



**UNITED STATES DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

DOCKET NO. NHTSA-2017-0092; Notice 1

Mazda Motor Corporation, Receipt of Petition for Determination of Inconsequentiality of Takata's Defect Information Report Filing under NHTSA Campaign Number 17E-034 for PSDI-5 Desiccated Driver Air Bag Inflators and Decision Denying Request for Deferral of Determination

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Notice of receipt of petition; notice of receipt of request for deferral and of decision denying request for deferral.

SUMMARY: On July 10, 2017, Takata Corporation ("Takata") filed a defect information report ("DIR") in which it determined that a safety-related defect exists in certain phase-stabilized ammonium nitrate ("PSAN") driver-side airbag inflators that it manufactured with a calcium sulfate desiccant, including inflators that it supplied to Ford Motor Company ("Ford"), Mazda North American Operations ("Mazda"), and Nissan North America Inc. ("Nissan") for use in certain vehicles. Mazda's vehicles identified by Takata's DIR were designed by Ford and were built on the same platform and using the same airbag inflators as the affected Ford vehicles. Mazda has petitioned the Agency—in part through a purported joint petition with Ford (see DOCKET NO. NHTSA-2017-0093)—for a decision that because analysis of inflators installed in certain Ford vehicles does not demonstrate propellant-tablet density degradation or increased inflation pressure, and because there are design differences between the inflators installed in Ford and Mazda vehicles and an inflator variant installed in Nissan vehicles, the equipment defect determined to exist by Takata is inconsequential as it relates to motor vehicle safety in the Mazda vehicles affected by Takata's DIR. Mazda requests relief from its notification and

remedy obligations under the National Traffic and Motor Vehicle Safety Act of 1966 and its applicable regulations, and further requests that the Agency defer a decision on the petition until March 31, 2018 to allow Ford to complete certain analysis and testing.

DATES: The closing date for comments is [INSERT DATE 30 DAYS AFTER PUBLICATION OF THIS NOTICE IN THE FEDERAL REGISTER].

ADDRESSES: Interested persons are invited to submit written data, views, and arguments regarding this petition for inconsequentiality. Comments must refer to the docket and notice number cited in the title of this notice and be submitted by one of the following methods:

- Internet: Go to <http://www.regulations.gov> and follow the online instructions for submitting comments.
- Mail: Docket Management Facility, M-30, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590.
- Hand Delivery or Courier: U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590 between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except Federal holidays.
- Facsimile: (202) 493-2251.

You may call the Docket at (202) 366-9324.

Note that all comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. Thus, submitting such information makes it public. You may wish to read the Privacy Act notice, which can be viewed by clicking on the “Privacy and Security Notice” link in the footer of <http://www.regulations.gov>. DOT’s complete Privacy Act Statement is available for review in the Federal Register published on April 11, 2000 (65 FR 19477–78).

The petition, supporting materials, and all comments received before the close of business on the closing date indicated above will be filed in the docket and will be considered. Comments and supporting materials received after the closing date will also be filed and will be considered to the extent possible. When the petition is granted or denied, notice of the decision will also be published in the Federal Register pursuant to the authority indicated at the end of this notice.

FOR FURTHER INFORMATION CONTACT:

For legal issues: Stephen Hensch, Office of the Chief Counsel, NCC-100, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, D.C. 20590 (telephone: (202) 366-5263).

For general information regarding NHTSA’s investigation into Takata airbag inflator ruptures and the related recalls, visit <https://www.nhtsa.gov/recall-spotlight/takata-air-bags>.

SUPPLEMENTAL INFORMATION:

I. Background

On November 3, 2015, NHTSA issued, and Takata agreed to, a Consent Order setting forth penalties, requirements, and performance obligations in connection with Takata’s alleged failure to fully comply with the National Traffic and Motor Vehicle Safety Act of 1966 as amended and recodified (the “Safety Act”), 49 U.S.C. 30101, *et seq.*, and its applicable regulations. Under the Consent Order, Takata is required to test its phase-stabilized ammonium nitrate (“PSAN”) inflators that contain a desiccant (a drying agent) in cooperation with vehicle manufacturers “to determine the service life and safety of such inflators and to determine whether, and to what extent, these inflator types suffer from a defect condition, regardless of

whether it is the same or similar to the conditions at issue” in the Defect Information Reports (“DIRs”) Takata had filed for its non-desiccated PSAN inflators. Consent Order ¶ 28.

