

February 24 and February 26. Southern Star had originally intended to run the MFL-C tool on February 23 immediately after the MFL-A/XT tool. The MFL-C tool malfunctioned before it could be launched, however, so the vendor shipped a replacement MFL-C tool to the site. The replacement MFL-C tool was longer than the original MFL-C tool, had more modules and different cup type and spacing.³

Southern Star and the ILI vendor ran the replacement MFL-C tool on February 24. While reviewing the run with the vendor onsite, the only item of concern noted by the vendor was a speed excursion near the beginning of the run. After the ILI run, the vendor discovered that, because of a pinched sensor wire at the beginning of the run, the tool did not collect the minimum amount of data required by Southern Star. The faulty sensor wire was repaired, and the same MFL-C tool was launched again on February 26.

The MFL-C tool run on February 26 was conducted at the same operating pressure as the run performed on February 24. To mitigate the risk of another speed excursion during the second run, Southern Star and the vendor launched the ILI tool at a lower flow rate. The MFL-C tool became lodged in a bend in the pipeline. Consistent with an In-Line Inspection Pigging Plan (pigging plan),⁴ Southern Star and the vendor attempted to dislodge the tool by applying differential pressures. When the tool dislodged, it propelled forward at a high speed. The tool was unable to negotiate the next bend in the pipe, ejected from the pipeline and ruptured it. One Southern Star employee was hospitalized with injuries but has been able to return to work.

Item 1: The Evidence Does Not Establish that Southern Star Failed to Follow ILI Inspection Procedures.

Section 192.493 requires, among other things, that when conducting an ILI that is required under the regulations, an operator must comply with several industry standards, including American Petroleum Institute (API) Standard (Std) 1163, In Line Inspection Systems Qualification Standard, which is incorporated by reference into PHMSA's regulations.⁵ Item 1 of the Notice alleges that, when running the ILI tool on Line FM, Southern Star failed to comply with API Std. 1163's requirement to follow the company's inspection procedures "before, during and after the inspection."⁶ Therefore, the Notice alleges that Southern Star violated §192.493 and proposes to assess a civil penalty of \$222,504.⁷

³ Violation Report Exhibit A at 20-22, 49.

⁴ Southern Star Central Gas Pipeline, In-Line Inspection Pigging Plan, Detailed Analysis and Planning for In-Line Inspection Assessments for Line: FM, approved by Operations, Measurement, Gas Control, and Integrity on February 23, 2021. Attached hereto as Attachment 1.

⁵ 49 C.F.R. § 192.7 (2021). The edition that is incorporated by reference is API Standard 1163, "In-Line Inspection Systems Qualification," Second edition, April 2013, Reaffirmed August 2018.

⁶ Notice at 2. The edition of API Std. 1163 that is incorporated into PHMSA's regulations does not contain a "Section 1.1 General." The language quoted in the Notice is contained in the document's Introduction. API Std. 1163 at vi. ILI procedures are addressed in Section 10 of API Std. 1163, Quality Management System. This section is not referenced in the Notice.

⁷ Notice at 4.

Southern Star’s integrity management procedure, IMP.E2.ASMT.02, addresses running an ILI. Section 7.3.3 requires Southern Star to “[e]nsure any and all changes in geometry or planned operating conditions are disclosed to the ILI vendor if they differ from the information previously provided.”⁸ Section 8.3.7 requires Southern Star to “[v]erify pipeline operating parameters required by the tool specifications are achievable.”⁹ Section 7.2.1 requires Southern Star to “[d]evelop a plan for running the tool and controlling gas flow while running the inspection tools.” The procedure states that the plan must include “[d]etails on the valves to manipulate to run tool and control speed.”¹⁰

The Notice asserts that Southern Star did not follow these procedures, alleging specifically that Southern Star (1) “failed to communicate critical operating parameters to its contractors to ensure proper control of the ILI tool,” (2) failed to verify that the minimum operating pressure of the ILI tool was achievable under Line FM’s maximum allowable operating pressure (MAOP), and (3) failed to have and to follow an approved detailed pigging plan.¹¹

The sole focus of the Notice is the ILI run that occurred on February 26, 2021. The Notice does not discuss the two previous tool runs that occurred earlier in the week, including the run that was conducted with the same MFL-C tool on February 24. The Notice also does not describe the information Southern Star provided to the ILI vendor months before the tool runs or the correspondence between Southern Star and the ILI vendor in the days and weeks before the February 2021 tool runs. This context is important.

