

October 6, 2020

VIA ELECTRONIC MAIL TO: hpefanis@paalp.com

Mr. Harry Pefanis
President
Plains Pipeline, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

Re: CPF No. 4-2019-5004

Dear Mr. Pefanis:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation, assesses a civil penalty of \$75,600, and specifies actions that need to be taken by Plains Pipeline, LP to comply with the pipeline safety regulations. The penalty payment terms are set forth in the Final Order. When the civil penalty has been paid and the terms of the compliance order completed, as determined by the Director, Southwest Region, this enforcement action will be closed. Service of the Final Order by electronic mail is effective upon the date of transmission, 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: Ms. Mary McDaniel, Director, Southwest Region, Office of Pipeline Safety, PHMSA
Mr. Wm. Dean Gore, Jr., Vice President, Environmental & Regulatory Compliance,
Plains Pipeline, LP, dgore@paalp.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

Plains Pipeline, LP,

Respondent.

CPF No. 4-2019-5004

FINAL ORDER

From August 7 through 11, 2017, pursuant to 49 U.S.C. § 60117, representatives 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 Plains Pipeline, LP (Plains or Respondent), in Midland, Texas. Plains owns and operates a network of hazardous liquid pipeline transportation, terminalling, storage, and gathering assets in the United States and Canada.¹

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated January 31, 2019, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order, which also included a warning pursuant to 49 C.F.R. § 190.205 (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that Plains had committed three violations of 49 C.F.R. Part 195 and proposed assessing a civil penalty of \$75,600 for one of the alleged violations. The Notice also proposed ordering Respondent to take certain measures to correct the alleged violations. The warning item required no further action but warned the operator to correct the probable violation or face possible future enforcement action.

After requesting and receiving an extension of time, Plains responded to the Notice by letter dated May 3, 2019 (Response). The company contested two of the allegations of violation, and requested that the proposed compliance order be modified or eliminated and the proposed civil penalty be reduced or eliminated. Respondent did not request a hearing and therefore has waived its right to one.

FINDINGS OF VIOLATION

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

¹ Plains website, available at <https://www.plainsallamerican.com/> (last accessed September 28, 2020).

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.214(a), which states:

§ 195.214 Welding procedures.

(a) Welding must be performed by a qualified welder or welding operator in accordance with welding procedures qualified under section 5, section 12, Appendix A or Appendix B of [American Petroleum Institute Standard (API Std)] 1104 (incorporated by reference, *see* § 195.3), or Section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC) (incorporated by reference, *see* § 195.3). The quality of the test welds used to qualify the welding procedures must be determined by destructive testing.

The Notice alleged that Respondent violated 49 C.F.R. § 195.214(a) by failing to perform welding in accordance with welding procedures qualified under Section 5, Section 12, or Appendix A or B of API Std 1104. Specifically, the Notice alleged that Plains failed to construct its Cotton Draw Pipeline, which was built with API 5L X52 pipe, using qualified welding procedures under Section 5 of API Std 1104 for this type of pipe.

Respondent did not contest this allegation of violation.² Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 195.214(a) by failing to perform welding in accordance with welding procedures qualified under API Std 1104.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. § 195.222(a), which states:

§ 195.222 Welders and welding operators: Qualification of welders and welding operators.

(a) Each welder or welding operator must be qualified in accordance with section 6, section 12, Appendix A or Appendix B of API Std 1104 (incorporated by reference, *see* § 195.3), or section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC), (incorporated by reference, *see* § 195.3) except that a welder or welding operator qualified under an earlier edition than listed in § 195.3, may weld but may not requalify under that earlier edition.

The Notice alleged that Respondent violated 49 C.F.R. § 195.222(a) by failing to use qualified welders during welding activities. Specifically, the Notice alleged that production welds on Plains' Cotton Draw pipeline were welded by 13 welders who were not properly qualified under API Std 1104.

In its Response, Plains contested this allegation of violation. It argued that the 13 welders referenced in the Notice were qualified to perform welds under its procedure *CS-G4265L205*,

² In its Response, Plains stated that its “welding procedures CS-G4265M211 and CS-G4265L205 were qualified by welding API 5L X42 to X65 pipe, and also confirms that these welding procedures were applied to API 5L X52 pipe for the Cotton Draw Pipeline. Plains recognizes that this is a violation of the base material groupings of API 1104 Section 5.4.2.2.”

which Plains argued was requalified to demonstrate that it met all the requirements of API Std 1104 to produce acceptable welds with sufficient mechanical properties for “the base material group consisting of greater than X42 but less than X65 pipe.”³ Plains argued that substitution of X52 pipe did not result in uncertainty in the welder’s skill or range of qualification since base material is not an essential variable.⁴