In February 2016, NHTSA requested Ford’s assistance in evaluating Takata calcium-sulfate desiccated PSDI-5 driver-side airbag inflators, to which Ford agreed.¹ In June 2016, Ford and Takata began a field-recovery program to evaluate Takata calcium-sulfate desiccated PSDI-5 driver-side airbag inflators that were original equipment in MY 2007–2008 Ford Ranger vehicles in Florida, Michigan, and Arizona. *See also* Recall No. 17E-034.² Nissan also initiated a similar field-recovery program for its Versa vehicles in March 2016. Recall No. 17V-449. By January 2017, a very limited number of samples from Ford were available and tested. Recall No. 17E-034. In March 2017, Takata and Ford met to review the field data collected from the inflators returned by Ford and Nissan. Recall No. 17E-034. Between March and June 2017, additional Ford inflators were subjected to live dissection, which included chemical and dimensional propellant analyses, and ballistic testing. Recall No. 17E-034. Also in June, Takata reviewed with Ford and NHTSA field-return data from Ford inflators. Recall No. 17E-034. Ford then met with NHTSA on July 6, 2017 to discuss the data collected to date, as well as an expansion plan for evaluating Takata calcium-sulfate desiccated PSDI-5 driver-side airbag inflators.

Takata has analyzed over 400 such inflators from the Ford program—as well as 895 such inflators from the Nissan program. *See* Recall No. 17V-449. After a review of field-return data, on July 10, 2017, Takata, determining a safety-related defect exists, filed a DIR for calcium-

¹ Mazda has relied upon the Ford testing information because Mazda’s vehicles identified by Takata’s DIR were designed by Ford and were built on the same platform and using the same airbag inflators as the affected Ford vehicles.

² Later, under Paragraph 43 of the Third Amendment to the Coordinated Remedy Order (“ACRO”), NHTSA ordered each vehicle manufacturer “with any vehicle in its fleet equipped with a desiccated PSAN Takata inflator” (and not using or planning to use such an inflator as a final remedy) to develop a written plan describing “plans to confirm the safety and/or service life” of desiccated PSAN Takata inflators used in its fleet. ACRO ¶ 43. Such plans were to include coordination with Takata for parts recovery from fleet vehicles, testing, and anticipated/future plans “to develop or expand recovery and testing protocols of the desiccated PSAN inflators.” *Id.*

sulfate desiccated PSDI-5 driver-side airbag inflators that were produced from January 1, 2005 to December 31, 2012 and installed as original equipment on certain motor vehicles manufactured by Ford (the “covered Ford inflators”), as well as calcium-sulfate desiccated PSDI-5 driver-side airbag inflators for those same years of production installed as original equipment on motor vehicles manufactured by Nissan (the “covered Nissan inflators”) and Mazda (the “covered Mazda inflators”) (collectively, the “covered inflators”). Recall No. 17E-034.

Takata’s DIR filing triggered Mazda’s obligation to file a DIR for its affected vehicles. *See* 49 CFR Part 573; November 3, 2015 Coordinated Remedy Order ¶¶ 45–46.³ Mazda filed a corresponding DIR, informing NHTSA it intended to file a petition for inconsequentiality. *Mazda Motor Corporation Petition for Determination of Inconsequentiality of Takata’s Defect Information Report filing under NHTSA Campaign Number 17E-034 for PSDI-5 Desiccated Driver Air Bag Inflators* (dated August 17, 2016)⁴ (“Petition”) (enclosing “Mazda submission copy of Part 573”). Mazda then petitioned the Agency, under 49 CFR Part 556, via letter including an enclosed purported “joint petition” with Ford,⁵ for a decision that the equipment defect determined to exist by Takata is inconsequential as it relates to motor vehicle safety in the Mazda vehicles affected by Takata’s DIR, and also requested NHTSA allow Ford until March 31, 2018 to complete an “expanded inflator field study, aging assessment, and testing on additional samples” before NHTSA makes a decision on the Petition. *Id.* at 1. Mazda sent its Petition via UPS on August 17, 2017, scheduled to arrive the following day via next-day air. However, because the Petition was incorrectly addressed, NHTSA did not receive this copy of