Though not mentioned in the Notice, the information Southern Star provided to the ILI vendor and Southern Star’s correspondence with the ILI vendor are described in Exhibit A of PHMSA’s Violation Report, which consists of PHMSA’s Failure Investigation Report. This report contains timelines that describe specific events leading up to the February 26, 2021 ILI.¹²

Southern Star’s communication with the ILI vendor began in November 2020 with the submission of the “Line FM ILI Vendor Questionnaire.”¹³ The vendor questionnaire informed the ILI vendor that the minimum and maximum pressure range on Line FM was 325 psig to 400 psig and that the flow range was 5 – 12 mmcf/d.¹⁴ On the previous day, Southern Star’s Integrity Engineer had requested the ILI vendor to “review 2010 ILI tool data, specifically the bends, to confirm passage of the MFL-C tool.”¹⁵

Correspondence between Southern Star and the ILI vendor continued in January 2021. The following excerpt of the timeline contained in the Violation Report documents that

⁸ Southern Star Central Gas Pipeline, Inc. Integrity Management Procedure, IMP.E2.ASMT.02, Sec. 7.3.3. Southern Star is providing the version of this procedure that was effective at the time of the incident as Attachment 2, hereto.

⁹ *Id.* at Sec. 8.3.7.

¹⁰ *Id.* at Sec. 7.2.1.

¹¹ Notice at 2.

¹² Violation Report, Exhibit A at 24-27, 28-31.

¹³ *Id.* at 24, 28. Southern Star’s vendor questionnaire is attached hereto as Attachment 3.

¹⁴ Attachment 3 at 8.

¹⁵ Violation Report, Exhibit A at 24, 25, 28.

correspondence and other actions of Southern Star and the ILI vendor related to the February ILI runs.

- 1/7/2021 Southern Star's PHMSA Compliance specialist called the ILI vendor "to voice concern regarding the bends in Line FM," and requests that the vendor "analyze past ILI data again."
- 1/7/2021 ILI vendor requests its data evaluation department for "a review of the 2010 Line FM data for the bends."
- 1/25/2021 Southern Star runs a gauge tool in Line FM.
- 1/26/2021 Southern Star sends gauge plate pictures to ILI vendor for review.
- 1/26/2021 ILI vendor informs the Southern Star Compliance Specialist that "the smart pig ILI runs are 'good to go.'"
- 1/26/2021 ILI vendor sends "pre-job notes" to Southern Star's PHMSA Compliance Specialist and others.
- 1/26/2021 Southern Star and the ILI vendor convene a "pre-job meeting" where Southern Star "mentioned concern that the tool was possibly stuck on 2010 run, asked for review by" ILI vendor.
- 1/29/2021 ILI vendor's data evaluations department informs the ILI vendor project manager "that the only outlier in the 2010 data was the 1.3D 89° located at 2845 ft. The tool stopped at this location and exited at a high velocity. The resulting speed excursion means that the bends is likely 1.5D bend."
- 1/29/2021 ILI vendor project manager calls Southern Star's PHMSA compliance Specialist to provide the results of the vendor's analysis of the 2010 ILI data at the bends.¹⁶
- 2/23/2021 ILI vendor emails Southern Star's PHMSA Compliance Specialist "confirming that ILI tool will pass through the line based off the gauge plate measurements. This second email on this topic was per the request of [Southern Star's] PHMSA Compliance Specialist."¹⁷

This timeline demonstrates Southern Star's efforts to ensure that the ILI vendor had the information it needed to assess possible issues that could prevent the successful passage of the ILI tools.

