NS states the reason for the proposed discontinuance is that operations no longer require TCS.

A copy of the petition, as well as any written communications concerning the petition, is available for review online at www.regulations.gov.

Interested parties are invited to participate in these proceedings by submitting written views, data, or comments. FRA does not anticipate scheduling a public hearing in connection with these proceedings since the facts do not appear to warrant a hearing. If any interested parties desire an opportunity for oral comment and a public hearing, they should notify FRA, in writing, before the end of the comment period and specify the basis for their request.

All communications concerning these proceedings should identify the appropriate docket number and may be submitted by any of the following methods:

- Website: http://www.regulations.gov. Follow the online instructions for submitting comments.
- Hand Delivery: 1200 New Jersey Ave. SE, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

Communications received by March 11, 2021 will be considered by FRA before final action is taken. Comments received after that date will be considered if practicable.

Anyone can search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the comment (or signing the document, if submitted on behalf of an association, business, labor union, etc.). Under 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its processes. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at https://www.transportation.gov/privacy. See also https://www.regulations.gov/privacyNotice for the privacy notice of regulations.gov.

Issued in Washington, DC.

John Karl Alexy,
Associate Administrator for Railroad Safety, Chief Safety Officer.

[FR Doc. 2021–01421 Filed 1–22–21; 8:45 am]
BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION
Federal Railroad Administration
[Docket Number FRA–2021–0003]

Notice of Application for Approval of Discontinuance or Modification of a Railroad Signal System

Under part 235 of title 49 Code of Federal Regulations (CFR) and 49 U.S.C. 20502(a), this document provides the public notice that on January 5, 2021, Norfolk Southern Corporation (NS) petitioned the Federal Railroad Administration (FRA) seeking approval to discontinue or modify a signal system. FRA assigned the petition Docket Number FRA–2021–0003.

Applicant: Norfolk Southern Corporation, Tommy A. Phillips, Senior Director—CS&ES Engineering, 1200 Peachtree Street NE, Atlanta, GA 30309

Specifically, NS requests permission to discontinue an automatic block signal (ABS) and traffic control system (TCS) on the S line from milepost (MP) S25.7, Statesville, North Carolina, to MP S145.0, control point (CP) Craggy, on the Coastal Division. This includes CPs at Biltmore, Mitchell, Russell, and Murphy Junction slide fencines, and 52 automatic signals. The main track between S25.7 and S145.0 will be converted to NS Rule 171 operation. An automatic signal at MP S26.2 will be converted to an operable approach signal. The signaled sidings within the application limits will be made non-controlled, other than main track.

NS states the reason for the proposed discontinuance is that operations no longer require ABS or TCS.

A copy of the petition, as well as any written communications concerning the petition, is available for review online at www.regulations.gov.

Interested parties are invited to participate in these proceedings by submitting written views, data, or comments. FRA does not anticipate scheduling a public hearing in connection with these proceedings since the facts do not appear to warrant a hearing. If any interested parties desire an opportunity for oral comment and a public hearing, they should notify FRA, in writing, before the end of the comment period and specify the basis for their request.

All communications concerning these proceedings should identify the appropriate docket number and may be submitted by any of the following methods:

- Website: http://www.regulations.gov. Follow the online instructions for submitting comments.

Issued in Washington, DC.

John Karl Alexy,
Associate Administrator for Railroad Safety, Chief Safety Officer.

[FR Doc. 2021–01421 Filed 1–22–21; 8:45 am]
BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
[Docket No. NHTSA–2017–0093]

Ford Motor Company; Denial of Petition for Inconsequentiality

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

ACTION: Denial of petition.

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 phase-stabilized ammonium nitrate ("PSAN") driver-side air bag inflators that it manufactured with a calcium sulfate desiccant and supplied to Ford Motor Company ("Ford"), Mazda North American Operations ("Mazda"), and Nissan North America Inc. ("Nissan") for use in certain vehicles. Ford petitioned the Agency for a decision that 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, and that Ford should therefore be relieved of its notification and remedy obligations under the National Traffic and Motor Vehicle Safety Act of 1966 and its applicable regulations. After reviewing the petition, NHTSA has concluded that Ford has not met its burden of establishing that the defect is inconsequential to motor vehicle safety, and denies the petition.

ADDRESS:


For general information about NHTSA’s investigation into Takata air bag inflator ruptures and the related recalls, visit https://www.nhtsa.gov/takata.

SUPPLEMENTARY INFORMATION:

I. Background

The Takata air bag inflator recalls ("Takata recalls") are the largest and most complex vehicle recalls in U.S. history. These recalls currently involve 19 vehicle manufacturers and approximately 67 million Takata air bag inflators in tens of millions of vehicles in the United States alone. The recalls are due to a design defect, whereby the propellant used in Takata’s air bag inflators degrades after long-term exposure to high humidity and temperature cycling. During air bag deployment, this propellant degradation can cause the inflator to over-pressurize, causing sharp metal fragments (like shrapnel) to penetrate the air bag and enter the vehicle compartment. To date, these rupturing Takata inflators have resulted in the deaths of 18 people across the United States and over 400 alleged injuries, including lacerations and other serious consequences to occupants’ face, neck, and chest areas.

In May 2015, NHTSA issued, and Takata agreed to, a Consent Order, and Takata filed four defect information reports ("DIRs") for inflators installed in vehicles manufactured by twelve vehicle manufacturers. Recognizing that these unprecedented recalls would involve many challenges for vehicle manufacturers and consumers, NHTSA began an administrative proceeding in June 2015 providing public notice and seeking comment (Docket Number NHTSA–2015–0055). This effort culminated in NHTSA’s establishment of a Coordinated Remedy Program ("Coordinated Remedy") in November 2015. The Coordinated Remedy prioritizes and phases the various Takata recalls not only to accelerate the repairs, but also—given the large number of affected vehicles—to ensure that repair parts are available to fix the highest-risk vehicles first.

Under the Coordinated Remedy, vehicles are prioritized for repair parts based on various factors relevant to the safety risk—primarily on vehicle model year (MY), age of vehicle, risk, and geographic region. In the early stages of the Takata inflator recalls, affected vehicles were categorized as belonging to one of two regions: The High Absolute Humidity ("HAH") region (largely inclusive of Gulf Coast states and tropical island states and territories), or the non-HAH region (inclusive of the remaining states and the District of Columbia). On May 4, 2016, NHTSA issued, and Takata agreed to, an amendment to the November 3, 2015 Consent Order ("ACO"), wherein these geographic regions were refined based on improved understanding of the risk, and were then categorized as Zones A, B, and C. Zone A encompasses the higher risk HAH region as well as certain other states. Zone B includes states with more moderate climates (i.e., lower heat and humidity than Zone A), and Zone C includes the cooler-temperature States largely located in the northern part of the country.