³ Under 49 CFR 573.5(a), a vehicle manufacturer is responsible for any safety-related defect determined to exist in any item of original equipment. *See also* 49 U.S.C. 30102(b)(1)(C).

⁴ Mazda appears to have inadvertently dated its letter August 17, 2016, instead of August 17, 2017.

⁵ Ford also submitted a petition to the Agency, with a cover letter dated August 16, 2017. This petition was not a “joint petition” with Mazda. Ford’s petition is separately under consideration by the Agency.

the Petition until August 23, 2017. NHTSA did, however, receive a copy via email on August 22, 2017.

II. Timeliness

Under 49 CFR 556.4(c), Mazda was required to submit its Petition to NHTSA no later than thirty days after Mazda determined a defect exists. Mazda made the defect determination on July 18, 2017, which allowed it until August 17, 2017 to submit a petition to the Agency. *See* Mazda’s enclosed DIR; 49 CFR 556.4(c). However, Mazda *sent* its Petition via UPS on August 17, 2017, with the Petition scheduled to arrive *the following day*. NHTSA first received Mazda’s Petition via email on August 22, 2017—five days after it was due.

Despite this procedural flaw, and with the public interest in mind, NHTSA acknowledges receipt of Mazda’s Petition, is publishing the relevant documents for public comment, and addresses Mazda’s request for the Agency to defer a decision on the Petition. NHTSA need not decide herein whether the timing of Mazda’s filing is fatal to its Petition—that issue is preserved for decision at a later date.

III. Classes of Motor Vehicles Involved

Mazda’s Petition involves 5,848 vehicles in which the covered Mazda inflators were originally installed. Petition at 1. Those vehicles are MY 2007–2009 B-Series pickup trucks, which Mazda explains were built on the same platform and using the same airbag inflators as Ford MY 2007–2011 Rangers. *Id.* Accordingly, Mazda states that although “Takata has not tested PSDI-5 inflators with calcium sulfate from Mazda vehicles,” data from those Ford Rangers is representative of Mazda’s MY 2007–2009 B-Series vehicles. *Id.*

IV. Summary of Mazda's Petition

In support of its Petition, Mazda largely refers NHTSA to the “joint petition” with Ford enclosed with Mazda’s letter. *Id.* Mazda’s Petition also provides a brief, bullet-point summary of certain arguments, including that data from Ford field-return parts does not show a propellant tablet-density degradation seen in field-return parts from Nissan; that pressure measurements in Ford inflator primary chambers during ballistic testing were within specification and there were no reports of pressure vessel ruptures in PSDI-5 inflators the field; and that desiccant saturation is not an indicator of propellant degradation. *Id.* at 2–3.

In the “joint petition” enclosed with Mazda’s letter, Ford argues that Takata’s DIR does not determine the covered Ford inflators “actually contain a defect at this time, or that they will develop one over time,” and that once Ford completes its engineering analysis (by the end of March 2018), it will be able to supplement or amend its Petition to “allow the Agency to make a determination” on its Petition. *See* Enclosure at 10, 19. In the interim, Ford states that it will continue to obtain permanent replacement driver-side airbag inflators so that its continuing analysis will not affect the availability of parts if a remedy is needed. *Id.*

Ford’s position in the “joint petition” is that the defect is inconsequential rests on two related arguments. First, in contrast to testing data pertaining to the covered Nissan inflators, Ford contends Takata’s analysis of the covered Ford inflators does not show propellant-tablet density degradation or increased inflation pressure. *Id.* at 11. Takata has analyzed over 1,300 of its calcium-sulfate desiccated PSDI-5 driver-side airbag inflators, which include approximately 423 inflators from Ford Ranger vehicles⁶ and 895 inflators from Nissan Versa vehicles.⁷ Such

⁶ Twenty of these inflators were from salvage yards, however, “where the conditions used to store the parts cannot be determined.” *Id.* at 11.

