November 18, 2024

VIA ELECTRONIC MAIL TO: wayne_simmons@kindermorgan.com

Mr. Wayne Simmons
Chief Operating Officer, Products Pipelines
Kinder Morgan, Inc.
1001 Louisiana Street, Suite 1000
Houston, Texas 77002

Re: CPF No. 5-2023-003-NOPV

Dear Mr. Simmons:

Enclosed please find the Final Order issued in the above-referenced case. It withdraws the Notice of Probable Violation issued on April 11, 2023. Accordingly, this case is now closed. Service of the Final Order by e-mail is effective upon the date of transmission and acknowledgement of receipt as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. Dustin Hubbard, Director, Western Region, Office of Pipeline Safety, PHMSA
Mr. Zach Ragain, Director, Engineering, Codes and Standards, Kinder Morgan, Inc., zach_ragain@kindermorgan.com
Mr. Matthew Posey, Manager, Codes and Standards, Kinder Morgan Inc., matthew_posey@kindermorgan.com

Ms. Mary Clair Lyons, Associate General Counsel, Environmental Health and Safety, Kinder Morgan, Inc., mary_lyons@kindermorgan.com
Ms. Annie Cook, Counsel to Kinder Morgan, Inc., Bracewell, LLC, annie.cook@bracewell.com

CONFIRMATION OF RECEIPT REQUESTED

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

In the Matter of	)	
Kinder Morgan, Inc.,	)	**CPF No. 5-2023-003-NOPV**
Respondent.	)	

FINAL ORDER

From October 31, 2022 through November 4, 2022, 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 Kinder Morgan, Inc.'s (KM or Respondent) SFPP Pipeline which runs from Long Beach, California to Yuma, Arizona. Respondent's Santa Fe Products Pipeline Units 33455 and 33515 transport petroleum products approximately 327.5 miles from Watson Station to the Arizona-California border.

As a result of the inspection, the Director, Western Region, OPS (Director), issued to Respondent, by letter dated April 11, 2023, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that KM had violated 49 C.F.R. § 195.583(c) and proposed assessing a civil penalty of $81,500 for the alleged violation. The Notice also proposed ordering Respondent to take certain measures to correct the alleged violation.

KM responded to the Notice by letter dated May 11, 2023 (Response). KM contested the allegation and requested an informal hearing. KM submitted additional written material on February 5, 2024 (Pre-hearing submission). A hearing was subsequently held on February 14, 2024, in Lakewood, Colorado before a Presiding Official from the Office of Chief Counsel, PHMSA. At the hearing, Respondent was represented by counsel. After the hearing, Respondent provided additional written material for the record by letter dated March 15, 2024 (Post-hearing submission). The Director provided a recommendation on April 15, 2024 (Recommendation) and KM submitted a reply to the Recommendation on May 10, 2024 (Reply).

WITHDRAWAL OF ALLEGATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195, as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.583(c), which states:

> **§ 195.583 What must I do to monitor atmospheric corrosion control?**
> (a)…
> (c) If you find atmospheric corrosion during an inspection, you must provide protection against the corrosion as required by § 195.581.

The Notice alleged that Respondent violated 49 C.F.R. § 195.583(c) by failing to protect against atmospheric corrosion as required. Specifically, the Notice alleged that atmospheric corrosion was present on the LS-120 pipeline at a span crossing Compton Creek. The Notice also identified "areas of concern" at the Colton Station.

In its Response and at the hearing, KM contested the proposed violation in the NOPV in its entirety, claiming it had performed atmospheric corrosion inspections on a timely basis and that the pipe spanning Compton Creek did not contain atmospheric corrosion but instead a light surface oxide. KM claims that because it considers the corrosion identified by PHMSA to be merely light surface oxide, the pipeline is exempt from the coating requirements of § 195.581(a) pursuant to § 195.581(c).

PHMSA's atmospheric corrosion regulations allow a pipeline operator to inspect its onshore aboveground pipelines every three years for atmospheric corrosion. They also include an exemption in § 195.581(c) stating in relevant part that operators:

> (c)…need not protect against atmospheric corrosion any pipeline for which you demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will—
>
> (1) Only be a light surface oxide; or
>
> (2) Not affect the safe operation of the pipeline before the next scheduled inspection.

