DEPARTMENT OF TRANSPORTATION

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

DOCKET NO. NHTSA-2017-0093; Notice 1

Ford Motor Company, Receipt of Petition for Inconsequentiality 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. Ford has petitioned the Agency 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 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 Ford vehicles affected by Takata's DIR. Ford 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 allow Ford until March 31, 2018 to complete certain analysis and testing before the Agency decides on the petition.

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 Hench, 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. 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.[1] 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-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

[1] 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.*

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 Ford's obligation to file a DIR for its affected vehicles. *See* 49 CFR Part 573; November 3, 2015 Coordinated Remedy Order ¶¶ 45–46.[2] Ford filed a corresponding DIR, informing NHTSA it intended to file a petition for inconsequentiality. *Ford Petition for a Determination of Inconsequentiality and Request for Deferral of Determination Regarding Certain Ford Vehicles Equipped with Takata PSDI-5 Desiccated Driver Airbag Inflators* (August 16, 2017) ("Petition") (cover letter). Ford then petitioned the Agency, under 49 U.S.C. 30118(d), 30120(h), and 49 CFR Part 556, for a decision that, because Takata's analysis of the covered Ford inflators does not show propellant tablet-density degradation, or increased inflation pressure, and certain inflator design differences exist between the covered Ford inflators and the covered Nissan inflators, the equipment defect determined to exist by Takata is inconsequential as it relates to motor vehicle safety in the Ford vehicles affected by Takata's DIR. *Id.* at 1, 11–16.[3] In addition, citing its commitment to further investigation, Ford stated it is expanding its acquisition, testing and analysis of the covered Ford inflators, and requested the Agency allow Ford until March 31, 2018 to complete certain testing and analysis before deciding on the Petition. *Id.* at 16–20.

II. Classes of Motor Vehicles Involved

Ford's Petition involves approximately 3.04 million light vehicles that contain the covered Ford inflators. These vehicles are:

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[2] 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).

[3] Ford also suggests differences in "vehicle environment," between affected Ford and Nissan vehicles as a potential explanation for inflator degradation-risk differences between the covered Ford inflators and the covered Nissan inflators. *See* Petition at 2. However, Ford does not elaborate on this suggestion elsewhere in its Petition. *See id.* at 14–16 (focusing on design differences between the covered Ford inflators and covered Nissan inflators).

- Ford Ranger (MY 2007–2011)
- Ford Fusion (MY 2006–2012)
- Lincoln Zephyr/MKZ (MY 2006–2012)
- Mercury Milan (MY 2006–2011)
- Ford Edge (MY 2007–2010)
- Lincoln MKX (MY 2007–2010)

Id. (cover letter).

III. Summary of Ford's Petition

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 id.* 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 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 vehicles[4] and 895 inflators from Nissan Versa vehicles.[5] Such analysis involved

[4] Twenty of these inflators were from salvage yards, however, "where the conditions used to store the parts cannot be determined." *Id.* at 11.

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 Ford's Petition explains its "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 expanding the scope of the sampling and is

[5] In its DIR, Nissan provides this 895 figure; in its Petition, Ford attributes "approximately 1,000" covered inflators to Nissan's program. *Compare* Recall No. 17V-449 *with* Petition at 11.

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.[6] *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.*

IV. Request for Deferral of Determination

Ford has requested that NHTSA allow it additional time before deciding on its Petition—specifically, until March 31, 2018—so that it 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." *Id.* 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.*

[6] 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.

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 Ford does not adequately justify why this provision does not preclude deferral here.

Specifically, NHTSA does not find Ford's request for deferral reasonable under the circumstances or supported by the testing and data it has 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. Further, while the covered Ford inflators were original equipment in six vehicle models (Ranger, Fusion, MKZ, Milan, Edge, and MKX), all approximately 400 inflators harvested in Ford's field-recovery program were from the same vehicle model (the Ranger). 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 Ford's request for a deferral of the NHTSA's decision on Ford's Petition. The Agency will decide on Ford's Petition without consideration of Ford's planned additional efforts as outlined in its Petition. 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 in its Petition—particularly given the concern about these inflators that Ford has expressed.

Accordingly, NHTSA hereby gives notice of its receipt of Ford's Petition for a Determination of Inconsequentiality and Request for Deferral of Determination Regarding Certain Ford Vehicles Equipped with Takata PSDI-5 Desiccated Driver Airbag Inflators. And it is hereby ORDERED that:

1. The period for public comment on Ford'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. Ford's request for a deferral of NHTSA's decision on Ford's Petition, so that Ford may complete its intensified and expanded inflator field study, aging assessment, and testing on additional samples and vehicle types, 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.

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Billing Code: 4910-59-P
[FR Doc. 2017-24829 Filed: 11/15/2017 8:45 am; Publication Date: 11/16/2017]