



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

901 Locust Street, Suite 480
Kansas City, MO 64106

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

VIA ELECTRONIC MAIL TO: aaron.milford@magellanlp.com;
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mike.pearson@magellanlp.com

May 8, 2023

Aaron L. Milford
Chief Executive Officer
Magellan Midstream Partners, LP
P.O. Box 22186
Tulsa, Oklahoma 74121

CPF 3-2023-001-NOPV

Dear Mr. Milford:

From December 4, 2020, through August 13, 2021, 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 (U.S.C.), investigated a spill on Magellan Midstream Partners, L.P.'s (Magellan) 6-inch nominal diameter hazardous liquid pipeline system in Commerce City, Colorado, a suburb of Denver. The rupture of the pipeline on December 4, 2020, resulted in the release of a reported 487 barrels of diesel fuel in a high consequence area (HCA).

The 6-inch pipeline originates from Magellan's Commerce City pump station at the Suncor Energy Refinery and transports refined products to a terminal near Fountain, Colorado. At the time of the spill the pipeline was delivering product to the Fountain Terminal when the pipe ruptured at 5:16 a.m. Mountain Standard Time (MST) at Milepost 0.17 along 56th Avenue, less than 1,000 feet from the Commerce City pump station discharge. The pipeline was controlled and monitored remotely by Magellan personnel using a Supervisory Control and Data Acquisition (SCADA) system.

Upon occurrence of the pipeline rupture, the SCADA system indicated pressure and flow deviations in the Magellan control center, and the pipeline was shutdown (First Shutdown) at

5:17 am MST. The operational deviations indicated by SCADA included decreasing pressure along with an increasing flow rate at the Commerce City pump station.

Twenty-two (22) minutes after the First Shutdown, at approximately 5:39 am MST, the pipeline was restarted (Restart) by the Magellan control center, and flow resumed from Commerce City. Pumping from the Commerce City pump station continued for approximately seven (7) minutes until the pump was shutdown at approximately 5:46 am MST (Second Shutdown).

Fifty-five (55) minutes after the Second Shutdown, at approximately 6:42 am MST, an emergency was announced in the control room, initiating Magellan's response plans. The total elapsed time from the First Shutdown until the control room announcement of an emergency on the pipeline was approximately 1 hour and 25 minutes. The National Response Center was called at approximately 7:08 am MST, 1 hour and 52 minutes after the First Shutdown occurred.

The origin of the rupture was a 6-inch-long split in the long seam of the pipe. The failed pipe was removed and sent for metallurgical analysis where the apparent cause of the rupture was determined to be selective seam weld corrosion.

As a result of the investigation, it is alleged that Magellan has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items investigated and the probable violations are:

1. **§ 195.401 General requirements.**
 - (a) **No operator may operate or maintain its pipeline systems at a level of safety lower than that required by this subpart and the procedures it is required to establish under § 195.402(a) of this subpart.**

On December 4, 2020, Magellan operated the 6-inch Commerce City to Fountain Terminal pipeline at a level of safety lower than required by part 195 subpart F – Operation & Maintenance when the pipeline was re-started (Restart) after the First Shutdown and ran for approximately seven minutes while discharging diesel fuel into a high consequence area through a rupture in the pipe. Logs of the flow rate at Commerce City showed the flow averaged 763 barrels per hour during the 7 minutes of operation after the Restart. Operating the pipeline from the time of the Restart (5:39 a.m. MST) until the Second Shutdown (5:46 a.m. MST) was also not in accordance with Magellan procedures.

Just prior to the rupture, the pipeline had been operating in steady state with 1,330 psi discharge pressure at Commerce City. After the Restart began at 5:39 am MST, the discharge pressure at Commerce City briefly reached a high of only 146 psi, as shown in a log of recorded pressures. This available information in Magellan's control room indicated that the pipeline was not safe for continued operation after the Restart.

To provide for a controller's prompt and appropriate response to operating conditions, the control room management regulations of § 195.446(b) require definition of a controller's authority and responsibility to make decisions, take actions, and communicate with others.

These responsibilities and authority were mentioned in Magellan's procedures (e.g., Normal Operations and Line Monitoring Procedure 9.02-ADM-017) for monitoring and responding to pipeline conditions, including the authority to take actions such as shutdown and isolation of pipelines, or delaying startup of pipelines under their control. Restarting and continuing to run the pipeline for seven minutes after it had ruptured was not an appropriate response to the SCADA-indicated abnormal operating conditions.

As denoted in the written 30-day report (Form PHMSA F 7000.1), Magellan initiated an investigation into whether the controller(s) or control room issues were the cause of, or a contributing factor, to the accident. Magellan determined that the SCADA and CPM (computational pipeline monitoring) systems were operating and fully functional, and their investigation identified that "incorrect controller action or controller error" had occurred.

2. **§ 195.402 Procedural manual for operations, maintenance, and emergencies.**
 - (a) **General.** Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies.