I disagree. Welders cannot be qualified on an unqualified procedure. API Std 1104 Section 6.1 states that “[t]he purpose of the welder qualification test is to determine the ability of welders to make sound butt or fillet welds *using previously qualified procedures*”⁵ (emphasis added). In its Response to Item 1, Plains did not contest that it violated § 195.214(a) by failing to perform welding in accordance with welding procedures qualified under API Std 1104. Therefore, since Plains used unqualified welding procedures during welding activity on X52 pipe on the Cotton Draw Pipeline, and the welders who performed the work were qualified to that same procedure, the welders were not qualified pursuant to § 195.222(a). Plains’ assertion that subsequent testing demonstrated the sufficiency of the welds does not negate the underlying violation. Accordingly, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.222(a) by failing to use qualified welders during welding activity on its Cotton Draw Pipeline.

Item 3: The Notice alleged that Respondent violated 49 C.F.R. § 195.430, which states:

§ 195.430 Firefighting equipment.

Each operator shall maintain adequate firefighting equipment at each pump station and breakout tank area. The equipment must be-

- (a) In proper operating condition at all times;
- (b) Plainly marked so that its identity as firefighting equipment is clear;
and
- (c) Located so that it is easily accessible during a fire.

The Notice alleged that Respondent violated 49 C.F.R. § 195.430 by failing to maintain adequate firefighting equipment at each pump station. Specifically, the Notice alleged that Plains failed to have a fire extinguisher at Section 17 where the Cotton Draw Pipeline originates and a pump is located. Further, at the line’s termination site where pumps are located, the company also failed to have fire extinguishers with inspection tags showing that they were in proper operating condition. Finally, the Notice alleged that Plains could not provide records demonstrating that the fire extinguishers had been inspected pursuant to the company’s written procedures.⁶

³ Response, at 4.

⁴ “Essential variables” are defined as welding variables that have a profound influence on the strength and mechanical properties of the weld. A welding procedure must be requalified whenever there is an essential variable change.

⁵ American Petroleum Institute (API) Standard 1104, “Welding of Pipelines and Related Facilities,” 20th ed., Oct. 2005, (including errata/addendum (July 2007) and errata 2 (2008)) at Section 6.1.

⁶ According to the Notice, Plains’ *Procedure P-195.430* requires that all firefighting equipment be inspected monthly.

In its Response, Plains contested this allegation of violation. The company noted that at the time of the PHMSA inspection, these sites were remote and unstaffed and that “adequate fire protection was provided by portable handheld fire extinguishers of various sizes dependent on the type of Plains operations and maintenance vehicle.”⁷ Plains stated that its staff carried portable fire extinguishers that could be used to control small, incipient fires in emergencies and that adequate equipment “was present any time operations and maintenance personnel were on site.”⁸ Finally, the company noted that after the PHMSA inspection, it installed fire extinguishers at the requisite sites and amended its procedures to require the installation of adequate firefighting equipment prior to operation.⁹

I do not find the additional information and explanations provided by Plains to be persuasive. First, there is no exception to the requirement for maintaining adequate firefighting equipment if the location is remote or unstaffed. Plains fails to meet its regulatory obligation by providing firefighting equipment only when its staff is present on site. The regulation requires that adequate equipment be maintained “at each pump station and breakout tank area,” not in vehicles or only when company personnel are on site. Second, Plains’ post-inspection remedial measures, including installing fire extinguishers and amending its procedures, do not mitigate the underlying violation. Accordingly, after considering all of the evidence, I find that Respondent violated 49 C.F.R. § 195.430 by failing to maintain adequate firefighting equipment at each pump station on the Cotton Draw Pipeline.

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

ASSESSMENT OF PENALTY

Under 49 U.S.C. § 60122, Respondent is subject to an administrative civil penalty not to exceed \$200,000 per violation for each day of the violation, up to a maximum of \$2,000,000 for any related series of violations.¹⁰ In determining the amount of a civil penalty under 49 U.S.C. § 60122 and 49 C.F.R. § 190.225, I must consider the following criteria: the nature, circumstances, and gravity of the violation, including adverse impact on the environment; the degree of Respondent’s culpability; the history of Respondent’s prior offenses; any effect that the penalty may have on its ability to continue doing business; and the good faith of Respondent in attempting to comply with the pipeline safety regulations. In addition, I may consider the economic benefit gained from the violation without any reduction because of subsequent damages, and such other matters as justice may require. The Notice proposed a total civil penalty of \$75,600 for the violations cited above.

⁷ Response, at 6.

⁸ *Id.*

⁹ *Id.*

¹⁰ These amounts are adjusted annually for inflation. *See* 49 C.F.R. § 190.223.