In other words, if atmospheric corrosion examined by an operator during one of its three-year inspections is a light surface oxide, the regulations allow an operator to defer cleaning and repainting that area until the next scheduled inspection that finds atmospheric corrosion that has progressed beyond light surface oxidation (i.e., heavy oxidation and/or pitting has begun).

With respect to the photographs relied on as evidence by OPS, it is quite correct that these photographs clearly show the presence of surface oxidation on the span crossing Compton Creek. The photographs show dark, discolored areas where the paint had obvious deficiencies at the time of the OPS inspection. It should not have been a surprise to KM that OPS questioned whether these areas should have been cleaned and painted at the previous three-year interval.[1]

In its Response and at the hearing, KM argued that the darkness and discoloration of the areas in the photographs where the paint had deteriorated was not inconsistent with light surface oxidation and did not automatically indicate that significant atmospheric corrosion was present. Respondent stated:

> SFPP's evidence indisputably confirms that the pipeline locations at issue exhibited nothing more than a light oxide and there was no condition that would affect the safe operation of the pipeline before the next inspection. Under SFPP's procedures and consistent with 49 C.F.R. §§ 195.583(c) and 195.581(c), a requirement to recoat or repair the coating was not and is not triggered today.
>
> Knowledgeable, trained, and experienced SFPP corrosion engineers and technicians certificated by AMPP in coatings, corrosion assessments, cathodic protection, and corrosion control practices performed comprehensive atmospheric corrosion inspections on the areas at issue (see Table 1). The corrosion technicians maintain operator qualifications (OQs) in atmospheric corrosion monitoring, inspection of coatings, surface preparation, application and repair, and they received extensive initial refresher, and on-the-job training from SFPP. "[T]hey, through the year, will conduct [100s], if not [1,000s] of individual site inspections across the region." Their conclusions were based on investigation, testing, and experience with this very pipeline at this exact location and environment in arid southern California, as evidenced by SFPP's atmospheric corrosion control procedures and criteria, corrosion technician training and qualifications, and results of regular atmospheric corrosion monitoring.
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> In contrast to PHMSA's cursory visual observations, the detailed inspections conducted by qualified SFPP technicians were performed in close proximity to the pipe, in consideration of their experience with the pipeline environment, and with access to measurement tools as needed (pit gauge, fine tip hook probe, ruler, sandpaper).[2]

OPS argued that KM's conclusion that the pipe spanning Compton Creek only evidenced a light surface oxide was based on evaluations Respondent conducted only after the OPS inspection.[3] It should be noted, however, that this is not a case where the operator failed to conduct its three-year atmospheric corrosion inspection. KM stated that:

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[1] PHMSA Violation Report, Exhibit A.

[2] Post-hearing Submission, at 8.

[3] Recommendation, at 1.

> Each of SFPP's inspections of the relevant areas referenced in the NOPV, performed by qualified corrosion experts, have repeatedly confirmed that the condition of the pipe has been properly designated as "fair"[3] or "good"[4] as defined by SFPP's procedures. *Attachment B: SFPP Procedure L-O&M 918, Inspection for Atmospheric Corrosion (Rev 9-11-2019)*. Under SFPP's procedures and consistent with 49 C.F.R. § 195.583(c), designations of "fair" and "good" do not trigger a requirement to repaint the relevant pipeline segment. Table 1 below details the inspections on the LS-120 Compton Creek span and Attachment C includes a table summarizing the inspections performed at the Colton Station. These tables are supported by three affidavits of corrosion SMEs which detail their inspections in these areas, the corrosion detection and measurement tools employed, and the experience and considerations brought to bear regarding the pipeline environment. The affidavits also attach the documentation for the inspections described.
>
> As it relates to the Compton Creek span, qualified corrosion technician Britt Mars performed close inspections in 2019, 2020, and 2021 with the use of a ladder. During the inspections, he had a variety of tools available to use as needed and considered the pipe environment, each time confirming the grade of "Fair." *Attachment D: Affidavit of Britt Mars (Feb. 2, 2024)*. Britt Mars recommended that SFPP schedule a more thorough inspection of the span with the use of special equipment, although SFPP was unable to perform such inspections in 2022 because the equipment delivered by the contractor did not facilitate a safe work environment.[4]

While the Notice reflects OPS' disagreement with Respondent's judgment that cleaning and painting the Compton Creek span would not be necessary until the next three-year interval, it does not mean that Respondent never made such a judgment at the required interval.