Magellan did not follow its procedures for handling abnormal operations when it failed to investigate and correct the cause of abnormal operation between the time of the First Shutdown at 05:17 am MST and prior to the Restart at 05:39 am MST. Section 195.402(d)(1) requires responding to, investigating, and correcting the cause of an increase or decrease in pressure or flow outside normal operating limits. Section 195.402(d)(2) requires checking variations from normal operation after an abnormal operation at sufficient critical locations in the system to determine continued integrity and safe operation.

According to logs of pressure and flow, prior to the time of the rupture at 5:16 a.m., the pipeline was running in a steady state mode with the Commerce City discharge pressure consistently at 1,330 psi while the flow was approximately 843 barrels per hour. At the time of the failure, the SCADA system showed a sharp drop in pressure and a sudden increase in flow rate at the Commerce City pump station, indicating a rupture had occurred.

Magellan failed to follow its Startup and Shutdown Procedure 9.02-ADM-002, which required a review of static line conditions for pipeline integrity prior to restarting the line. The procedure further stated that if the static line pressure was not above minimum pressures, then a pressure test was necessary. After the First Shutdown, the Commerce City discharge pressure fell to less than 20 psi while the suction pressure at the Russellville pump station downstream was 0 psi. These low pressures, recorded between the First Shutdown and the Restart, were further indications of a failed pipeline that did not have continued integrity for safe operation.

After the First Shutdown at 5:17 am, the Magellan control room contacted the refinery to ascertain if the supply of diesel fuel to Magellan's pump station had been interrupted. After the refinery reported back to Magellan that there were no issues in the refinery at 5:37 am MST, the Commerce City pump station was started (Restart) by Magellan two minutes later at 5:39 am. Despite this, the Magellan control room staff did not conclude there was an issue (i.e., a pipe

rupture) on the 6-inch pipeline, as indicated in the SCADA operating data. It was not until 5:48 am MST, after the Second Shutdown at 5:46, that control room staff contacted a local field technician to investigate further at the Commerce City pump station. As such, the cause of the abnormal operation was not adequately investigated by Magellan, and was not corrected between the time of the First Shutdown and the Restart.

- 3. § 195.402 Procedural manual for operations, maintenance, and emergencies.**
(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies.

Magellan did not follow its procedures for handling emergencies when it failed to initiate its Code Red Event Procedure 9.02-ADM-011 for approximately 1 hour and 25 minutes after the First Shutdown at 5:17 am MST. Code Red is a term Magellan used for an emergency, including SCADA-indicated pipeline ruptures, and notifications reporting a pipeline fire, or explosion, etc. The Code Red was initiated from the control room at 6:42 am MST.

Section 195.402(e) requires procedures to provide safety when an emergency condition occurs, including a prompt and effective response to an accidental release of hazardous liquid from a pipeline [see § 195.402(e)(2)]. In Magellan's Code Red Event Procedure 9.02-ADM-011, the controller of the console experiencing the emergency event had the role of initiating the procedure, and was to immediately announce "Code Red" within the control room. Other immediate actions included emergency shutdown of the pipeline and closure of valves.

Per the written 30-day report (Form PHMSA F 7000.1) submitted by Magellan, "CPM leak detection system or SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)" was how the pipeline accident was identified. At multiple times on the morning of December 4, 2020, sufficient information was available in Magellan's control room to initiate a Code Red emergency. The pipe failure at 5:16 am MST exhibited characteristics of a rupture in the SCADA system, including a sudden loss of pressure accompanied by increased flow rate. At 5:43 am MST it was observed in the control room that pressures and flows were not rising after the Restart. After the Second Shutdown at 5:46 am MST, pressures at Commerce City dropped again. At 6:19 am MST, the refinery contacted the Magellan control room and reported a possible leak on Magellan's pipeline. At 6:32 am MST, the refinery called the Magellan control room to report that spilled product was located at the fence line with diesel fuel on the road at 56th Avenue. At 6:40 am MST a Magellan technician called the control room to report that the spill was from Magellan's pipeline, and the controller initiated the Code Red Event procedure at 6:42 am MST. In summary, Magellan did not initiate an emergency response promptly in accordance with its Code Red Event procedure.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$257,664 per violation per day the violation persists, up to a maximum of \$2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022.

We have reviewed the circumstances and supporting documentation involved for the above probable violation(s) and recommend that you be preliminarily assessed a civil penalty of \$655,941 as follows:

| <u>Item number</u> | <u>PENALTY</u> |
|--------------------|----------------|
| 1 | \$218,647 |
| 2 | \$218,647 |
| 3 | \$218,647 |

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement 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).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. 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. If you are responding to this Notice, we propose that

you submit your correspondence to my office within 30 days from the receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 3-2023-001-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Gregory A. Ochs
Director, Central Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

cc: Katie McCullough, P.E. Manager, Integrity Management and Regulatory Compliance,
Katie.McCullough@MagellanLP.com
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Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*