While the Takata recalls to date have been limited almost entirely to Takata PSAN inflators that do not contain a desiccant (a drying agent)—i.e., “non-desiccated” inflators—under a November 3, 2015 Consent Order issued by NHTSA and agreed to by Takata, Takata is required to test its PSAN inflators that do contain a desiccant—i.e., “desiccated” inflators—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 DIRs Takata had filed for its non-desiccated PSAN inflators.

In February 2016, NHTSA requested Ford’s assistance in evaluating Takata calcium-sulfate desiccated PSDI–5 driver-side air bag 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 air bag inflators that were original equipment in

4 The twelve vehicle manufacturers affected by the May 2015 recalls were: BMW of North America, LLC; FCA US, LLC (formerly Chrysler); Daimler Trucks North America, LLC; Daimler Vans USA, LLC; Ford Motor Company; General Motors, LLC; American Honda Motor Company; Mazda North American Operations; Nissan North America, Inc.; Nissan North America, Inc.; Subaru of America, Inc.; and Toyota Motor Engineering and Manufacturing.
5 See Notice of Coordinated Remedy Program Proceeding for the Replacement of Certain Takata Air Bag Inflators, 80 FR 32197 (June 5, 2015).
7 The Third Amendment to the Coordinated Remedy Order incorporated additional vehicle manufacturers, that were not affected by the recalls at the time that NHTSA issued the CRO into the Coordinated Remedy, and is available at: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/final_public_-_third_amendment_to_the_coordinated_remedy_order_with_annex_a_corrected.12.18.16.pdf. The additional affected vehicle manufacturers are: Ferrari North America, Inc.; Jaguar Land Rover North America, LLC; McLaren Automotive, Ltd.; Mercedes-Benz US LLC; Tesla Motors, Inc.; Volkswagen Group of America, Inc.; and pursuant to Paragraph 1 of the Consent Order at ¶ 7.a.
8 Zone A comprises the following U.S. states and jurisdictions: Alabama, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, South Carolina, Texas, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands (Saipan), and the U.S. Virgin Islands.
9 Zone B comprises the following U.S. states and jurisdictions: Arizona, Arkansas, Delaware, District of Columbia, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, Nebraska, Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Virginia, and West Virginia.

*Consent Order ¶ 28.
Ford had been recovered and tested.13 A very limited number of samples from Ford were subjected to live dissection, which included chemical and dimensional propellant analysis, as well as ballistic testing.14

In March 2017, Takata and Ford met to review the field data collected from the inflators returned by Ford and Nissan.15 Between March and June 2017, additional Ford inflators were subjected to live dissection, which included chemical and dimensional propellant analysis, as well as ballistic testing.16

In June, Takata reviewed with Ford and NHTSA field-return data from Ford inflators.17 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 air bag inflators.

Takata analyzed 423 such inflators from the Ford program—as well as 895 such inflators from the Nissan program.18 After a review of field-return data, Ford informed Takata, determining that a safety-related defect exists, filed a DIR for calcium-sulfate desiccated PSDI–5 driver-side air bag 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”).19 As well as calcium-sulfate desiccated PSDI–5 driver-side air bag 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”).20

As described further below, the propellant tablets in these inflators may experience density reduction over time, which could result in the inflator rupturing, at which point “metal fragments could pass through the air bag cushion material, which may result in injury or death to vehicle occupants.”21

Takata’s DIR filing triggered Ford’s obligation to file a DIR for its affected vehicles.22 Ford filed a corresponding DIR, informing NHTSA that it intended to file a petition for inconsequentiality.23 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.24 In addition, citing its commitment to further investigation, Ford stated that it was expanding its acquisition, testing, and analysis of the covered Ford inflators, and requested that the Agency allow Ford until March 31, 2018 to complete certain testing and analysis before deciding on the Petition.25

In a Notice published in the Federal Register on November 16, 2017, NHTSA acknowledged its receipt of Ford’s Petition, opened a public comment period on the Petition to expire on December 18, 2017, and denied Ford’s request that the Agency allow Ford until March 31, 2018 to complete certain testing and analysis before deciding on the Agency’s Petition.26

The fourth commenter, the Center for Auto Safety (“CAS”), emphasized the dangers that Takata air bag inflators can pose, including the PSDI–5 inflators at issue in Ford’s Petition. CAS also stated a concern that granting Ford’s Petition “would effectively serve as a decision that these inflators are exempt from future recall should additional PSAN testing prove a danger.”27 Specific to the substance of Ford’s Petition, CAS commented that the Petition “contains unsupported assertions as fact, and . . . no corresponding data or scientific studies confirming the safety of the PSDI–5 airbag inflators,” and stated that “[w]here the petition does not describe the testing conducted by Takata on Ford inflators, there is little evidence provided to suggest that these inflators will continue to perform after years of exposure.”28

CAS concluded that, “[a]t best, the testing performed by Takata suggests that propellant degradation and inflator chamber pressure have not yet developed the potential to harm occupants after ten years in service,” and that NHTSA should deny Ford’s Petition.29

On October 26, 2018, at an in-person meeting with NHTSA, Ford shared additional information in support of its Petition, including internal analyses, test methodologies, and results of tests performed by Ford and outside parties on behalf of Ford or at Ford’s request.30 At a subsequent virtual meeting with NHTSA on November 4, 2020, Ford shared further information in support of its Petition related to additional work done by a third party since October 2018.31

II. Classes of Motor Vehicles Involved
Ford’s Petition involves approximately 3.04 million light vehicles,32

13 See also Recall No. 17E–034. 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. Id. ¶ 43. Such safety and/or service life assurances as fact, and . . . no corresponding data or scientific studies confirming the safety of the PSDI–5 airbag inflators,” and stated that “[w]here the petition does not describe the testing conducted by Takata on Ford inflators, there is little evidence provided to suggest that these inflators will continue to perform after years of exposure.”27

24 NHTSA decided on the Petition.25 NHTSA received four comments in response to this Notice, none of which advocated granting Ford’s Petition. Two individual commenters appeared to express general discontent with the state of the Takata recalls for non-desiccated PSAN inflators, and a third individual simply stated opposition to Ford’s Petition without extensive substantive explanation.

26 The fourth commenter, the Center for Auto Safety (“CAS”), emphasized the dangers that Takata air bag inflators can pose, including the PSDI–5 inflators at issue in Ford’s Petition. CAS also stated a concern that granting Ford’s Petition “would effectively serve as a decision that these inflators are exempt from future recall should additional PSAN testing prove a danger.”28 Specific to the substance of Ford’s Petition, CAS commented that the Petition “contains unsupported assertions as fact, and . . . no corresponding data or scientific studies confirming the safety of the PSDI–5 airbag inflators,” and stated that “[w]here the petition does not describe the testing conducted by Takata on Ford inflators, there is little evidence provided to suggest that these inflators will continue to perform after years of exposure.”27 CAS concluded that, “[a]t best, the testing performed by Takata suggests that propellant degradation and inflator chamber pressure have not yet developed the potential to harm occupants after ten years in service,” and that NHTSA should deny Ford’s Petition.29

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31 II. Classes of Motor Vehicles Involved

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30 Ford submitted an accompanying slide deck, hereinafter “October 2018 Presentation.” This presentation is available on the public docket.

