



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

901 Locust Street, Suite 480
Kansas City, MO 64106

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

**VIA ELECTRONIC MAIL TO: pierce.norton@oneok.com; teri.anderson@oneok.com;
nicole.bickford@oneok.com**

July 3, 2024

Pierce H. Norton II
President and Chief Executive Officer
ONEOK, Inc.
100 West Fifth Street
Tulsa, Oklahoma 74103

CPF 3-2024-052-NOPV

Dear Mr. Norton:

From March 6 to March 8, 2023, 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.), performed an on-site investigation of Magellan Pipeline Company, LP.'s (Magellan)¹ #3-8" Paola to Kansas City pipeline segment in Tulsa, Oklahoma. On September 25, 2023, Magellan Midstream Partners was acquired by ONEOK, Inc.

On Wednesday, March 29, 2022, at 2:07 AM CST, Magellan, identified a pipeline release of five barrels of diesel product in a high consequence area (HCA). The release occurred on the Magellan #3-8" pipeline (Line ID 6060) near Mile Post (MP) 187 in Johnson County, Kansas, at 6920 Pflumm Road, Shawnee, Kansas. The release did not impact any waterways, and all contaminated soil was removed from the site.

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

¹ Magellan Pipeline Company, L.P., was a subsidiary of Magellan Midstream Partners.

1. § 195.452 Pipeline integrity management in high consequence areas.

(a)

(e) *What are the risk factors for establishing an assessment schedule (for both the baseline and continual integrity assessments)?*

(1) **An operator must establish an integrity assessment schedule that prioritizes pipeline segments for assessment (see paragraphs (d)(1) and (j)(3) of this section). An operator must base the assessment schedule on all risk factors that reflect the risk conditions on the pipeline segment. The factors an operator must consider include, but are not limited to:**

(i) **Results of the previous integrity assessment, defect type and size that the assessment method can detect, and defect growth rate;**

Magellan violated § 195.452(e)(1) by failing to base its assessment schedule on all the risk factors that affected the risk conditions on its pipeline. Specifically, Magellan failed to consider the following: (1) the actual corrosion growth rate, and (2) the defect type and size that the assessment method it used could detect. This led to the failure of its #3-8" Paola-Kansas City Pipeline on March 29, 2022.

Magellan underestimated the corrosion growth rate for a known corrosion defect. An in-line-inspection (ILI assessment) conducted in December, 2018, found a defect through approximately 38 percent of a section of the #3-8" Paola-Kansas City Pipeline pipe wall. The defect grew to 100 percent through the pipe wall resulting in the release of approximately 5.2 barrels of mixed diesel, fuel oil, kerosene, and jet fuel on March 29, 2022.

Magellan's analysis of the inspection results predicted that the corrosion defect would not cause a failure of the pipeline within less than 6.2 years. The prediction was based on Magellan's integrity management procedure which utilized the assumption of an average corrosion growth of the peak depth of the defect that would not exceed 6 mils (0.006 in.) per year, representing a predicted rate of metal loss of approximately 3 percent per year.

PHMSA published guidance to operators in October 2016, for inspection reassessment intervals.² PHMSA cautioned operators therein to not use an "average" growth rate to determine defect growth rates stating that by using an "average" growth rate, operators "can severely underestimate the growth of faster-growing defects and can lead to failures." PHMSA stated that defect growth rates are not homogeneous and small variations in environment, stress, cathodic protection, corrosion mechanisms such as stray current or AC corrosion, and several other possible factors can cause two similar time-dependent defects to grow at vastly different rates.

² PHMSA Inspection Reassessment Intervals Guidance for Less than 7 Years, Oct. 1, 2016, available at <https://www.phmsa.dot.gov/pipeline/gas-transmission-integrity-management/phmsa-inspection-reassessment-intervals-guidance-less-than-7-years>.

The actual growth rate of the remaining pipe wall was approximately 19 percent per year. Magellan had a third-party metallurgical analysis performed on the failed pipe segment by DNV GL USA, Inc. (DNV). DNV's final report concluded that the pipeline had been damaged by rapid localized corrosion growth which had characteristics consistent with microbiologically influenced corrosion (MIC). Magellan's assumed average corrosion growth rate consideration of 6 mils/year was significantly underestimated. Use of a non-average growth rate would have shown a high risk of the defect failing prior to the next scheduled assessment, and Magellan could have either repaired the defect or reassessed the pipe on a faster schedule. By underestimating the risk of corrosion growth through use of an assumed average growth rate, Magellan failed to base its assessment schedule on risk factors that reflect the actual risk conditions on the pipeline segment, causing an accidental release of hazardous material and, therefore, Magellan is in violation of § 195.452(e)(1).

Furthermore, Magellan was aware of the risk factor of MIC that reflected the risk condition of accelerated corrosion growth. Magellan's procedure 7.04-ADM-001 section 2.3.2 stated, "Where injurious aerobic bacteria has been identified, or is suspected, a polarized potential of -0.950 volts or more negative is required." The -0.950 volt criteria was determined by utilizing a recommendation made by third party vendor in 2007 after a MIC failure occurred on the Magellan pipeline in Kansas City, Kansas. Magellan has used the -0.950 volts criteria since 2018 for this pipeline segment.

Magellan's assessment method was not capable of accurately detecting the defect type and size. The vendor specifications for the ILI tool stated, "ILI detection capabilities and tool tolerance have limitations for corrosion pits with 0.1 [inch] x 0.1 [inch] dimensions." Furthermore, the pipeline segment was 93 percent seamless pipe. For seamless pipe, detection thresholds increase by 0.05t and depth accuracies degrade by 0.05t, per the vendor. This was proved to be true when another 100 percent through wall anomaly was incorrectly called by the ILI tool as only 53 percent deep? on August 26, 2022, at MP 180.25. The only reason this pinhole did not leak was due to the pipeline coating still being intact.

By not utilizing an assessment method capable of accurately detecting the defect type and size, and by not considering the actual corrosion growth rate, Magellan is in violation of § 195.452(e)(1).

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$266,015 per violation per day the violation persists, up to a maximum of \$2,660,135 for a related series of violations. For violation occurring on or after January 6, 2023 and before December 28, 2023, the maximum penalty may not 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.

We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of \$ 297,900 as follows:

<u>Item number</u>	<u>PENALTY</u>
1	\$ 297,900

Proposed Compliance Order

With respect to Item 1 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Magellan. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

This Notice is issued in accordance with 49 C.F.R. § 190.207(c). Any response you may have submitted to the original Notice is no longer applicable. You must respond as set forth below.

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 your receipt of this Notice, you have 30 days to respond as described in the enclosed *Response Options*. 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 receipt of this Notice. The Region Director may extend the period for responding upon a written request timely submitted demonstrating good cause for an extension.

In your correspondence on this matter, please refer to **CPF 3-2024-052-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: Teri Anderson, Sr. Manager DOT Compliance Services (teri.anderson@oneok.com)
Nicole Bickford, DOT Compliance Assistant (nicole.bickford@oneok.com)

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

PROPOSED COMPLIANCE ORDER

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

- A. In regard to Item 1 of the Notice, pertaining to Magellan's failure to base its assessment schedule on all the risk factors that affected the risk conditions on its pipeline, Magellan must develop its integrity management program to consider the risk of corrosion growth, and an assessment method that can detect the defect type and size that lead to the failure of its #3-8" Paola-Kansas City Pipeline on March 29, 2022, within **30** days of receipt of the Final Order to the Central Region Director.
- B. It is requested that Magellan maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Gregory A. Ochs, Director, Central 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.