



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

820 Bear Tavern Road, Suite 103
West Trenton, NJ 08628
609.771.7800

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

OVERNIGHT EXPRESS DELIVERY

January 18, 2018

Mark Cluff
VP Safety & Operational Discipline
Williams Partners, L.P.
One Williams Center
Tulsa, Oklahoma 74172

CPF 1-2018-5007

Dear Mr. Cluff:

On January 20, 2015, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code, investigated an accident that occurred at the Williams Field Services (Williams) Houston M&R facility located at 933 Western Avenue in Houston, Pennsylvania.

On December 24, 2014, at 21:49 hours, an accident involving the release of 1,924 barrels of liquid ethane occurred at the Williams Field Services (Williams) Houston, PA Metering and Regulating Station (Houston M&R Station) located at 933 Western Avenue near the town of Houston, Pennsylvania; in Washington County. Just prior to the accident, severe weather affecting southwestern Pennsylvania caused intermittent power outages at the Houston M&R facility. The power outages resulted in the loss of the phase converters at the station, and the loss of instrument air supplied by electric air compressors.

The loss of instrument air at the station, combined with the failure of the nitrogen backup system, resulted in an overpressure situation, subsequent rupture of the ethane vaporizer inlet nozzle, and damage to the flare piping system. A fire and explosion occurred as ethane from the ruptured vaporizer was released. Williams' personnel responded and isolated the station. There were no fatalities or injuries reported. Three homes near the station were evacuated by Emergency Response personnel. Property damage was confined to the station, and was estimated to be over one million dollars.

As a result of the investigation, 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 violation(s) are:

1. §195.52 Immediate notice of certain accidents.

(a) At the earliest practicable moment following discovery of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in §195.50, the operator of the system must give notice, in accordance with paragraph (b) of this section, of any failure that:

(2) Resulted in either a fire or explosion not intentionally set by the operator;

Williams failed to provide notice to the National Response Center at the earliest practicable moment following the discovery of a release of hazardous liquid at the Houston M&R facility that resulted in a fire and explosion. Specifically, on December 25, 2014, at 13:23 Eastern Standard Time, a Williams representative notified the National Response Center (NRC) of a release which occurred at the Williams Field Services Houston M&R facility on December 24, 2014 at 23:50. The accident was reported to the NRC thirteen hours and 33 minutes after Williams confirmed the release.

Advisory Bulletin ADB 2013-01, posted in the Federal Register on January 30, 2013, advised owners and operators of gas and hazardous liquids pipeline systems and LNG facilities that they should contact the NRC within one hour of discovery of a pipeline accident and should also file additional telephonic reports if there are significant changes in the number of fatalities or injuries, product release estimates, or the extent of damages.

In addition, Williams' release reporting procedures, 6.04-ADM-002, Section 1.1, of the System Integrity Plan, state:

“Due to the very short timeframes required for reporting to regulatory agencies (usually within one hour of an event) and the possibility for penalties associated with delayed reporting, it is imperative that all Releases and events required to be reported by this Procedure are reported immediately. Do not delay reporting by attempting to exactly determine the amount released. Report immediately with an estimate and correct later.”

Section 2.3.1.1 states “Report immediately if you determine or suspect that the 5 gallon/24 hour threshold will be met or exceeded.”

Williams failed to notify the NRC within 1 hour of the confirmed release.

2. §195.202 Compliance with specifications or standards.

Each pipeline system must be constructed in accordance with comprehensive written specifications or standards that are consistent with the requirements of this part.

Williams failed to follow written construction procedures during the commissioning of the Houston M&R facility, which was placed into service in September 2014. Specifically, Williams failed to commission the new nitrogen system when commissioning the Houston M&R facility.

The backup nitrogen system was designed to automatically activate in the event of the loss of the main instrument air supply to the station, thus allowing continued temporary operation of valves, overpressure protection, and safety devices at the station.

During the investigation, PHMSA reviewed Williams' procedures, facility design information, control room and construction records, original construction drawings, accident report (Form F7000.1), incident analysis causal map, and SCADA data, and conducted interviews with Williams personnel.

Williams' Procedures:

Williams Pre-Startup Safety Review (PSSR), Procedure No. 9.09-ADM-001-PSSR Procedure, Revision 8, dated 1/1/2011 states in part:

Section 2.1.2:

“A PSSR is required prior to startup or placement into service of any new or modified asset or any existing asset that has been out of service for 12 or more months or removed from service for significant maintenance (generally, anything exceeding preventative maintenance), non-routine repairs and/or otherwise disassembled.

Section 2.1.3:

“At a minimum, the PSSR will:

2.1.3.1 Provide verification that construction is performed in accordance with design and specifications.

2.1.3.2 Provide verification that equipment/assets are inspected, tested, calibrated, etc. in accordance with design and specifications.”

Interviews and Records

Following the accident, Williams found that the outlet valves on the nitrogen bottles were all closed. PHMSA asked Williams' personnel if the nitrogen system was tested as part of the post construction / pre-startup inspections, and requested records for any tests conducted by Williams prior to commissioning the Houston M&R facility. From the interviews and related record reviews, PHMSA discovered several issues, including:

1. Williams did not have documentation to show that the nitrogen system was tested prior to the Houston M&R facility being placed in service on September 22, 2014, or prior to the accident on December 24, 2014. The PSSR form completed for this project shows the P&IDs/PFDs were signed off by Williams personnel on 8/1/14. The nitrogen system was not included in the PSSR or point-to-point (loop) checks.
2. Williams' Manager of Asset Integrity West, stated that the nitrogen system was designed to be the backup system. Williams' personnel stated that the bottles were never opened in September 2014 when the Houston M&R facility was commissioned, and indicated that there was no maintenance or operational reason for the valves to be closed.
3. The Houston M&R Station Piping and Instrumentation Diagram (P&ID) issued for construction on 10/3/2013, and subsequently revised on 12/6/2013, incorrectly identified

the nitrogen backup system as two Air Storage Racks (ASR) ASR-0066 and ASR-0067. On January 15, 2015, following the accident, the information related to the ASR's was removed from the P&ID's and replaced with details of the nitrogen backup system.

Williams' Causal Analysis:

As a result of the accident, Williams completed PHMSA Form F7000.1 titled "Accident Report – Hazardous Liquid Systems," and conducted a causal analysis of the accident. The causal analysis concluded in part that:

1. "Williams SIP did not have guidelines for standard facility procedures."
2. "Operating procedures did not detail operation of air system and backup system of all MLVs [Main Line Valves]"
3. "Issues with backup air system [were] not identified during project design, execution, or commissioning"
4. "Design documentation [was] inadequate to correctly implement back up"
5. "The instrument air backup [was] not in service"

As established in Williams' records, interviews of Williams' personnel, and the causal analysis, Williams failed to verify that the Houston M&R facility was constructed, inspected, tested, and calibrated in accordance with comprehensive written specifications or standards, as required by 49 C.F.R. §195.202 and Williams' own procedures.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$209,002 per violation per day the violation persists up to a maximum of \$2,090,022 for a related series of violations. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed \$200,000 per violation per day, with a maximum penalty not to exceed \$2,000,000 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of \$174,100 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$24,400
2	\$149,700

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 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.

Please submit all correspondence in this matter to Robert Burrough, Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, West Trenton, New Jersey 08628. Please refer to **CPF 1-2018-5007** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on a CD accompanied by the original paper copy to the Eastern Region Office.

Additionally, if you choose to respond to this (or any other case), please ensure that any response letter pertains solely to one CPF case number.

Sincerely,



Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*