31 The written materials Ford submitted do not explicitly identify one of these third parties, which his hereinafter referred to as “Third Party.”30 Ford submitted an accompanying slide deck, hereinafter “November 2020 Presentation.” This presentation is available on the public docket.
vehicles that contain the covered Ford inflators. These vehicles are:
• Ford Ranger (MY 2007–2011) (build dates January 9, 2006 through December 16, 2011);
• Ford Fusion (MY 2006–2012) (build dates March 15, 2005 through July 29, 2012);
• Lincoln Zephyr/MKZ (MY 2006–2012) (build dates March 15, 2005 through July 29, 2012);
• Mercury Milan (MY 2006–2011) (build dates March 15, 2005 through June 4, 2011);
• Ford Edge (MY 2007–2010) (build dates June 15, 2006 through July 12, 2010); and

III. Defect

The defect is present in Takata calcium-sulfate desiccated PSDI–5 driver-side air bag inflators.32 According to its DIR, Takata produced 2.7 million of these defective inflators from January 1, 2005, to December 31, 2012.33 These inflators are the earliest generation of Takata desiccated PSAN inflators, and were installed as original equipment in vehicles sold by Ford, Mazda, and Nissan.34 The evidence makes clear that these inflators pose a significant safety risk. In these inflators, “[t]he propellant density reduction over time”—specifically, “some of the inflators within the population analyzed show a pattern of propellant density reduction over time that is understood to predict a future risk of inflator rupture”—“would potentially lead to over-aggressive combustion” when the air bag in which they are installed deploys.35 This “could create excessive internal pressure, which could result in the body of the inflator rupturing upon deployment.”36 In the event of such a rupture, “metal fragments could pass through the air bag cushion material, which may result in injury or death to vehicle occupants.”37 Rupture potential may be influenced by “several years of exposure to persistent conditions of high absolute humidity.”38

IV. Legal Background

The National Traffic and Motor Vehicle Safety Act (the “Safety Act”), 49 U.S.C. Chapter 301, defines “motor vehicle safety” as “the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of accidents occurring because of the design, construction, or performance of a motor vehicle, and against unreasonable risk of death or injury in an accident, and includes nonoperational safety of a motor vehicle.”39 Under the Safety Act, a manufacturer must notify NHTSA when it “learns the vehicle or equipment contains a defect and decides in good faith that the defect is related to motor vehicle safety,” or “decides in good faith that the vehicle or equipment does not comply with an applicable motor vehicle safety standard.”40 The act of filing a notification with NHTSA is the first step in a manufacturer’s statutory recall obligations of notification and remedy.41 However, Congress has recognized that, under some limited circumstances, a manufacturer may petition NHTSA for an exemption from the requirements to notify owners, purchasers, and dealers and to remedy the vehicles or equipment on the basis that the defect or noncompliance is inconsequential to motor vehicle safety.42

“Inconsequential” is not defined either in the statute or in NHTSA’s regulations, and so must be interpreted based on its “ordinary, contemporary, common meaning.”43 The inconsequentiality provision was added to the statute in 1974, and there is no indication that the plain meaning of the term has changed since 1961—meaning definitions used today are substantially the same as those used in 1974.44 The Cambridge Dictionary defines “inconsequential” to mean “not important,” or “able to be ignored.”45 Other dictionaries similarly define the term as “lacking importance”46 and “unimportant.”47

The statutory context is also relevant to the meaning of “inconsequential.”48 The full text of the inconsequentiality provision is:

On application of a manufacturer, the Secretary shall exempt the manufacturer from this section if the Secretary decides a defect or noncompliance is inconsequential to motor vehicle safety. The Secretary may take action under this subsection only after notice in the Federal Register and an opportunity for any interested person to present information, views, and arguments.49

As described above, the statute defines “motor vehicle safety” to mean “the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of accidents . . . and against unreasonable risk of death or injury in an accident . . . .”50 This is also consistent with the overall statutory purpose: “to reduce traffic accidents and deaths and injuries resulting from traffic accidents.”51

The statute explicitly allows a manufacturer to seek an exemption from carrying out a recall on the basis that either a defect or a noncompliance is inconsequential to motor vehicle safety.52 However, in practice, substantially all inconsequentiality petitions have related to noncompliances, and it has been extremely rare for a manufacturer to seek an exemption in the case of a defect. This is because a manufacturer

31 Petition at 9–10 & cover letter thereto at 1.
32 Recall No. 17E–034.
33 Id. The Agency notes that there is a discrepancy between this figure of potentially involved inflators cited in Takata’s DIR, and Ford’s approximate volume of affected vehicles subject to its petition (approximately 3.04 million). Recall 17E–034, Petition at 9–10 & cover letter thereto at 1. That discrepancy does not affect NHTSA’s decision on Ford’s Petition.
34 Recall No. 17E–034.
35 Id.
36 Id.
37 Id.
38 Id.
40 Id. 30118(c)(1). “[A] defect in original equipment, or noncompliance of original equipment with a motor vehicle safety standard prescribed under this chapter, is deemed to be a defect or noncompliance of the motor vehicle in or on which the equipment was installed at the time of delivery to the first purchaser.” 49 U.S.C. 30102(b)(1)(F).
41 Id. 30118–20.
42 Id. 30118(d); 30120(h); 49 CFR part 556.
44 See Public Law 93–492, Title I, § 102(a), 88 Stat. 1475 (Oct. 27, 1974); Webster’s Third New Int’l Dictionary (principal copyright 1961) (defining “inconsequential” as “inconsequent; defining as well as other factors, including “manufacturing variability or vehicle type.”
49 49 U.S.C. 30118(d), 30120(h).
50 Id. 30102(a)(9) (emphasis added).
51 Id. 30101.
52 Id. 30118(d), 30120(h).
does not have a statutory obligation to conduct a recall for a defect unless and until it “learns the vehicle or equipment contains a defect and decides in good faith that the defect is related to motor vehicle safety,” or NHTSA orders a recall by making a “final decision that a motor vehicle or replacement equipment contains a defect related to motor vehicle safety.” 53 Until that threshold determination has been made by either the manufacturer or the Agency, there is no need for a statutory exception on the basis that a defect is inconsequential to motor vehicle safety. And since a defect determination involves a finding that the defect poses an unreasonable risk to safety, asking the Agency to make a determination that a defect posing an unreasonable risk to safety is inconsequential has heretofore been almost unexplored. 54

Given this statutory context, a manufacturer bears a heavy burden in petitioning NHTSA to determine that a defect related to motor vehicle safety (which necessarily involves an unreasonable risk of an accident, or death or injury in an accident) is nevertheless inconsequential to motor vehicle safety. In accordance with the plain meaning of “inconsequential,” the manufacturer must show that a risk posed by a defect is not important or is capable of being ignored. This appropriately describes the actual consequence of granting a petition as well. The manufacturer would be relieved of its statutory obligations to notify vehicle owners and to remedy the defect, and effectively to ignore the defect as unimportant from a safety perspective. Accordingly, the threshold of evidence necessary for a manufacturer to carry its burden of persuasion that a defect is inconsequential to motor vehicle safety is difficult to satisfy. This is particularly true where the defect involves a potential failure of safety-critical equipment, as is the case here.