⁷ In its DIR, Nissan provides this 895 figure; in its Petition, Ford attributes “approximately 1,000” covered

analysis involved both live inflator dissections and ballistic testing. *Id.* Ford asserts that about 360 live dissections of inflators obtained as part of Ford’s field-recovery program demonstrate “consistent inflator output performance”—specifically, measurements of ignition-tablet discoloration, generate density, and moisture content of certain inflator constituents did not indicate a reduction-in-density trend. *Id.* at 11–12. Ford further contends that these observations are supported by 47 ballistic deployment tests that showed no inflator exceeding the production primary-chamber pressure specifications. *Id.* at 12–13. Ford also emphasizes that Takata has not observed pressure vessel ruptures or pressure excursions on any desiccated PSDI-5 inflator, and that “[t]he maximum primary chamber pressure that Takata measured” in covered Ford inflators was about 15 MPa lower than that measured in a covered Nissan inflator (which exhibited primary chamber pressure exceeding 60 MPa). *Id.* at 14.

Second, and relatedly, Ford contends “[t]here are design differences” in the covered Ford inflators when compared to the covered Nissan inflators, and that such differences may explain differences observed between the two inflator variants during testing. *Id.* In short, Ford cites its inflator variant as having “fewer potential moisture sources” because the inflators contain only two, foil-wrapped auto-ignition tablets (instead of three that are not foil-wrapped), contain divider disk foil tape, and utilize certain EPDM generate cushion material (instead of ceramic) that “reduces generate movement over time, maintains generate integrity, and leads to consistent and predictable burn rates.” *Id.* at 15–16 (providing table).

The remainder of the “joint petition” enclosed with Mazda’s letter explains Ford’s “commit[ment] to further investigation of PSDI-5 airbag inflators.” *See id.* at 16–18. Because of this stated concern, including about data pertaining to the covered Nissan inflators, “Ford is

inflators to Nissan’s program. *Compare* Recall 17V-449 *with* Petition at 11.

expanding the scope of the sampling and is involving leading industry experts to assess any potential risks from desiccated PSDI-5 inflators in Ford products.” *Id.* at 16. Ford outlines a two-pronged plan for this expansion. First, Ford describes a parts-acquisition program “to gather approximately 6,000 desiccated PSDI-5 driver airbag inflators” from certain model year vehicles in areas with high absolute humidity for what appears to be all vehicle lines in which the covered inflators were originally installed.⁸ *Id.* at 17. And second, Ford describes a continuation of inflator testing and engineering analysis, which will engage third-party experts for independent assessments. *Id.* at 17–18. The testing will include various engineering analyses (comparisons of design within the PSDI-5 family, statistical assessments, and ballistic modeling), inflator testing (CT scanning and inflator disassembly), and propellant testing (moisture content, closed-bomb burn rate, x-ray micro-computer tomography, thermogravimetric/differential scanning calorimetry analysis). *Id.*

V. Request for Deferral of Determination

Mazda requests in its letter that, “in conjunction with [its] joint petition filing with” Ford, NHTSA allow Mazda additional time before deciding on its Petition—specifically, until March 31, 2018—so Ford may “complete its expanded inflator field study, aging assessment, and testing on additional samples.” Petition at 1. Mazda also refers to “Ford’s commitment to further investigation of PSDI-5 inflators through additional parts acquisitions as well as continued testing and engineering analysis.” *Id.* at 3. Mazda does not make any additional reference to its deferral request in its letter, but does refer NHTSA to its enclosed “joint” petition” with Ford, in which Ford further discusses this deferral request (on its own behalf). *See*

⁸ Ford’s Petition explicitly lists six vehicle lines, comprising all affected Ford models except for the Fusion. *See* Petition at 17. However, one of the six vehicle lines is simply listed as “2006–2007 MY Ford.” Presumably, this refers to certain MY Ford Fusions.

id. Assuming, *arguendo*, that the explanation therein applies equally to Mazda, NHTSA must deny Mazda's request for deferral.