Item 2: The Notice proposed a civil penalty of \$75,600 for Respondent's violation of 49 C.F.R. § 195.222(a), for failing to use qualified welders during welding activity on its Cotton Draw Pipeline. In its Response, Plains argued that if this item were not reduced to a warning item, then the penalty should be reduced for several reasons. First, under Section E4 of the Violation Report, the company argues that the nature of the non-compliance should be considered a record-keeping, rather than an "activities," violation. I disagree. Plains did not simply fail to maintain necessary records. Instead, the company performed welding activity using unqualified welders.

Second, Plains argued that the duration of the violation under the "gravity" portion of Section E5 of the Violation Report should be amended from "greater than 10 days" to a single day, since welding qualification takes less than one day and the welds were all sound. This item, however, does not allege a violation of a one-day qualification testing process. Instead, it involves welding activities performed by unqualified welders, a non-compliance that persisted for a period of time longer than 10 days.

Finally, Plains argued that the instances of violation under Section E6 of the Violation Report should be reduced from 13 to one. However, as noted above, I found that the 13 welders who performed welding activity on the Cotton Draw Pipeline were not qualified. Therefore, since 13 unqualified welders individually performed welding on the pipeline, the number of instances of violation is 13. Plains also alleged that the selection for the gravity assessment criteria under Section E6 should be changed from "the violation occurred in areas that are not in a high consequence area (HCA) or not in an HCA 'could affect' segment" to "the violation occurred; however, pipeline safety was minimally affected." I do not believe, however, that pipeline safety was minimally impacted. Proper welding is critical to the safe operation of a hazardous liquid pipeline, and must be performed using qualified welders and qualified procedures. Plains failed to satisfy both requirements. Therefore, I find no compelling reason to lower the gravity selection.

Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of **\$75,600** for violation of 49 C.F.R. § 195.222(a).

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require such payment to be made by wire transfer through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. Detailed instructions are contained in the enclosure. Questions concerning wire transfers should be directed to: Financial Operations Division (AMK-325), Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 S MacArthur Blvd, Oklahoma City, Oklahoma 79169. The Financial Operations Division telephone number is (405) 954-8845.

Failure to pay the \$75,600 civil penalty will result in accrual of interest at the current annual rate in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in a district court of the United States.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Items 1 and 3 in the Notice for violations of 49 C.F.R. §§ 195.214(a) and 195.430, 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.

With regard to the violation of § 195.214(a) (Item 1), Respondent argued that the compliance terms should be withdrawn or modified.¹¹ Specifically, Plains alleged that, despite not using qualified welding procedures for API 5L X52 pipe, the welds on its Cotton Draw Pipeline have the required API Std 1104 strength and mechanical properties to “produce a sound and satisfactory girth weld” for joining the X52 pipe and do not pose a safety hazard.¹² Specifically, Plains explained that in November 2015, it requalified one of the welding procedures utilized during the Cotton Draw Pipeline construction, *CS-G4265L205*, using 20-inch diameter by 0.500 wall thickness X60 pipe, to demonstrate that the welding procedure met all requirements of API Std 1104 to produce acceptable welds with sufficient mechanical properties for the base material group consisting of greater than X42 but less than X65 pipe.¹³ Plains then conducted additional testing using these newly qualified procedures to confirm that the test welds met the criteria in API Std 1104.¹⁴ Further, Plains noted that after the commissioning period, pipeline failure rates decrease, and girth welds are unlikely to fail unless subjected to severe axial strains from external loads.¹⁵

Plains also argued that removal and destructive testing of “in service” welds, as proposed by the Director in the Proposed Compliance Order, would be unnecessary, unjustified, and result in a greater safety threat to people and the environment than the actions already taken by the company to demonstrate the safety margins of the X52 girth welds.¹⁶

In her Region Recommendation, the Director noted that although Plains attempted to requalify the welding procedure used during construction to demonstrate that the welds on the Cotton Draw Pipeline met the criteria in API Std 1104, Plains changed an essential variable in its new welding procedures, which nullifies the testing results. Specifically, Plains changed the range of

¹¹ Plains also argued that Section E3-Proposed Action in the Violation Report should be changed from “Proposed Compliance Order” to “Warning Item” for Item 1. Response, at 1. In its Response, however, Plains did not contest this violation and confirmed that it did not use qualified welding procedures on its Cotton Draw Pipeline. Therefore, I see no reason to reduce Item 1 to a warning item.

¹² Response, at 2 and Attachment 1 (CS-G4265L205 qualification procedure).

¹³ Response, at 2.

¹⁴ *Id.*, at Attachment 1.

¹⁵ *Id.*

¹⁶ *Id.*

speed of travel, an essential variable, in its new procedure.¹⁷ Therefore, the Director recommended that Plains requalify the welding procedure used during original construction in order to confirm that its welds are safe. I agree. By changing an essential variable, the requalified test conducted by Plains in November 2015 still does not offer proof that the girth welds on the Cotton Draw Pipeline have the required strength and mechanical properties necessary for X52 pipe. In order to demonstrate the welds used were qualified, Plains must requalify the welding procedure per API 1104 using the same essential variables that most likely approximate those used to construct the Cotton Draw pipeline and replicate those conditions in a controlled test laboratory setting.