The Agency necessarily determines whether a defect or noncompliance is inconsequential to motor vehicle safety based on the specific facts before it. The scarcity of defect-related inconsequentiality petitions over the course of the Agency’s history reflects the heavy burden of persuasion, as well as the general understanding among regulated entities that the grant of such relief would be quite rare. The Agency has recognized this explicitly in the past. For example, in 2002, NHTSA stated that “[a]lthough NHTSA’s empowering statute alludes to the possibility of an inconsequentiality determination with regard to a defect, the granting of such a petition would be highly unusual.” 55

Of the four known occasions in which the Agency has previously considered petitions contending that a defect is inconsequential to motor vehicle safety, the Agency has granted only one of the petitions, nearly three decades ago, in a vastly different set of circumstances. 56 In that case, the defect was a typographical error in the vehicle’s gross weight rating (GVWR) that had no impact on the actual ability of the vehicle to carry an appropriate load. NHTSA granted a motorcycle manufacturer’s petition, finding that a defect was inconsequential to motor vehicle safety where the GVWR was erroneously described as only 60 lbs., which error was readily apparent to the motorcycle operator based upon both common sense and the fact that the 330 lbs. front axle rating and 540 lbs. rear axle rating were listed directly below the GVWR on the same label. 57 Moreover, the error did not actually impact the ability of the motorcycle to carry the weight for which it was designed. 58

On the other hand, NHTSA denied another petition concerning a vehicle’s weight label where there was a potential safety impact. NHTSA denied that petition from National Coach Corporation on the basis that the rear gross axle weight rating (RGAWR) for its buses was too low and could lead to overloading of the rear axle if the buses were fully loaded with passengers. 59 NHTSA rejected arguments that most of the buses were not used in situations where they were fully loaded with passengers and that there were no complaints. 60 NHTSA noted that its Office of Defects Investigation had conducted numerous investigations concerning overloading of suspensions that resulted in recalls, that other


54 Suzuki Motor Co., Ltd.; Grant of Petition for Inconsequential Defect 47 FR 41458, 41459 (Sept. 20, 1982) and 48 FR 27635, 27635 (June 16, 1983).

55 Id.

56 Nat’l Coach Corp.: Denial of Petition for Inconsequential [Defect], 47 FR 49517, 49517 (Nov. 1, 1982). NHTSA’s denial was erroneously titled “Denial of Petition for Inconsequential Noncompliance”; the discussion actually addressed the issue as a defect. See id.; see also Nat’l Coach Corp.; Receipt of Petition for Inconsequential Defect, 47 FR 4190 (Jan. 26, 1982).


63 Fiat Motors of N. Am., Inc.; Receipt of Petition for Determination of Inconsequential Defect, 44 FR 60913, 60913 (Oct. 18, 1979); Fiat Motors Corp. of N. Am.; Receipt of Petition for Determination of Inconsequential Defect, 44 FR 12793, 12793 (Mar. 8, 1979).

64 See, e.g., 45 FR 2134, 2141 (Jan. 10, 1980).


66 Fiat also agreed to a recall of certain of the vehicles, and NHTSA found that Fiat did not reasonably meet the statutory recall remedy requirements. Id. at 2134–37.

67 Id.

68 Id. at 2140.
was inconsequential to motor vehicle safety, where the defect involved the degradation of inflator propellant that could cause the inflator to over-pressurize during air bag deployment—causing metal fragments to penetrate the air bag and enter the vehicle compartment toward vehicle occupants. In support of this petition and its argument that the inflators at issue were not at risk of rupture—being “more resilient” to rupture than other Takata PSAN inflators—General Motors made arguments and submitted evidence regarding inflator design differences and vehicle features, testing and field data analyses, inflator aging studies, predictive modeling, risk assessments, and potential risk created by conducting repairs. The Agency rejected these arguments and, among other things, observed the severe nature of the safety risk and that the defect could not be discerned even by a diligent vehicle owner. The Agency also specifically noted the heavy burden on General Motors to demonstrate inconsequentiality, stating that “[t]he threshold of evidence necessary to prove the inconsequentiality of a defect such as this one—involving the potential performance failure of safety-critical equipment—is very difficult to overcome.”

Agency practice over several decades therefore shows that inconsequentiality petitions are rarely filed in the defect context, and virtually never granted. Nonetheless, in light of the importance of the issues here, and the fact that Ford’s defect notification was filed in response to the notification provided by Ford’s supplier, the Agency also considered the potential usefulness of the Agency’s precedent on noncompliance. The same legal standard—“inconsequential to motor vehicle safety”—applies to both defects and noncompliances.

In the noncompliance context, in some instances, NHTSA has determined that a manufacturer met its burden of demonstrating that a noncompliance was inconsequential to safety. For example, labels intended to provide safety advice to an occupant that may have a misspelled word, or that may be printed in the wrong format or the wrong type size, have been deemed inconsequential where they should not cause any misunderstanding, especially where other sources of correct information are available. These decisions are similar in nature to the lone instance where NHTSA granted a petition for an inconsequential defect, as discussed above.

However, the burden of establishing the inconsequentiality of a failure to comply with a performance requirement in a standard—as opposed to a labeling requirement—is more substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential. Potential performance failures of safety-critical equipment like seat belts or air bags, are rarely deemed inconsequential. An important issue to consider in determining inconsequentiality based upon NHTSA’s prior decisions on noncompliance issues was the safety risk to individuals who experience the type of event against which the recall would otherwise protect. NHTSA also does not consider the absence of complaints or injuries to show that the issue is inconsequential to safety.

“Most importantly, the absence of a complaint does not mean there have not been any safety issues, nor does it mean that there will not be safety issues in the future.”

Arguments that only a small number of vehicles or items of motor vehicle equipment are affected have also not justified granting an inconsequentiality petition. Similarly, NHTSA has rejected petitions based on the assertion that only a small percentage of vehicles or items of equipment are actually likely to exhibit a noncompliance. The percentage of potential occupants that could be adversely affected by a noncompliance does not determine the question of inconsequentiality. Rather, the issue to consider is the consequence to an occupant who is exposed to the consequence of that noncompliance. These considerations are also relevant when considering whether a defect is inconsequential to motor vehicle safety.