On February 23, 2021, Southern Star successfully launched and received the MFL-A/XT ILI tool. Later that day, the ILI vendor notified Southern Star's PHMSA Compliance Specialist that "passage of the combination tool indicates that there should be passage of the MFL-C tool."¹⁸ Consistent with that assessment, on February 24, after replacing the malfunctioning initial MFL-C tool, Southern Star ran the replacement MFL-C tool and was not made aware of any stoppages. The tool needed to be run again, however because a pinched sensor wire prevented obtaining all the required data.¹⁹

¹⁶ Violation Report, Exhibit A at 25, 28-29. The statement in the Violation Report that "information on previous tool stoppages and their locations was not provided to the ILI vendor" (Violation Report, Exhibit A at 24, 27) fails to acknowledge the correspondence between Southern Star and the ILI vendor regarding possible 2010 stoppages and the ILI vendor's analysis of the 2010 data.

¹⁷ Violation Report, Exhibit A at 26, 29.

¹⁸ *Id.* at 26, 30.

¹⁹ Violation Report, Exhibit A at 26, 30.

The Notice alleges that, when the MFL-C tool was run again on February 26, 2021, Southern Star did not communicate to the ILI vendor critical operating parameters to ensure proper control of the ILI and did not verify that the minimum operating pressure of the ILI tool was achievable under the line's MAOP. These allegations disregard all the information Southern Star provided to the ILI vendor before the February 2021 ILIs were conducted and the correspondence and communications that occurred before and during the tool runs.

In November 2020, Southern Star submitted the vendor questionnaire providing all necessary operating parameters, including flow rates, minimum and maximum pressures, and MAOP.²⁰ None of this information had changed at the time of the second MFL-C tool run. In addition, Southern Star and the ILI vendor corresponded about previous tool stoppages that may have occurred in 2010, and the vendor analyzed data related to those runs.²¹ Southern Star also provided gauge plate pictures and convened a pre-job meeting with the ILI vendor weeks before the ILIs were run.²² The allegation that Southern Star did not communicate critical operating parameters to the ILI vendor is inaccurate and unsupported.

The allegations also do not account for the four days of communication and coordination between Southern Star and the ILI vendor as they worked together to run the MFL-A/XT tool, troubleshoot the initial malfunctioning MFL-C tool, and run the replacement MFL-C tool on both February 24 and February 26. Throughout these four days, field personnel from both companies engaged in on-the-ground, real-time exchanges of information during and after each ILI run. Personnel evaluated information regarding Line FM operating conditions (i.e. pressures and flow rates) before each tool was launched and while it was traveling the pipeline.

On February 24, the vendor and Southern Star performed the first run of the replacement MFL-C tool. The pipeline's operating pressure during the run was 350 psig, which was lower than the line's MAOP of 400 psig, and the flow rate was 4.25 mmcf/d. While the ILI experienced one known speed excursion, the passage of the tool through the pipeline proceeded without any known stoppages.

After repairing the faulty sensor, Southern Star and vendor ran the same tool a second time on February 26. To prevent another speed excursion, Southern Star decided to run the tool at a flow rate of 3.25 mmcf/d and at the same operating pressure of 350 psig. The vendor's on-site representative, who had the best understanding of the capabilities of the ILI tool and who had been present during the February 24 tool run, agreed with this approach and launched the tool. Given the tool's successful passage on February 24, neither Southern Star nor the ILI vendor had reason to believe that the second run on February 26 would experience a stoppage. The Notice's allegation that Southern Star did not verify that the minimum operating pressure of the ILI was achievable given Line FM's MAOP is belied by the fact that the first run of the MFL-C ILI, which was performed at an operating pressure below the pipeline's MAOP, experienced no stoppage. The allegation is not supported by either the evidence contained in the Violation Report or the events surrounding the ILI runs.

²⁰ Attachment 3 at 8, 9.

²¹ Violation Report at 25, 26, 28, 29, 30.

²² *Id.* at 25, 28.

