



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

FEB 18 2011

Mr. John Swearingen
President
Marathon Pipe Line LLC
539 South Main Street
Findlay, OH 45840

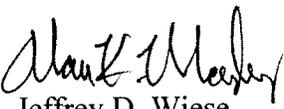
Re: CPF No. 5-2010-5013

Dear Mr. Swearingen:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation and specifies actions that need to be taken by Marathon Pipe Line LLC to comply with the pipeline safety regulations. When the terms of the compliance order have been completed, as determined by the Director, Western Region, this enforcement action will be closed. Service of the Final Order by certified mail is deemed effective upon the date of mailing, or as otherwise provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,


for: Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. Chris Hoidal, Director, Western Region, PHMSA

Mr. Randy M. Thomson
Environmental, Safety, and Regulatory Compliance Supervisor
Marathon Pipe Line LLC
539 South Main Street
Findlay, OH 45840

CERTIFIED MAIL - RETURN RECEIPT REQUESTED [7005 11600001 0041 3153]

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590**

)	
In the Matter of)	
)	
Marathon Pipe Line LLC,)	CPF No. 5-2010-5013
)	
Respondent.)	
)	

FINAL ORDER

On July 13-16, 2009, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Marathon Pipe Line LLC (MPL or Respondent) in Wyoming. MPL, a subsidiary of Marathon Oil Corporation, operates more than 5,000 miles of oil and gas pipelines in 16 states, primarily in the eastern United States.¹

As a result of the inspection, the Director, Western Region, OPS (Director), issued to Respondent, by letter dated April 26, 2010, a Notice of Probable Violation and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that MPL had violated 49 C.F.R. §§ 195.401(b) and 195.410(a)(1) and proposed ordering Respondent to take certain measures to correct the alleged violations.

MPL responded to the Notice by letters and emails dated June 1, 2010, June 30, 2010, August 23, 2010, and October 28, 2010 (collectively, Response). The company contested one of the allegations, offered additional information in response to the Notice, and requested that the proposed violation be withdrawn. The company did not contest the other allegation of violation but provided information concerning the corrective actions it had taken. Respondent did not request a hearing and therefore has waived its right to one.

FINDING OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195.401(b), as follows:

¹ Marathon Oil Corporation, http://www.marathon.com/Global_Operations/Refining_Marketing_and_Transportation/Transportation_and_Logistics/ (last visited December 17, 2010).

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.401(b), which states:

§ 195.401 General requirements.

(a)

(b) Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it shall correct it within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.

The Notice alleged that Respondent violated 49 C.F.R. § 195.401(b) by failing to address conditions that could adversely affect the operation of its pipeline. Specifically, it alleged that a “very loud and distinct ‘gravelly’ sound” emanated from the pipeline immediately downstream from the pressure-reducing control valve at Casper Station, indicating possible cavitation.² The Notice further alleged that the ball valve immediately downstream of the control valve was partially closed, and that this was not an acceptable use of such a valve.³

In its Response, MPL stated that source of the noise identified by the OPS inspector was an orifice plate that it installed in 2003 to assist in the control valve holding backpressure.⁴ Respondent did not dispute the fact that the orifice plate could cause cavitation, or that the latter phenomena could damage pipeline equipment.

However, MPL provided evidence, obtained by way of a May 26, 2010 inspection, that this condition had no observable impact on the pipe, plug valve, or orifice downstream of the control valve.⁵ Respondent also stated that it has never experienced a pipeline failure due to cavitation, and that it did not believe that the conditions observed could affect the safe operation of its system.⁶

Further, with regard to the allegation that the ball valve was being used in an unacceptable manner, Respondent indicated that the valve was actually a plug valve being used for equipment

² Notice at 4. Cavitation is “[t]he formation and collapse, within a liquid, of cavities or bubbles that contain vapor or gas or both. In general, cavitation originates from a decrease in static pressure in the liquid. It is distinguished in this way from boiling, which originates from an increase in the liquid temperature.” ASM International, *Metals Handbook 11* (Desk ed., 2nd ed. 1998). Cavitation can cause what is known as “cavitation erosion,” the “[p]rogressive loss of original material from a solid surface due to continuing exposure to cavitation.” *Id.* at 12. It can also cause what is known as “cavitation damage,” i.e., “[t]he degradation of a solid body resulting from its exposure to cavitation[.], . . . [which] may include the loss of material, surface deformation, or changes in properties or appearance.” *Id.*

³ *Id.*

⁴ Respondent’s Response to the Notice (Response) dated June 1, 2010 at 1.