In the "joint petition," Ford makes the same request for a deferral as Mazda, so that it (Ford) may "complete its intensified and expanded inflator field study, aging assessment, and testing on additional samples and vehicle types to evaluate the performance of the Takata desiccated PSDI-5 driver airbag inflators." *See* Enclosure at 19. In making this request, Ford appears to acknowledge the available data may not yet be sufficient for the Agency to grant its petition. Indeed, Ford notes that while its results to date are "good news for the safety" of users of one of its six affected vehicle models—the Ranger—"the results on the Nissan design inflators are of concern." *Id.*

The Agency recognizes Ford's plans to expand its investigation and to secure a supply of remedy inflators for affected vehicles if it becomes needed. *See id.* at 3, 10. However, 49 CFR 556.4(b)(5) provides that an inconsequentiality petition must set forth all data, views, and arguments supporting that petition, and Mazda (through Ford, *arguendo*) does not adequately justify why this provision does not preclude deferral here.

Specifically, NHTSA does not find the request for deferral reasonable under the circumstances or supported by the testing and data collected to date. Indeed, Ford does not provide an explanation for why it has not already undertaken the expansive investigation it now proposes, and Ford's past efforts to evaluate the safety of the covered inflators do not support granting a deferral. NHTSA requested Ford's assistance in evaluating Takata calcium-sulfate desiccated PSDI-5 driver-side airbag inflators in February 2016, and over seventeen months later only about 400 covered Ford inflators have been tested. Moreover, the number of inflators tested under Ford's program was less than half the number tested under Nissan's program, and about

seven percent of the approximately 6,000 inflators Ford now proposes to test in only about *seven months*.

It is difficult to reconcile Ford's ambitious plan with its prior approach toward evaluating the safety of the covered inflators. Ford has provided no compelling argument for the Agency to deviate from 49 CFR 556.4(b)(5).

For these reasons, NHTSA denies Mazda's request for a deferral of NHTSA's decision on Mazda's Petition. The Agency will decide on Mazda's Petition without consideration of Ford's planned additional efforts. Nevertheless, NHTSA recognizes Ford's plans to further evaluate the safety of Takata calcium-sulfate desiccated PSDI-5 driver-side airbag inflators, and encourages Ford to move forward with those plans as described—particularly given the concern about these inflators that Ford has expressed.

Accordingly, NHTSA hereby gives notice of its receipt of Mazda Motor Corporation Petition for a Determination of Inconsequentiality of Takata's Defect Information Report filing under NHTSA Campaign Number 17E-034 for PSDI-5 Desiccated Driver Air Bag Inflators.

And it is hereby ORDERED that:

1. The period for public comment on Mazda's Petition shall run from the publication of this decision through [INSERT DATE 30 DAYS AFTER PUBLICATION OF THIS NOTICE IN FEDERAL REGISTER]; and
2. Mazda's request for a deferral of NHTSA's decision on its Petition, so that Ford may complete its intensified and expanded inflator field study, aging assessment, and testing on additional samples, is DENIED.

Authority: 49 U.S.C. 30101, *et seq.*, 30118, 30120(h), 30162, 30166(b)(1), 30166(g)(1); delegation of authority at 49 CFR 1.95(a); 49 CFR Parts 556, 573, 577.

Issued: November 9, 2017.

Stephen P. Wood
Acting Chief Counsel

Billing Code: 4910-59-P

[FR Doc. 2017-24833 Filed: 11/15/2017 8:45 am; Publication Date: 11/16/2017]