V. Information Before the Agency

Ford advances several arguments in support of its Petition. In sum, Ford asserts that there is a difference in expected performance between desiccated and non-desiccated Takata PSAN inflators; that there are design differences between its covered inflators and another variant of the same type; that although there are signs of aging in field returns, there is no indication of propellant degradation that could lead to rupture and no imminent safety risk; and that no ruptures of the covered inflators are expected to occur for at least over twenty-six years of cumulative exposure in the worst-case environment, for the worst-case vehicle configuration, and worst-case customer usage. Ford supports these arguments with its own analyses, results of inflator testing and analyses conducted by three outside entities, and predictive modeling.
A. Ford’s Statistical Analysis of MEAF Data

Ford undertook its own statistical analysis of data in the Master Engineering Analysis File ("MEAF"), which Ford contends "shows a clear difference in expected field performance between desiccated and non-desiccated inflators," and "suggests that the factors causing degradation in the non-desiccated population of inflators are not currently affecting" the covered Ford inflators. Four charts underpin Ford’s assertions.

The first chart is of box plots of primary-chamber pressures of covered Ford inflators by age, which Ford asserts shows there is "[n]o significant trend of primary pressure increase with inflator age." The second chart Ford provides is a lognormal histogram illustrating the frequency of maximum values of primary-chamber pressure of covered Ford inflators, which Ford asserts shows that the probability of a covered Ford inflator exceeding a 92.37 MPa "threshold" is estimated as less than 1 × 10⁻⁶. Ford’s third chart illustrates predicted primary-chamber pressure for covered Ford inflators with probability curves for three module ages—15, 20, and 30 years old, which Ford contends shows that the probability of a module with thirty years of service exceeding a 92.37 MPa threshold is 6.56 × 10⁻⁶. And a fourth chart consists of probability plots (log normal, 95% confidence) comparing primary-chamber pressure maximum values between Ford modules with desiccated Takata PSAN inflators and Ford modules with non-desiccated Takata PSAN inflators. Ford states this shows how the probability of exceeding a 92.37 MPa threshold for desiccated parts is "several orders of magnitude lower than that of non-desiccated parts." Ford describes in its Petition that during visual inspection of the covered Ford inflators, "Takata observed slight discoloration of the propellant tablets in the primary and secondary chambers," but that such discoloration "is not an indication by itself that the propellant has degraded"—only that the propellant had been exposed to elevated temperatures. Takata also observed changes in color in the primary and secondary booster auto-ignition tablets. On a scale of 1–10, with a discoloration of 10 "indicating severe exposure" to elevated temperatures, Ford states that "the vast majority" of observed discoloration in inflators obtained from vehicles in certain high-heat-and-humidity states "was within the 1–3 range after seven to eleven years of vehicle service," while acknowledging that "[s]even samples were in the 5–6 range." Accordingly, Ford asserts, the results of visual inspection "evidence time-in-service, but not tablet density loss." Ford’s Petition also states that Takata took density measurements of propellant tablets in the primary and secondary chambers of covered Ford inflators. "[A] small number of samples" were measured with a density slightly below the minimum average tablet production specification, although Ford noted that "a nearly equal number . . . measured densities higher than the maximum average tablet production specification." Ford argues that such data does "not support a conclusion that tablet density is degrading in the inflators designed for Ford after 10 years of service." Ford contends in its Petition that its conclusions are further supported by forty-seven ballistic deployment tests that showed no inflator exceeding the production primary-chamber pressure performance specifications. The results of these tests are, according to Ford, consistent with data from newly manufactured PSDI-5 inflators in Ford vehicles. Ford also emphasizes that Takata did not observe pressure vessel ruptures or pressure excursions on any
There are significant design differences in the covered Ford inflators, which may explain differences in the covered Ford inflators when compared to the covered Nissan inflators, and that such differences may explain differences observed between the inflator variants in generate properties and during testing. Ford posits that such differences may explain differences observed between the two inflator variants’ generate material properties, and ballistic-testing results.

D. Northrop Grumman’s Analysis

Northrop Grumman ("NG") analyzed the covered Ford inflators, results of which were presented to the Agency subsequent to Ford’s filing of its Petition. According to Ford, NG’s assessment of field-return parts and modeling “identified expected signs of aging but no indication of degradation that could lead to rupture,” and the assessment “identified clear and significant differences between desiccated and non-desiccated inflators of similar age and design.”


NG also completed probability-of-failure projections for the covered Ford inflators under its inflator aging model, on which Ford updated the Agency in November 2020. Ford considered the results of those projections in conjunction with anticipated vehicle attrition and the probabilities of crashes with air bag deployments.

1. Live Dissections

According to Ford, NG performed various assessments related to live dissections of inflators:

- **Propellant health analysis.** According to Ford, the covered Ford inflators are susceptible to energetic disassembly when tablet density is at 1.64 g/cc or lower,108 and the densities of the tablets from such returned inflators were measured “well above” 1.63–1.64 g/cc.
- **AI–1 analysis.** NG measured the propellant tablets for outer diameter (“OD”), weight, and color. Ford states that the OD and weight of field returns were “similar” to virgin inflators. Also according to Ford, “[i]n older undesiccated inflators, the AI–1 tablet color is an indicator of age based on humidity and temperature exposure in the field, and the returned inflators retained a 0–2 color (10 the darkest),” which was “similar” to virgin inflators.

Ford further notes that thermogravimetric analysis “indicated similar weight loss to virgin samples.”

- **Moisture content.** According to Ford, the propellants from the returned inflators were lower in moisture content than non-desiccated PSDI–5 inflators (prefix ZA) and desiccated PSDI–5 (prefix YT) inflators.

2. Ballistic Modeling

NG developed ballistic models “to investigate the observed performance behavior of Ford PSDI–5 ZN and ZQ inflators and to evaluate the potential sensitivity of the inflators to certain design deviations.” Representative performance models were anchored to measured pressure data from virgin inflators. The models simulated inflator ignition, chamber volumetric filling, burst tape rupture, ignition delay between chambers and steady state combustion. According to Ford, the PSDI–5 design required “significant degradation of the 2004 propellant tablets” to obtain failure pressures. Specifically, “[a]n equivalent low press tablet density below 1.631 g/cc was
required to produce sufficient augmented burning.” 

Ford states that such degradation was not observed in the field returns of covered Ford inflators.

3. MEAF Assessment

NG analyzed MEAF data up to February 2018 to determine whether covered Ford inflators had energetic deployment (“ED”) rates were dependent on platform, inflator age, climate zone, or other factors. Among the “key” findings according to Ford:

• “[w]ith newer inflators that have not yet shown signs of aging, there is a significant opportunity for improving the fidelity and accuracy of the model with enhanced anchoring data”;

• “there is time for a separate surveillance program for the covered Ford inflators “well before any potential risk is projected” after the results of NG’s surveillance program that are expected in 2021.”

Ford concludes that it “believes that the current data indicates that the subject inflators do not present an unreasonable risk to safety and that it supports granting the petition.”

E. Additional Third-Party Analysis

According to Ford, an additional Third Party found that no pressure excursions were detected in the covered Ford inflators analyzed to date. The Third Party also found that some field inflators experienced porosity growth greater than virgin inflators with 2004 propellant, “but not to a level sufficient to cause pressure excursions in bomb

Ford therefore states that the earliest a Ford vehicle in a Miami-type environment may reach a .01% probability of failure is over a decade in the future for a 1%-usage T3 vehicle and that, in other words, “the predictive model suggests that no inflator ruptures are expected to occur for at least 26 years of cumulative exposure in the worst case environment, worst case vehicle configuration, and worst case customer usage” (i.e., 2031 for the oldest vehicles).

