



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

**NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 2, 2013

Mr. Richard Boocock
Vice President of Global Operations
Air Products & Chemicals Inc.
7201 Hamilton Blvd
Allentown, PA 18195-4153

CPF 4-2013-1001

Dear Mr. Boocock:

During the month of June 2012, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS) conducted a new construction inspection of your 184 mile, hydrogen pipeline from Port Neches, Texas, to Plaquemine, Louisiana. This is a connection project between East and West Gulf Coast pipeline systems of Air Products & Chemicals (Air Products). The inspection consisted of both field and record audits related to the construction pursuant to Chapter 601 of 49 United States Code.

As a result of the inspection, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

1. §192.303 Compliance with specifications or standards.

Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.

§192.461 External corrosion control: Protective coating

(e) If coated pipe is installed by boring, driving, or other similar method, precautions must be taken to minimize damage to the coating during installation.

Air Products failed to take precautions to minimize damage to the coating during installation of the boring and/or Horizontal Directional Drills (HDDs) applications at highway, railroad, streams, river crossings, and at other locations. During the inspection, PHMSA identified that Air Products used 22 mils Fusion Bonded Epoxy Coating (FBE) pipe without Abrasion Resistant Overlays (ARO) in the HDDs and bored locations. Air Products was asked to provide the construction specification of the pipe coating that was used at bored and HDDs locations along its right-of-way (ROW).

Air Product's construction specifications, 4APL-20001, Section 4.1.1.4 states:

"the coating thickness shall be 560µm (22 mils) nominal if only the FBE coating is to be applied. Abrasion Resistant Overlays (ARO) should be considered for directional drills in geographic locations where soil or rock formation may be abrasive to the external coating."

According to the operator, Air Products used 3M Scotchkote Fusion Bonded Epoxy Coating (FBE) 6233 in bored or HDDs locations. But according to the Vendor's (3M) specification, Fusion Bonded Epoxy Coating 6233 is "designed for corrosion protection of pipe" and not designed to protect from damage during pipeline directional drilling applications, bores, and river crossings.

Air Products could not demonstrate that they took precautions to minimize damage to the coating during installation. Air Products stated that precautions are not required due to their operating experience, long history with native soil (primarily clay and sand) found in the Gulf Coast. Air Products was asked to provide supporting documentation and/or certification from 3M identifying whether the 6233 FBE 22 mils coating is adequate and resistant from damage during pipeline directional drilling applications, bores, and river crossings. To date, Air Products has not provided any supporting documentation from the vendor.

2. §192.303 Compliance with specifications or standards.

Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.

Air Products performed a construction task (brazing) without a qualified and/or approved brazing procedure. During the inspection of on Gulf Coast Connection Project, it was observed that Air Products installed twenty three (23) "Decouplers" on the pipeline. The installation of the "Decouplers" was done by brazing M8 pins on the carrier pipe. PHMSA requested Air Products to provide the brazing procedure that was used while brazing on their pipeline system. Air Products provided the vendor's (BAC) brazing procedure. When questioned about the

qualification of the vendor's brazing procedure, Air Products could not provide any documentation whether the vendor's procedure had been reviewed, approved and/ or accepted prior to the commencement of the brazing works on the specified pipeline project.

According to Air Products' procedure, Pipelines - Installation, 670.810, Section 4.1 and 4.1.1, it states that the procedure developed by the contractor and the qualification of the individual in accordance with ASME BPVC, Section IX, shall be furnished to Air Products Project Engineering or representative for approval before the start of any work. Air Products could not provide any documentation that the brazing procedure had been approved by Air Products prior to the commencement of the construction of Gulf Coast Pipeline Project.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$200,000 per violation per day the violation persists up to a maximum of \$2,000,000 for a related series of violations. For violations occurring prior to January 3, 2012, the maximum penalty may not exceed \$100,000 per violation per day, with a maximum penalty not to exceed \$1,000,000 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violations and has recommended that you be preliminarily assessed a civil penalty of \$80,000 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$60,000
2	\$20,000

Proposed Compliance Order

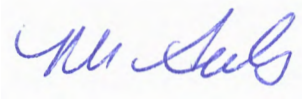
With respect to item 1 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Air Products & Chemicals Inc. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 4-2013-1001** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



R. M. Seeley
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Air Products & Chemicals Inc. (Air Products) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Air Products with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to §192.461(e), Air Products failed to take precautions to minimize damage to the coating during installation during Horizontal Directional Drills (HDDs) applications at highway, railroad, streams, river crossings, or other locations. Air Products must:
 - a. For the entire 184 miles of hydrogen pipeline there are 82 HDD locations, at highway, railroad, streams, river crossings, or other locations along the right-of-way. Conduct an assessment of the crossings to verify the integrity of the pipe coating in all HDD locations. This would include the loss of coating thickness, coating disbondment from the pipe, or coating gouges that might damage the coating and pipe. Provide the qualification records of the individuals performing the survey, whether these individuals are Air Products employees or of a qualified vendor. This assessment must be completed within 60 days upon receipt of the Final Order.
 - b. Submit the results of the assessment, including the disposition of issues identified. This shall be completed within 120 days upon receipt of the Final Order.
2. It is requested (not mandated) that Air Products maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.