⁵ Response dated August 23, 2010, attached CD file folder *Cavitation Information*.

⁶ Response dated June 1, 2010 at 1.

isolation, not backpressure control. MPL also stated that while the plug valve had now been placed in a full open state, it had never been a threat to the safe operation of the line.⁷

I do not find the first part of MPL's arguments persuasive. Respondent has not disputed the fact that the orifice plate could be causing cavitation, or that this condition, if left uncorrected, could adversely affect the safe operation of a pipeline system through erosion. While MPL has demonstrated that no cavitation erosion has occurred to date, it has not demonstrated that this phenomenon will not occur in the future.

However, I am persuaded by the second part of Respondent's argument. The Notice incorrectly identified the plug valve as a ball valve, and the evidence of record does not substantiate the allegation that the failure to fully open that valve adversely affected the safe operation of MPL's pipeline system.

Accordingly, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.401(b) by failing to address conditions that could adversely affect the operation of its pipeline.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. § 195.410(a)(1), which states:

§ 195.410 Line markers.

(a) Except as provided in paragraph (b) of this section, each operator shall place and maintain line markers over each buried pipeline in accordance with the following:

(1) Markers must be located at each public road crossing, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known.

The Notice alleged that Respondent violated 49 C.F.R. § 195.410(a)(1) by failing to place and maintain line markers in sufficient number along each buried line so that its location was accurately known.⁸ Specifically, the Notice alleged that MPL failed to adequately mark buried pipelines located at road crossings in a housing development located a few miles west of Casper Station.⁹ In its Response, Marathon did not contest this allegation of violation.¹⁰

Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 195.410(a)(1) by failing to place and maintain line markers in sufficient number along each buried pipeline so that its location was accurately known.

⁷ *Id.* at 2.

⁸ Notice at 2.

⁹ *Id.*

¹⁰ Response dated June 30, 2010.

These findings of violation will be considered a prior offense in any subsequent enforcement action taken against Respondent.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Items 1 and 2 in the Notice for violations of 49 C.F.R. §§ 195.401(b) and 195.410(a)(1), respectively. Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. The Director has indicated that Respondent has taken the following actions to address one of the cited violations:

1. With respect to the violation of § 195.410(a)(1) (**Item 2**), Respondent has replaced missing line markers in the housing development a few miles west of Casper Station.¹¹

Accordingly, I find that compliance has been achieved with respect to this violation. Therefore, the compliance terms proposed in the Notice for Item 2 are not included in this Order.

As for the remaining compliance terms, pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

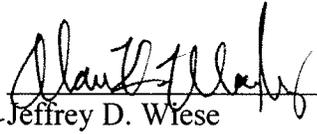
1. With respect to the violation of § 195.401(b) (**Item 1**), Respondent must submit an engineering analysis showing whether the cavitation at the Casper Station could affect the safe operation of its pipeline system. If potential long-term damage could occur, Respondent must make appropriate modifications to any affected piping and components.
2. Respondent must complete the above requirements within sixty (60) days of the Final Order.
3. It is requested that Respondent maintain documentation of the safety improvement costs associated with fulfilling this compliance Order and submit the total to Chris Hoidal, Director, Western Region, PHMSA. It is requested that the costs be reported in two categories: (1) total costs associated with preparation/revision of plans, procedures, studies and analyses, and (2) total cost associated with replacements, additions and other changes to pipeline infrastructure.

¹¹ *Id.* at 2; Response dated August 23, 2010, attached CD file folder *Line Marker Information*.

The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent and demonstrating good cause for an extension.

Failure to comply with this Order may result in administrative assessment of civil penalties not to exceed \$100,000 for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

The terms and conditions of this Final Order are effective upon service in accordance with 49 C.F.R. § 190.5.

for  _____
Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

FEB 18 2011

Date Issued