

**APR 04 2012**

February 14, 2012

Mr. Jeff Wiese  
Associate Administrator for Pipeline Safety  
US Department of Transportation  
PHMSA  
East Building, 2<sup>nd</sup> Floor  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Ms. Vanessa Allen Sutherland  
Chief Counsel  
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**Subject: Petition to Reconsider PA12 Supplier Petition to Amend  
§§192.121 and 192.123 to allow use of Polyamide 12 (PA12)  
Piping Systems for Transport of Natural Gas  
Reference Docket ID: PHMSA-2007-29042**

Dear Mr. Wiese

Please find enclosed, the Petition to Reconsider by Evonik-Degussa Corporation and UBE Industries (PA12 Suppliers) to amend §§192.121 and 192.123 to allow the use of Polyamide 12 (PA12) piping system for safe transport of natural gas. Following extensive research, safe field performance of the PA12 piping systems installed under special permits, and demonstrated retention of physical and material properties after exposure to a wide range of in-service conditions, the PA12 suppliers believe an informal hearing to discuss their petition for reconsideration is warranted to decide what additional steps are needed to be taken in order to advance the rulemaking process.

If you have any questions, please feel free to contact Richard Wolf at (610)804-9794 or Hitesh Patadia at (847)873-3139. These gentlemen represent UBE America, Inc. and Evonik Degussa Corp. respectively.

Sincerely,



Mr. Thomas Bates  
President – Evonik Degussa Corp



Mr. Shin Kawasuso  
President and CEO – UBE America, Inc.

cc: Mr. John Gale - PHMSA

**PETITION FOR RECONSIDERATION TO AMEND  
TITLE 49 CODE OF FEDERAL REGULATIONS TO  
PERMIT USE OF POLYAMIDE 12 (PA12) PIPING  
SYSTEMS FOR GAS DELIVERY SYSTEMS**

**Revise Section 192.121 to Increase Design Factor  
Used in the Formula to Calculate Maximum Design Pressure  
For Polyamide 12 (PA12) Piping Systems**

**Revise Section 192.123 to Include Maximum Design Pressure  
Limitations for Polyamide 12 (PA12) Piping Systems**

**Incorporate by reference ASTM Standards Pertaining to  
Polyamide 12 (PA12) Pipe and Components**

January 31, 2012

**BEFORE THE  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
UNITED STATES DEPARTMENT OF TRANSPORTATION  
WASHINGTON, D.C.**

<b>Revise §§ 192.121 and 192.123 to</b>	)	
<b>Permit the use of Polyamide 12 (PA12)</b>	)	<b>Docket No.: PHMSA-2007-29042</b>
<b>Piping System and Incorporate by</b>	)	
<b>by Reference PA12 Pipe and</b>	)	
<b>and Component ASTM standards</b>	)	

**EVONIK INDUSTRIES AND UBE AMERICA PETITION FOR RECONSIDERATION  
TO PERMIT USE OF POLYAMIDE 12 (PA12) PIPING SYSTEMS AND  
INCORPORATE BY REFERENCE CURRENT ASTM STANDARDS**

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Evonik Industries and UBE America, hereafter called, PA12 suppliers, submit this Petition for Reconsideration for Rulemaking to amend §§ 192.121 and 192.123 to allow the use of Polyamide 12 (PA12) piping system for safe transport of natural gas and incorporate by reference current ASTM standards governing the material, physical, and chemical requirements of PA12 pipe and components.

On April 27, 2007 PA12 suppliers filed a petition with the Pipeline and Hazardous Materials Safety Administration (PHMSA) for rulemaking to amend §§ 192.121 and 192.123 to allow the use of Polyamide 12 (PA12) piping system operating at pressures based on its long term strength ratings.<sup>1</sup> The petition was filed under Docket No. PHMSA-2007-29042. During September 2007, PHMSA administratively requested additional information to clarify the scope of the petition and additional technical feedback.<sup>2</sup>

The PA12 suppliers performed extensive work to resolve the relevant concerns identified within the PHMSA response. The PA12 suppliers performed additional installations and developed a series of reports to address all outstanding technical concerns. Moreover, the PA12 suppliers

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<sup>1</sup> The petition is attached as Exhibit 1

<sup>2</sup> The PHMSA response is attached as Exhibit 2

proactively developed a suite of standards containing stringent performance based requirements to ensure the overall safety of the PA12 piping systems.

During June 2009, the PA12 suppliers filed an amended petition to strengthen the proposed language within the previously filed petition<sup>3</sup>. The PA12 suppliers received no written correspondence from PHMSA regarding the amended petition. The lack of correspondence in over two years is perceived to be evidence of PHMSA's need for additional clarification and update.

Pursuant to 49 CFR Part 190.335, the PA12 suppliers are requesting an informal informational hearing to reconsider their request to allow the use of PA12 piping for transport of natural gas. Since the time of initial petition submittal and subsequent request for additional information and clarity, the PA12 suppliers have made significant advancements to prove the safe performance of the PA12 piping system for transport of natural gas. Specifically, a few of the key accomplishments include:

- Two installations in the public right of way under approved special permits in the State of Mississippi and State of Montana. These installations have been operating safely with no issue since 2008 and test data has confirmed the overall stability of the PA12 material properties after exposure to in-service conditions
- A series of installations in the States of Wisconsin, Arizona, and New York on private property using PA12 piping systems of various sizes as outlined in the petition have also been operating without any issues. The test data also confirms the retention of material and physical properties of the PA12 material following exposure to a wide range of in-service conditions.
- A suite of standards have been developed to ensure stringent performance-based requirements for the PA12 piping systems. A new stand alone ASTM specification has been developed which includes requirements to ensure ample resistance to Slow Crack Growth (SCG) and resistance to Rapid Crack Propagation (RCP). Additional standards

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<sup>3</sup> The revised petition is attached as Exhibit 3

have been developed or revised to include requirements for various PA12 piping components, fittings, and appurtenances.

The PA12 piping systems enable natural gas utility companies and other operators to safely upgrade aging infrastructure and extend service to remote areas in a safe and cost effective manner. The PA12 piping is corrosion resistant and is an effective alternative for replacement of bare steel mains and in potential contaminated soil conditions.

Unlike any other material prior to its inclusion the Code of Federal Regulations, the PA12 material and piping system has undergone an extensive series of testing and evaluation. The PA12 suppliers believes that an informal hearing to reconsider their request is warranted to educate PHMSA on the technical and standards advancements and what additional steps are needed to be taken in order to advance the rulemaking process.

If you have any questions or need additional information, please feel free to contact either of us.

Evonik Industries

UBE America



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