Ford also makes several other observations, including that:

• “[s]tudying parts prior to approximately 16–18 years in service would not identify meaningful inflator aging information” (i.e., 2023 for the oldest vehicles);

• the ITC, in coordination with NG, is conducting a surveillance program for desiccated Takata PSAN inflators, and data gathered from that program can validate the NG models;

• “[w]ith newer inflators that have not yet shown signs of aging, there is a significant opportunity for improving the fidelity and accuracy of the model with enhanced anchoring data”;

• there is time for a separate surveillance program for the covered Ford inflators “well before any potential risk is projected” after the results of NG’s surveillance program that are expected in 2021.

Ford notes this was “[a]justed for the population attrition & accident probabilities using vehicles currently registered in Florida (not all of which have always been registered in Florida).”

Ford concludes that the earliest Fusion/Milan/MKZ vehicles equipped with the covered Ford inflators were built in 2005, and that if those vehicles perform as T3 vehicles, the earliest calendar year for a 1 in 10,000 probability of failure is 2031 for a 1% usage vehicle. Similarly, Ford asserts that the earliest Ranger, Edge/MKX vehicles equipped with the covered Ford inflators were built in 2006, and that if those vehicles perform as T3 vehicles, the earliest calendar year for a 1 in 10,000 probability of failure is 2032 for a 1% usage vehicle.

Ford builds on these assertions by stating that “for a rupture to occur the vehicle must be in service and experience a crash resulting in airbag deployment,” and that based on vehicle attrition and crash statistics, Ford does not project a field event at twenty-six years of service.

Ford provides the below data in support:

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Model year</th>
<th>Volume (Florida)</th>
<th>Probability of inflator rupture at 26 years in service</th>
<th>Expected cumulative events at 26 years in service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion</td>
<td>2006–2012</td>
<td>75,232</td>
<td>5.08E–07</td>
<td>0.038</td>
</tr>
<tr>
<td>MKZ</td>
<td>2006–2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milan</td>
<td>2006–2011</td>
<td>39,161</td>
<td>6.34E–07</td>
<td>0.025</td>
</tr>
<tr>
<td>Edge</td>
<td>2007–2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKX</td>
<td>2007–2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ranger</td>
<td>2007–2011</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ford then asserts that the earliest

See November 2020 Presentation at 24. The “1% usage vehicle” refers to a vehicle with the most severe environmental exposure based on customer usage. See November 2020 Presentation at 24.

November 2020 Presentation at 25.

Id. at 26.

Id.

Id.

Id.

Id.

Id.

Id.
testing." 140 In addition, "[n]o significant increase in tablet ODs was observed for field populations" of covered inflators.141 These findings were derived from live dissections performed on 39 inflators and deployment tests on 65 inflators.142 The inflators were field-return parts obtained from Florida, Michigan, and Ohio.143

VI. Response to Ford’s Supporting Information and Analyses

Ford, through its Petition and supporting analysis, seeks to show that the covered Ford inflators are not at risk of rupture such that the defect is inconsequential to safety. First, as noted above, when taking into consideration the Agency’s noncompliance precedent, an important factor is also the severity of the consequence of the defect were it to occur—i.e., the safety risk to an occupant who is exposed to an inflator rupture. Ford did not provide any information to suggest that result would be any different were a covered Ford inflator to rupture in a Ford vehicle.

And second, as a general matter, at various points, Ford’s Petition implicitly appears to adopt the covered Nissan inflators as a standard for inconsequentiality. However, differentiating the covered Ford inflators from the covered Nissan inflators, e.g., through ballistic-testing or live-dissection results, does not directly answer the question of whether the defect in the covered Ford inflators is, on its own merits, inconsequential to motor vehicle safety. Even assuming that the covered Ford inflators compare favorably to the covered Nissan inflators, NHTSA has not made an inconsequentiality determination for the covered Nissan inflators—nor will it be doing so.144 Ford similarly argued in subsequent materials, for example, with regard to NG’s live dissections and predictive-model results, as well as Ford’s statistical analysis of the MEAF, that the covered Ford inflators compared favorably to other inflator variants, and even to non-desiccated inflators. Merely demonstrating that one’s own defective product compares favorably to another’s defective product does not suffice for an inconsequentiality determination.

Relatedly, Ford’s argument regarding “design differences” between the covered Ford and covered Nissan inflators appears to be more of an identification of areas for further study or potential explanation—not a standalone argument in support of an inconsequentiality determination. Ford identifies design differences “that may account for the difference in material properties of the generake,” and differences in pressures measured during ballistic testing of the inflators.145 Ford did not persuasively connect these design differences to meaningful improved performance in generate properties and pressure differences146 and, even if Ford had, the covered Nissan inflators are not a proxy standard for inconsequentiality.

In addition to these issues, signs of aging were observed in the covered Ford inflators; the sample sizes used for the analyses were limited; and there are shortcomings regarding various analyses that undermine their conclusions—including some information that was missing or unclear. Ford’s probability-of-failure projections are also unpersuasive—and notably belied by the limited evidence available from ballistic testing and analysis on real-world field returns of the covered Ford inflators. These additional issues are discussed below.

A. Signs of Aging

Ford admits that signs of aging were observed in the covered Ford inflators. While Ford indirectly dismisses this as a non-issue—claiming that there is no degradation “that would signal either an imminent or developing risk to safety”—aging leads to degradation, which leads to risk of inflator rupture. Further, the 2004 propellant that is present in the covered Ford inflators degrades until, at some point, it no longer burns normally, but in an accelerated and unpredictable manner that can cause an inflator rupture. “The purpose of the Safety Act . . . is to prevent serious injuries stemming from established defects before they occur.” 147 And as CAS commented, “tests demonstrating that inflators are ‘OK for now’ in no way ensures safety throughout the maximum useful life of these vehicles.” 148

B. Samples

The Agency finds shortcomings in the sample sizes utilized in the analyses. Ford’s total field-return sample was, across the Takata, NG, and the additional Third Party analyses, less than 3,000 inflators for an affected population of over 3 million vehicles. Ford presented analysis from Takata of fewer than 2,000 inflators, while NG analyzed only 196, and the additional Third Party analyzed just over 100. In total, Ford cites to 1,460 ballistic tests, which is approximately .05% of the total population subject to Ford’s Petition. By comparison, for example, that percentage of the population tested is much smaller than the percentage of inflators tested as of November 2019 in a mid-sized pick-up vehicle population equipped with non-desiccated PSAN inflators—1.81%—with one observed test rupture. Ford’s own statistical analysis of the MEAF regarding Pc Primary Max Value frequency149 was also based on only 1,247 inflators.150

C. Additional Underlying Information

Other shortcomings regarding various analyses presented here—including some information that was missing or unclear—further undermine the associated conclusions. These are identifiable in both Ford’s Petition and in the subsequent Presentations to the Agency.

