159 tires. In response to Fleetwood's request, Goodyear supplied the remedy replacement tires at a reduced cost. Goodyear did not separately recall the tires, however; only those Fleetwood motorhomes subject to the recall received the replacement tires.

Further evidence of Goodyear's knowledge of the conditions under which the subject tires were being used is found in its interactions with for the subject tires were being used is found in its interactions with for the subject tires were for the Goodyear that G159 tires were failing in service on for the Windsor Class-A motorhomes. Notes summarizing a January 29, 2002, meeting between for the subject were failing due to underinflation. Goodyear agreed to replace the G159 tires with a 295/80R22.5 G391 tire, free of charge. Among other things, these meeting notes indicate that for the believed to be the correct tire for motorhome applications by relying on Goodyear's Engineering Data Book. However, the notes observe:

"The Motor Home application is unique and Monaco's need for a better understanding of the actual tire usage has emerged. Based on this we need to engage the technical teams of both companies relative to spec'ing tires."

Finally, Goodyear and agreed to cooperate in drafting a "customer satisfaction" letter advising advised owners of the tire replacement program. In June 2002, Goodyear added the following paragraph to the letter advised would send to Windsor owners:

It has come to our attention that a number of customers are decreasing the air pressure in their tires for better comfort and as a result are operating the tires in an underinflated/overloaded condition. This improper operating condition can possibly result in the premature removal of tires from service.

ODI has tentatively concluded that Goodyear should have conducted a formal safety recall instead of a "customer satisfaction" campaign, particularly in light of the fact that it was aware than a G159 failure on a Class-A motorhome posed risks of serious injury or death far more serious that a "premature removal of tires from service".³ Furthermore, while Goodyear continued to strenuously maintain to that the G159 did not have a safety issue, it simultaneously acknowledged that its own guidelines – which led manufacturers such as to select the G159 tires – were inapplicable to the "unique" circumstances encountered when the tire was used on motorhomes.

Therefore, the existing record aptly demonstrates that Goodyear was aware of chronic overloading and underinflation as early as February of 1998, and by January 2002 had reached the conclusion that the G159 was not, according to its own specifications, suitable for use in Class-A motorhomes. Nonetheless, Goodyear continued to put the onus for G159 failures squarely on the shoulders of motorhome owners and provided them with a tepid warning that tire failure posed a risk of "premature removal of tires from service."

Despite claiming at the time that G159 275/70R22.2 size tires did not present a safety issue, Goodyear now argues that the actions by **second** and **second** addressed any safety risk presented by the tire. ODI disagrees with this position because NHTSA's failure data show a significant number of incidents occurred in G159 275/70R22.2 size tires used on RVs produced by other manufacturers.

Under the Motor Vehicle Safety Act, motor vehicle and equipment manufacturers are responsible for safety defects caused by the foreseeable misuse of their products. *See United States v. General Motors Corp.*, 518 F.2d 420, 427 (D.C. Cir. 1975) (finding that "a vehicle or component "contains a defect" if it is subject to a significant number of failures in normal operation, including failures either occurring during specified use or resulting from owner abuse (including inadequate maintenance) that is reasonably foreseeable") ("*Wheels*"). In the *Wheels* decision, the D.C. Circuit recognized that "[t]he protection afforded by the Act was not limited to careful drivers who fastidiously observed speed limits and conscientiously complied with manufacturer's instructions on vehicle maintenance and operation The congressional purpose to warn owners about safety hazards requires notice not only where the vehicle fails when used in conformity with manufacturer's instructions, but also when there is an inadequate margin of safety to protect against failures during reasonably expected vehicle operation." *Id.* at 434-35. Goodyear's blame of vehicle owners is not persuasive.

Prior recalls and service campaigns (including service campaigns that Goodyear participated in) demonstrate that underinflation and overloading are reasonably foreseeable conditions. *See* NHTSA Recall Nos. 04T-003 and 04T-018. Notably, in 2002, and Goodyear agreed to replace the G159 275/70R 22.5 size tires with the G391 295/80R 22.5 size tires (a different tire line), on certain **EVS** at their expense, in order to allow customers to operate at a lower inflation pressure that would provide a more comfortable ride while maintaining tire loading within the operating range of the tire. Manufacturers have also previously filed recalls because a tire was not suitable for a particular application for which it was sold. *See* NHTSA Recall No. 16T-002, by Bridgestone Americas Tire Operation LLC (issuing a recall because tires that were

³ NHTSA is not taking a position at this time on which is not the subject of this investigation.

sold as all position tires were found not suitable for trailer applications). Examples of such recalls, undertaken while G159 tires were still failing in service on motorhomes, are presented in Table 1.0 below.

RECALL,	MANUFACTURER	MARKET	SAFETY DEFECT
PRODUCT			DESCRIPTION
SERVICE			
BULLETIN			
04T-003	Bridgestone/Firestone	2000-2003 Ford	Rapid air loss due to
	North America	Excursion	underinflation, overloading and
			speeding
04T-018	Bridgestone/Firestone	Replacement market	Belt detachment due to
	North America		underinflation and overloading
16T-002	Bridgestone	Replacement market for	Tires were sold as all position
	Americas Tire	steer, drive,	tires, found not suitable for
	Operation LLC	and trailer usage	trailer applications
PSB-2002-20	Coach	1999-2001 Windsor	Underinflation and overloading
	Corporation	Class-A Motorhomes	

Table 1.0 - Vehicle safety recalls and product safety bulletins related to tire failure and loss of vehicle control

<u>Goodyear Did Not Issue a Recall Despite Being Fully Aware of High Failure Rates on RVs</u> <u>and Resulting Fatalities</u>

Manufacturers of motor vehicles and motor vehicle equipment are required to file a recall notice with NHTSA no more than five working days after the manufacturer knew or should have known of a safety defect or noncompliance. *See* 49 C.F.R. § 573.6(b); *see also United States v. General Motors Corp.*, 656 F. Supp. 1555, 1559 n.5 (D.D.C. 1987). It appears that Goodyear was aware of a safety defect in the G159 275/70R22.5 size tires as early 2002 while the tires were in production but did not file a recall.