PHMSA also has not demonstrated that Southern Star failed to approve and follow a pigging plan in advance of the ILI runs on Line FM. Southern Star's pigging plan, which was approved on February 23, 2021, provided a detailed description of Line FM, including MAOP, expected pressure range, expected flow range, differential required to launch, estimated run time, and estimated run speed.²³ The plan also indicated that the "[v]endor is aware of the bend and has adjusted tool appropriately."²⁴ The pigging plan also identifies a number of risks, including a "Stuck Pig," and sets forth several contingencies based on those identified risks.²⁵ Actions identified to address a lodged tool included "[i]ncrease differential to flip cups to allow for gas to bypass" and "[r]emove Pig by cutout."²⁶ Southern Star and the vendor discussed these actions during their planning meetings leading up to the ILI runs. When the MFL-C tool became stationary during the ILI run, the actions taken to dislodge the ILI were consistent with the actions described in the pigging plan. The Notice's assertion that Southern Star did not comply with Section 7.2.1 of its procedures by not having a pigging plan that addressed options for dislodging a stationary ILI is unsupported.

Southern Star regrets that an incident occurred on Line FM causing injury to one of its employees. The fact that an incident occurred as a result of the stoppage of the ILI tool does not necessarily mean that Southern Star did not comply with its ILI inspection procedures, API Std. 1163 or § 192.493.²⁷ PHMSA has the burden of demonstrating that Southern Star has violated the pipeline safety regulations.²⁸ PHMSA does not satisfy its burden if its evidence is outweighed by the evidence and reasoning provided by a Respondent.²⁹

Southern Star has demonstrated that it communicated critical operating parameters to the ILI vendor and that the information did not change before the February 26, 2021 tool run. In addition, based on the February 24 run of the MFL-C tool, Southern Star verified that passage of that ILI tool was achievable at an operating pressure below Line FM's MAOP. Southern Star also had an approved pigging plan for this ILI run on Line FM. PHMSA has not met its burden of proving that Southern Star did not comply with Section 7.2.1, 7.3.3 or 8.3.7 of its ILI

²³ Attachment 1 at 2, 3.

²⁴ *Id.* at 2.

²⁵ *Id.* at 4-5, 12.

²⁶ *Id.* at 5, 12.

²⁷ *ExxonMobil Pipeline Co. v. U.S. DOT*, 867 F.3d 564, 577-78 (5th Cir. 2017) (Stating that the fact that an oil release occurred "does not necessarily mean that ExxonMobil failed to abide by the pipeline integrity regulations" and that such an interpretation would create a strict-liability regime not authorized by Congress under the Pipeline Safety Act).

²⁸ 49 U.S.C. § 60117(b)(1)(F) (2018), as amended by the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020, Pub. L. No. 116-260, div. R, title I, § 108(a)(2), 134 Stat. 2221, 2223 (Dec. 27, 2020). *See* 49 C.F.R. § 190.213(a)(1) (2021). *E.g.*, *ExxonMobil Pipeline Co.*, Final Order, CPF No. 4-2017-5027, 2019 WL 3734516, **4, 5 (Apr. 3, 2019) (withdrawing allegation because PHMSA's evidence did not establish a violation).


²⁹ *Butte Pipeline Co.*, Final Order, CPF No. 5-2007-5008, 2009 WL 3190794, *1 (Aug. 17, 2009) ("PHMSA carries the burden of proving the allegations set forth in the Notice, meaning that a violation may be found only if the evidence supporting the allegation outweighs the evidence and reasoning presented by Respondent in its defense.") (internal citation omitted).

inspection Procedures, API Std. 1163, or §192.493. Southern Star requests that the allegation in Item 1 and the proposed civil penalty be withdrawn.³⁰

II. CONCLUSION

For the reasons set forth above, Southern Star respectfully requests that PHMSA withdraw the allegations in Item 1 and the proposed civil penalty.

Respectfully submitted,

DocuSigned by:

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Charles Crews
Executive Vice President and Chief Operations Officer

March 20, 2023

³⁰ *ExxonMobil*, 2019 WL 3734516 at **4, 5 (withdrawing allegation because PHMSA's evidence did not establish a violation); *ANR Pipeline Co.*, Final Order, CPF No. 3-2011-1011, 2012 WL 7177134, *3 (Dec. 31, 2012) (finding that evidence in violation report was insufficient).