1. Ford’s Petition

As an initial matter, Ford submitted little of the relevant underlying data, and did not fully explain the underlying methodologies and results, associated with the arguments in its 2017 Petition. More specifically, one of Ford’s arguments in its 2017 Petition is that Takata’s live dissections of covered Ford inflators does not show tablet-density degradation or increased inflation pressure, and therefore, Takata “did not identify a reduction in density trend” in

140 See Comments at 3.
141 See November 2020 Presentation at 8.
142 Moreover, twenty of the inflators (from Ranger vehicles) were from salvage yards, “where the conditions used to store the parts cannot be determined.” Petition at 11. Further highlighting the significance of this shortcoming, Ford noted in its Petition the potential importance of “vehicle environment” with respect to inflator-degradation risk but did not elaborate on this suggestion elsewhere in its Petition. See id. at 2. id. 14–16 (focusing on design differences between the covered Ford inflators and covered Nissan inflators). For purposes of its arguments related to the NG Model, Ford presented a worst-case scenario, where it was assumed for purposes of that scenario that the vehicles at issue would be in the T3 temperature band.
the covered Ford inflators.\textsuperscript{151} Tablet discoloration was graded on a qualitative 1–10 scale, but to what discoloration characteristics each level of this scale corresponds is not explained. And Ford’s conclusion that a “vast majority” of discoloration in certain inflators was within a certain low range of discoloration (with seven samples in a certain mid-range) is vague, and Ford did not provide information about the specific distribution of the results (e.g., the number of inflators receiving each discoloration value or the number of inflators in each Zone).\textsuperscript{152}

Ford also provides little information about the specific inflators tested and associated results with regard to density measurements—such as actual dimer mass and densities, among measurements—instead largely relying on general descriptions the results.\textsuperscript{153} For inflation pressure, Ford offers evidence of ballistic tests, although the breakdown of this sample with regard to vehicle model year and location, as well as how many of these inflators were obtained from salvage yards with unknown environment exposures (and the associated results), was not provided.\textsuperscript{154}

2. Subsequent Submissions to the Agency

Ford’s statistical analysis of the MEAF contains several shortcomings in the first two charts—box plots of primary-chamber pressure by age of inflator, and a lognormal histogram of maximum values illustrating the frequency of maximum values of primary-chamber pressure of covered Ford inflators. In the box plots, Ford does not specify or illustrate what a “normal” or “expected” primary-chamber pressure would be. Nor did Ford provide information showing how many inflators each age group comprises—although the lack of whiskers in the box plot for inflators aged thirteen years suggests that, at least for that age group, the sample size is small. There are also outlying pressure values observed in the nine- to twelve-year age groups, which concern the Agency. And in the histogram, Ford does not distinguish among different inflator ages—which would have highlighted any trends in primary-chamber pressure maximum values based on age.

There are also several shortcomings with the second two charts—the probability curves for module ages, and probability plots comparing primary-chamber pressure maximum values of Ford modules with desiccated and non-desiccated inflators, respectively. As to the probability curves, while details were not provided by Ford, this analysis appears to assume that degradation will proceed linearly. However, researchers that have been most closely involved in analyzing Takata inflators, including NG, all seem to agree that the degradation process is, at the very least, complex, and does not follow a linear trajectory. Instead, 2004 propellant (which is contained in the covered Ford inflators) degrades until, at some point, it no longer burns normally, but in an accelerated and unpredictable manner that can cause an inflator rupture. As to the probability plots, while a comparison between desiccated and non-desiccated inflators is somewhat informative from a broad perspective, it is too general to lend much support to Ford’s Petition, and as noted above, the performance of non-desiccated Takata PSAN inflators is not a sound benchmark for whether the defect in the covered Ford inflators is inconsequential to safety.

Regarding NG’s analysis, as an initial matter, over a quarter of the 196 inflators analyzed were non-aged/virgin inflators and, further, degradation would not be expected in the inflators from Michigan (from which, collectively, 55 of the inflators were obtained). Ford also acknowledges aging in inflator O-rings from this analysis. In addition, there are several particular issues with NG’s live dissections worth noting. Findings regarding moisture content are of limited value, and Ford did not provide important information on the referenced comparator prefix ZA and YT inflators—e.g., age and the geographic region in which they were used. As to the SEM results, Ford does not explain how the concept of surface roughness relates to the long-term safety of the inflators at issue here. Similarly, regarding the additional Third Party’s analysis, OD growth for the tablet grain form has not been found to be reliable indicator of propellant health, and Ford does not demonstrate otherwise.

\textbf{D. Probability-of-Failure Projections}

Ford’s probability-of-failure projections are also unsupportable. As previously described, these projections, submitted in support of Ford’s Petition in November 2020, are based on the NG Model. While the projections are informative in various respects, NHTSA does not view the Model’s outputs for the covered Ford inflators as fully squaring with the evidence available for those inflators from real-world field returns\textsuperscript{155}—which renders what Ford provides unpersuasive for the purposes of its Petition. Even with the limited testing evidence available, ballistic testing of field returns of the covered Ford inflators includes three inflator deployments with primary-chamber pressures between 60 and 70 MPa—coming from two ZQ inflators with a field age between 12 and 13 years (one of which exhibited a pressure of 68 MPa), and one ZN inflator with a field age between 10 and 11 years.\textsuperscript{156} In the Agency’s experience, such primary-chamber pressure results are indicative of propellant degradation and potential future rupture risk. The nature of these results, in addition to causing concern, undercuts one of Ford’s notable arguments in its Petition: 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). Indeed, at least three covered Ford inflators have now exceeded 60 MPa in ballistic testing (one ZN, two ZQ), and according to recent MEAF\textsuperscript{157} data, one of these inflators (of the ZQ variant) has the highest chamber pressure tested for Takata calcium-sulfate desiccated PSDI–5 inflators.

Data from the MEAF also may suggest the beginning stages of notable density changes in propellant tablets in the covered Ford inflators with increasing field age. Recent results from primary tablets in inflators with field ages between 12 and 14 years show four inflators with density measurements near (or below) 1.68 g/cc; according to Ford, 1.64 g/cc is the point at which the PSDI–5 inflators with 2004 tablets are susceptible to energetic disassembly.\textsuperscript{157}

\textsuperscript{151} See id. at 11.
\textsuperscript{152} See id. at 12.
\textsuperscript{153} See id. at 12–13 ("[A] small number of samples were measured with a density slightly below the minimum average tablet production specification, while a nearly equal number of samples measured densities higher than the maximum. . . .").
\textsuperscript{154} See id. at 13.
\textsuperscript{155} While it may be possible to age an inflator artificially in a manner that replicates aging characteristics in the field (and then test those inflators), Ford did not attempt to do this for the covered Ford inflators.
\textsuperscript{156} Also notable is that all three results are over three standard deviations above even the average field-return results for ZN and ZQ inflators collectively (for which the Agency would expect a higher average than virgin inflators).
\textsuperscript{157} These results regard recently tested ZQ inflators with greater field ages than previously tested ZN inflators, although it should also be noted that Ford also noted a ZN inflator tested by NG with a chamber pressure approximately 20% higher than the average of the other inflators in tank testing. The specific measurement (and measurements of other NG tests) does not appear to have been provided to the Agency.
Similarly, there are a number of field returns measured with secondary-chamber tablet densities under 1.66 g/cc (mostly ZN, although one ZQ inflator), including ZN inflators under 1.64 g/cc—one of which was measured as low as 1.62 g/cc. This undermines the contention that the densities of the tablets from returned covered Ford inflators were measured “well above” 1.63–1.64 g/cc, as well as assertions regarding the results of visual inspections that it contends “evidence time-in-service, but not tablet density loss.”