Following the OPS inspection, KM took various additional actions and conducted supplemental inspections to confirm whether its judgment that the areas identified by OPS on the span crossing Compton Creek qualified for the surface oxidation exemption for another three years was justified. Respondent stated that:

> A qualified certificated corrosion professional, Mr. Michael Pyle, promptly inspected the areas identified by PHMSA within two months pursuant to SFPP's corrosion procedures and nearly three months prior to receipt of the NOPV on April 11, 2013. Mr. Pyle's January 2023 comprehensive inspection of the span validated the prior atmospheric corrosion ratings of "fair," with "no visible pitting, no measurable pitting with the analog pit gauge, and no measurable wall loss with the ultrasonic thickness gauge." Given the Region's concerns, Mr. Pyle's inspection was facilitated with a ladder and included a hands-on evaluation of the areas in question, cleaning of the pipe surface with fine grit sandpaper, use of an

[4] Pre-hearing Submission, at 5.

> analog pit gauge, and ultrasonic wall loss tool measurement for the purpose of identifying any measurable corrosion. Further, results of ILI assessment performed in the middle of the Region's audit on November 1, 2022 confirmed again that there was no measurable wall loss in these areas that could affect the safe operation of the pipe before the next inspection, no safety hazard, and no significant risk to safe operation.
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> In November of 2023, qualified AMPP certificated SFPP corrosion professional, Mr. Walter Yarbrough, performed a visual and hands-on evaluation of the Compton Creek span and the Colton Station areas at issue, including ultrasonic wall loss tool measurements at the request of the Western Region. This comprehensive inspection and analysis confirmed the prior atmospheric corrosion rating of "fair," with the results of pit gauge and ultrasonic wall loss measurement tool finding that there was no measurable wall loss. SFPP also engaged third-party corrosion expert, Mr. Garrity, to perform a review and analysis of the pipeline areas at issue which was undertaken in January of 2024, to independently verify SFPP's prior atmospheric corrosion monitoring inspections and the Region's allegations in the NOPV and PSVR. Mr. Garrity observed the areas firsthand with the assistance of a ladder, employing measurement tools, SCAT sampling, pH sampling, and consideration of the pipeline environment. His comprehensive evaluation of the Compton Creek span and Colton Station further confirmed that there was no actionable atmospheric corrosion under the PHMSA regulations, no measurable wall loss, and nothing beyond a light surface oxide in certain areas.[5]

In addition, KM provided information showing that after the OPS inspection, it conducted an ultrasonic wall loss measurement on the area identified by OPS to further confirm that there was no metal loss or pitting on the pipe surface.[6]

Respondent also pointed out that the relevant rulemaking provided pipeline operators with significant flexibility when deciding to coat pipelines:

> Final § 195.581 gives operators flexibility when deciding to coat pipelines where atmospheric corrosion will be limited to a light surface oxide, or will not affect the safe operation of the pipeline before the next scheduled inspection.
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> Final Rule, *Controlling Corrosion on Hazardous Liquid and Carbon Dioxide Pipelines*, 66 Fed. Reg. 66994, 67001 (Dec. 27, 2001). In response to a public commenter that opposed the requirement that would allow pipe to "remain unprotected and unrepaired," the rulemaking preamble further clarified (*id.* (emphasis added)):

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[5] Reply, at 10.

[6] Post-hearing Submission, at 8.

> [T]he need for coating would be reviewed again in 3 years. A 3-year delay in coating a pipeline judged to be safe should not jeopardize public safety, considering that atmospheric corrosion generally progresses at a slow rate. Therefore, we did not adopt [the public commenter's] comment. Nevertheless, mindful of [the public commenter's] concern, we edited the final wording to clarify that any decision not to coat a particular pipeline must be supported by testing, investigation, or experience relevant to that pipeline.[7]

KM also noted that the enforcement guidance that was available about how heavy the atmospheric corrosion must be to trigger the cleaning and coating requirement was far more supportive of its position than that of OPS:

> PHMSA guidance also provides that a light surface oxide means "general oxidation of the metal where there is no associated loss of metal" or "the slow rusting of pipe which is not yet considered to be atmospheric corrosion because there is no evidence of metal loss." *PHMSA Corrosion Enforcement Guidance Part 195* at 87, 90 (Jun. 22, 2016). Consistent with this guidance, PHMSA has explained with respect to the corollary Part 192 provision, "that a light surface oxide is a non- damaging form of corrosion that does not need remedial action" and that it "believes operators should have the option of assigning resources to problems that pose a higher near-term risk." *See* Final Rule, *Further Regulatory Review: Gas Pipeline Safety Standards*, 68 Fed. Reg. 53895, 53897-98 (Sept. 15, 2003); *see also* Notice of Proposed Rulemaking, *Controlling Corrosion on Hazardous Liquid and Carbon Dioxide Pipelines*, 65 Fed. Reg. 76968, 75978 (Dec. 8, 2000) (rejecting a request to "except all but 'active corrosion' from the atmospheric corrosion protection requirement" and explaining "[t]he intent of the recommendation is to distinguish harmless rust from serious metal loss"). PHMSA has also recognized that light surface oxide may even be beneficial and protective of the pipe surface. *See PHMSA Corrosion Enforcement Guidance Part 195* at 90 (Jun. 22, 2016) ("Some corrosion experts consider a light surface oxide to be protective to the metal surface.").[8]

Having considered Respondent's arguments, it should be emphasized that under the regulations, pipeline operators are not allowed to wait until significant pitting and metal loss has occurred before taking any action. After all, the purpose of the atmospheric corrosion regulations is to prevent any significant corrosion from occurring. At the same time, the regulations did not have to include an exemption for surface oxidation. They could have simply said that any indication that atmospheric corrosion had begun to develop triggered the cleaning and coating requirement. Moreover, the regulations do not articulate how a light surface oxide is to be distinguished from more advanced atmospheric corrosion such as where pitting has begun KM's approach of lightly

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[7] Pre-hearing submission, at 3.

[8] *Id*.

hand sanding the oxidized areas to ensure they qualified as light oxidation does not appear to be impermissible under the regulations.

Finally, KM's well qualified third-party expert determined that in this instance the presence of peeling paint did not equate to the presence of significant corrosion:

> There's no question that the paint is peeling on this [Compton Creek] span, but truth be told, this span doesn't even need a paint or a coating. It has no measurable wall loss. It's not in an environment that's conducive to any type of accelerated atmospheric corrosion, and nothing has been found by either SFPP or PHMSA that would suggest that there is a condition that adversely affects the safe operation of that pipeline, and the same is true for what I looked at […] Colton Station.
>
> Mr. Garrity also addressed PHMSA's substantial and misplaced reliance on photographs, explaining that "corrosion is three-dimensional. So when we're looking at photographs…there needs to be a recognition that it's very difficult to identify metal loss from a photograph unless there's a significant cavity or reduction in the wall loss itself." Further, Mr. Garrity clarified in his report and at the hearing that the mechanism of corrosion resulting in external metal loss beneath disbonded coating is not feasible:
>
> It also important to note that under the observed peeling coating conditions, the mechanism of corrosion resulting in external metal loss under disbonded coatings is not feasible due to the absence of a capillary path between an anaerobic anodic condition under the coating and an adjacent oxygenated cathodic condition where the coating has peeled off.[9]

OPS did not refute this information, but maintained its view that KM was "unable to demonstrate that atmospheric corrosion did not exist" on the span crossing Compton Creek at the time of the 2022 OPS inspection.[10] However, it was OPS that had the burden of proving its allegation that atmospheric corrosion that went beyond light surface oxidation was present on the discolored areas on the Compton Creek span at the time of its inspection. While OPS was of the opinion that the photographs meant the level of surface oxidation did not qualify for the exemption, OPS never made a persuasive evidentiary showing to that effect (such as by the use of a pit gauge by the OPS inspector or evidence of an attempt at hand sanding that did not remove the surface oxidation), nor did OPS make a showing that the darkness of the discoloration was dispositive in this regard.

Accordingly, after considering all of the evidence, I find that OPS did not meet its burden of proving the specified allegation. Based upon the foregoing, I hereby order that the Notice be withdrawn.

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[9] Post-hearing submission, at 13.

[10] Recommendation, at 4.

ASSESSMENT OF PENALTY

Item 1: The Notice proposed a civil penalty of $81,500 for Respondent's alleged violation of 49 C.F.R. §195.583(c). Since the Notice has been withdrawn, the proposed penalty is not assessed.

November 18, 2024

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Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Date Issued