However, I agree with Plains that excavating the existing welds and performing destructive testing may impose additional, unnecessary risks such as potentially damaging adjacent pipe segments during excavation. Additionally, destructive testing will require Plains to add two new girth welds to replace each in-service weld removed for testing. I believe removal and destructive testing of existing welds should only be done if the qualification of the welding procedure that replicates the welding process used during original construction fails. In the event the welding procedure fails qualification, then Plains must destructively test a statistically significant number of girth welds on the pipeline. Any potential risk associated with excavation will be outweighed by the safety benefit gained from ensuring that the welds that could not be adequately qualified in a controlled environment still have sufficient strength to perform well in the field and do not pose a heightened risk of failure.

With regard to the violation of § 195.430 (Item 3), Respondent argued that the compliance terms should be withdrawn or modified. Specifically, Plains noted that it had amended its procedures to require installation of firefighting equipment prior to operation of any *new* pump station or breakout facility.¹⁸ However, the regulation requires this equipment “at each pump station and breakout tank area” regardless of the age of the facility.

For the above reasons, the Compliance Order is not withdrawn and is modified as set forth below.

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 § 195.214(a) (**Item 1**), Respondent must utilize project X52 pipe to qualify a welding procedure utilizing the same essential variables that were used during the construction of the Cotton Draw pipeline. The materials used to qualify the welding procedure must include the welding electrodes used during original construction. The welding procedure must be qualified per API Std 1104 three (3) times by different welders in a laboratory setting. Plains must submit its proposed qualification plan to the Director within 30 days after receipt of the Final Order. Once approved by the Director, Plains must submit documentation showing results of the weld procedure

¹⁷ Response, at Attachment 1.

¹⁸ Response, at 6.

qualification tests within five working days of the third test. Further, the Director shall be notified of the qualification date(s) 10 calendar days in advance in order to give PHMSA staff the opportunity to attend the testing on site.

If any of the welding procedure tests cannot be destructively qualified in a laboratory setting per API 1104, Plains must notify the Director in writing. Respondent must then perform destructive testing on 10 girth welds on the Cotton Draw Pipeline at locations where external forces may occur (e.g. slopes, road crossings) to show that the welds have the required strength and mechanical properties for the application. The proposed testing plan must include specific designation of the welds to be tested, proposed procedures to cut out and test the welds, and a qualified welding procedure that will be used to re-weld the pipeline. The testing plan must also include bend and tensile tests as required by API 1104. These welds must be randomly chosen throughout the construction projects timeline, given the conditions set forth above. Welds selected and test coupon locations can be chosen based upon radiography to avoid acceptable imperfections in production girth welds, which may cause erroneous mechanical test results. Results of the weld locations, weld identifications, radiograph review, tensile test data, and bend test data will be reported in writing to the Director. Plains must notify the Director in writing when girth welds are being removed from the pipeline and when coupon testing will be taking place. If any of these welds fail destructive testing, the number of welds tested must be expanded, as specified by the Director, to include an additional number of welds made by that welder.

Plains must submit its proposed testing plan to the Director within 30 days after notifying the Director that its qualification tests failed. Once approved by the Director, Plains must submit documentation showing completion of the destructive testing and weld repairs within 120 days of approval.

2. With respect to the violation of § 195.430 (**Item 3**), Respondent must further revise its procedures to require maintenance of “adequate firefighting equipment at each pump station and breakout tank area,” as required by § 195.430. This shall not be limited to *new* pump stations and breakout tank areas. Plains must submit its revised procedure to PHMSA for Director approval within 30 days after receipt of the Final Order.

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.

It is requested (not mandated) that Respondent maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. 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.

Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed \$200,000, as adjusted for inflation (49 C.F.R. § 190.223), 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.

WARNING ITEM

With respect to Item 4, the Notice alleged a probable violation of Part 195, but identified it as a warning item pursuant to § 190.205. The warning was for:

49 C.F.R. § 195.428(a) **(Item 4)** — Respondent’s alleged failure to inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

If OPS finds a violation of this provision in a subsequent inspection, Respondent may be subject to future enforcement action.

Under 49 C.F.R. § 190.243, Respondent may submit a Petition for Reconsideration of this Final Order to the Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address, no later than 20 days after receipt of service of this Final Order by Respondent. Any petition submitted must contain a statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.243. The filing of a petition automatically stays the payment of any civil penalty assessed. The other terms of the order, including corrective action, remain in effect unless the Associate Administrator, upon request, grants a stay.

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

October 6, 2020

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Date Issued