The above results from real-world field returns signal that propellant degradation in the covered Ford inflators is occurring. While the predictive model that Ford references (and its applicable results) is informative in certain respects, the specific metrics Ford cites in support cannot be sufficiently squared with the actual testing that has been completed on real-world field returns to be persuasive for Ford’s Petition. Further, there are shortcomings particular to the metrics on which Ford relies regarding the Model. Notably, the assumptions made by Ford’s Petition appear to focus on the NG Model and according to Ford, there is a 1% probability of failure for a covered Ford inflator in a T3 vehicle with the most severe (top 1%) usage factors in Miami, Ford does not explain why this is an appropriate point at which to end its analysis of the expected number of cumulative field events.

NHTSA has been offered no persuasive reason to think that without a recall, even if current owners are aware of the defect and instant petition, subsequent owners of vehicles equipped with covered Ford inflators would be made aware of the issue. This is not the type of defect for which notice alone enables an owner to avoid the safety risk. A remedy is required to address the underlying safety defect.

As discussed above, the threshold of evidence necessary to prove the inconsequentiality of a defect such as this one— involving the potential performance failure of safety-critical equipment—is very difficult to overcome. Ford bears a heavy burden, and the evidence and argument Ford provides suffers from numerous, significant deficiencies, as previously described in detail. In all events, the information that Ford presents in its Petition and subsequent Presentations to the Agency is inadequate to support a grant of its Petition.
Ford inflators compared favorably to another inflator variant of the same type, and even to non-desiccated inflators. These comparisons do not suffice for an inconsequentiality determination. Relatedly, Ford’s argument regarding design differences does not suffice to support an inconsequentiality determination. This argument, furthermore, was not persuasively connected to meaningful improved performance in generate-properties and pressure differences (and even if it had been, the covered Nissan inflators are not an appropriate proxy standard for inconsequentiality). The sample sizes used for the analyses were also limited, and there are shortcomings regarding various analyses that undermine their conclusions—including some information was missing or unclear.

As a general matter, signs of aging were observed in the covered Ford inflators, which leads to propellant degradation, which leads to inflator rupture—and the 2004 propellant that is present in the covered Ford inflators degrades until, at some point, it no longer burns normally, but in an accelerated and unpredictable manner that can cause an inflator rupture. Perhaps most importantly, even with the limited testing evidence available, ballistic testing of field returns of the covered Ford inflators includes three inflator deployments with primary-chamber pressures between 60 and 70 MPa—coming from two ZQ inflators with a field age between 12 and 13 years (one of which exhibited a pressure of 68 MPa), and one ZN inflator with a field age between 10 and 11 years. Data from the MEAF also appears to indicate the beginning stages of density changes in propellant tablets in the covered Ford inflators with increasing field age. These results from real-world field returns signal that propellant degradation in the covered Ford inflators is occurring, and belies the probability-of-failure projections that Ford provides (which have their own additional shortcomings that lead to an understatement of the potential risk).

Given the severity of the consequence of propellant degradation in these air bag inflators—the rupture of the inflator and metal shrapnel sprayed at vehicle occupants—a finding of inconsequentiality to safety demands extraordinarily robust and persuasive evidence. What Ford presents here, while valuable and informative in certain respects, suffers from far too many shortcomings, both when the evidence is assessed individually and in its totality, to demonstrate that the defect in covered Ford inflators is not important or can otherwise be ignored as a matter of safety.

In consideration of the forgoing, NHTSA has decided Ford has not demonstrated that the defect is inconsequential to motor vehicle safety. Accordingly, Ford’s Petition is hereby denied, and Ford is obligated to provide notification of, and a remedy for, the defect pursuant to 49 U.S.C. 30118 and 30120. Within 30 days of the issuance of this decision, Ford shall submit to NHTSA a proposed schedule for the notification of vehicle owners and the launch of a remedy required to fulfill those obligations.

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.

Jeffrey Mark Giuseppe, Associate Administrator for Enforcement.

[FR Doc. 2021–01540 Filed 1–22–21; 8:45 am]
BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA–2020–0008]

Pipeline Safety: Request for Special Permit; El Paso Natural Gas Company, L.L.C.

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA); DOT.

ACTION: Notice.

SUMMARY: PHMSA is publishing this notice to solicit public comments on a request for special permit received from the El Paso Natural Gas Company, L.L.C. (EPNG). The special permit request is seeking relief from compliance with certain requirements in the Federal pipeline safety regulations. At the conclusion of the 30-day comment period, PHMSA will review the comments received from this notice as part of its evaluation to grant or deny the special permit request.

DATES: Submit any comments regarding this special permit request by February 24, 2021.

ADDRESSES: Comments should reference the docket number for this specific special permit request and may be submitted in the following ways:

• E-Gov Website: http://www.Regulations.gov. This site allows the public to enter comments on any Federal Register notice issued by any agency.
• Fax: 1–202–493–2251.

• Hand Delivery: Docket Management System: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

Instructions: You should identify the docket number for the special permit request you are commenting on at the beginning of your comments. If you submit your comments by mail, please submit two (2) copies. To receive confirmation that PHMSA has received your comments, please include a self-addressed stamped postcard. Internet users may submit comments at http://www.Regulations.gov.

Note: There is a privacy statement published on http://www.Regulations.gov. Comments, including any personal information provided, are posted without changes or edits to http://www.Regulations.gov.

Confidential Business Information: Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this notice contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this notice, it is important that you clearly designate the submitted comments as CBI. Pursuant to 49 Code of Federal Regulations (CFR) § 190.343, you may ask PHMSA to give confidential treatment to information you give to the agency by taking the following steps: (1) Mark each page of the original document submission containing CBI as “Confidential”; (2) send PHMSA, along with the original document, a second copy of the original document with the CBI deleted; and (3) explain why the information you are submitting is CBI. Unless you are notified otherwise, PHMSA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this notice. Submissions containing CBI should be sent to Kay McIver, DOT, PHMSA–PH–80, 1200 New Jersey Avenue SE, Washington, DC 20590–0001. Any commentary PHMSA receives that is not