Goodyear's information request response reveals that the failure rate and the adjustments data for the G159 275/70R22.5 size tire in the first three years of its production (1996-1999) were significantly higher compared to the peer G159 tires (Figure 2.0). From 1999 through 2001, Goodyear continued to make design changes to improve the performance of the subject tires and ultimately replaced them with the G670 model, specifically designed for RV applications, based on the lessons learned from the G159 field data. Significantly, between 2002 and 2009, Goodyear received claims for eight fatalities resulting from failures of the G159 tire on RVs.

Despite this knowledge, Goodyear did not and still has not conducted a notification and remedy campaign pursuant to the Motor Vehicle Safety Act, 49 U.S.C. §§ 30118-3120, to eliminate the risk to the public.

Goodyear's Position

Goodyear has previously stated it does not believe that a safety defect exists in 275/70R22.5 size tires, despite significantly higher failure rates compared to peer G159 tires. It has asserted that the high failure rates and adjustments data are caused by owner abuse such as overloading and underinflating tires. Goodyear also maintains that any safety concerns presented by the G159 size 275/70R.22.5 tire were addressed by campaigns and recalls conducted by now defunct RV manufacturers.

Conclusion

ODI believes a safety-related defect exists in the performance of Goodyear G159 275/70R22.5 tires used on Class-A motorhomes; the failure rate of this specific tire used on Class-A motorhomes is significantly higher than the failure rates for peer tires manufactured by Goodyear. The safety-related defect is a clear, identified failure that leads to a loss of vehicle control, causing crashes and potentially catastrophic consequences such as death and serious injury. Multiple fatalities have resulted from failures of this tire on RVs.

Field actions mentioned above, such as free tire replacement for certain motorhomes, testing and communications regarding high failure rates on Fleetwood products equipped with G159 275/70R22.5 size tires, and an owner education campaign, demonstrate that Goodyear was aware of this problem in the early years of the subject tire's production. Tire overloading and underinflation are common among RV owners/operators and are foreseeable conditions by RV and tire manufacturers and thus are not a defense for Goodyear's failure to conduct a recall. These data and Goodyear's actions support the conclusion that there is a clear safety defect in these tires when used on Class-A motorhomes. The fact that these tires are no longer in production does not relieve Goodyear of the obligation to conduct a recall for a safety defect.⁴

The data available to Goodyear established that the G159 275/70R22.5 size tire is not suitable for use on Class-A motorhomes and presented an unreasonable risk to safety. Significantly high warranty claims and adjustments data on Class-A motorhomes compared to non-motorhome applications suggest that G159 275/70R22.5 size tires might be suitable for use on applications such as delivery trucks, but not for use on Class-A motorhomes. ODI requests that Goodyear conduct a recall in accordance with 49 U.S.C. §§ 30118-30120.

ODI's request that Goodyear conduct a safety recall does not constitute a formal conclusion by NHTSA with respect to the evidence in its investigative file. Also, this recall request does not constitute an initial or final agency decision that the subject tires contain a safety-related defect pursuant to 49 U.S.C. § 30118, an order to recall vehicles, or a final decision that Goodyear violated the law.

If Goodyear decides not to conduct the requested recall, it must provide ODI with a full explanation of its decision, including any additional analysis of the problem beyond Goodyear's past presentations. If Goodyear fails to initiate a recall, the agency may proceed to an Initial Decision that this tire contains a safety-related defect, pursuant to 49 U.S.C. § 30118(a), and may

⁴ The Motor Vehicle Safety Act does include any time limitation on the obligation to file a recall with NHTSA or to carry out the recall notification requirements. *See* 49 U.S.C. § 30120(g).

take other appropriate action. An Initial Decision will be accompanied by the publication of a Federal Register notice describing the alleged safety-related defect and the ODI investigation and scheduling a public meeting.

Goodyear's written response to this letter referencing the identification codes in the upper righthand corner on page 1 of this letter, must be submitted to this office no later than March 8, 2022 by email to joshua.neff@dot.gov. It is important that Goodyear respond to this letter on time. This letter is being sent pursuant to 49 U.S.C. § 30166, which authorizes this agency to conduct investigations and requires the submission of reports that may be necessary to enforce Chapter 301 of Title 49. Failure to respond promptly and fully to this letter may be construed as a violation of 49 U.S.C. § 30166, which could subject Goodyear to civil penalties pursuant to 49 U.S.C. § 30165.

If you have any questions about this letter, please contact Mr. Joshua Neff of my staff at 202-366-0698. If you have any questions regarding the recall procedures, please contact Mr. Alexander Ansley of my staff at 202-493-0481.

Sincerely,



Stephen Ridella, Ph.D. Director Office of Defects Investigation

CC:

Paula Christ paula_christ@goodyear.com

Dane Taylor dane.taylor@goodyear.com