



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

1200 New Jersey Ave, S.E.
Washington, D.C. 20590

NOV 12 2015

VIA CERTIFIED MAIL AND FAX TO: 713-646-4378

Mr. Troy Valenzuela
Vice President EHS
Plains Pipeline, LP
333 Clay Street, Suite 1600
Houston, TX 77002

Re: CPF No. 5-2015-5011H

Dear Mr. Valenzuela:

Enclosed is Amendment No. 2 to the Corrective Action Order issued in the above-referenced case on May 21, 2015. It requires Plains Pipeline, LP, to take additional corrective actions with respect to Line 903 of its pipeline system. Service is being made by certified mail and facsimile. Service of the Amendment to the Corrective Action Order by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon completion of service.

Thank you for your continued cooperation in this matter.

Sincerely,

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, OPS
Director, Western Region, OPS

**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. 5-2015-5011H

AMENDMENT NO. 2 TO THE CORRECTIVE ACTION ORDER

Purpose and Background:

On May 21, 2015, the Associate Administrator issued a Corrective Action Order (CAO) under the authority of 49 U.S.C. Section 60112 to require Plains Pipeline, L.P. (Plains or Respondent), to take certain corrective actions to protect the public, property, and the environment from potential hazards associated with Line 901 (Affected Pipeline) in Santa Barbara County, California. The CAO was issued in response to a May 19, 2015 failure on the Affected Pipeline that caused a release of approximately 2500 barrels of heavy crude oil (Failure). On June 3, 2015, the Associate Administrator issued Amendment No. 1 to the CAO, which requires Plains to take certain additional corrective actions on Line 901 and Line 903. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the accident.

Additional Findings:

- Line 903 is a 30-inch diameter pipeline approximately 129.5 miles in length and is composed of three segments: Gaviota Station to Sisquoc Station (38.5 miles long); Sisquoc Pump Station to Pentland Station (76.1 miles long); and Pentland Station to Emidio Station (14.9 miles long). Line 903 crosses Santa Barbara County, San Luis Obispo County, and Kern County, California. Amendment No. 1 requires that the operating pressure of Line 903 not exceed eighty percent (80%) of the highest pressure sustained for a continuous 8-hour period between April 19, 2015, and May 19, 2015. The Pentland to Emidio segment is currently operating intermittently at low pressures in accordance with requirements of Amendment No. 1. The remaining portions of Line 903 are currently idled but are still full of crude oil.

- PHMSA's independent review of in-line inspection (ILI) tool surveys for Line 901 and 903 over the past 10 years found that anomalies were "under-called" in areas of general corrosion. Direct field examination and measurements of the anomalies revealed that the actual length and width of the anomalies were greater than the measurements predicted by the ILI tool. Specifically, on Line 901, direct measurement of the metal loss anomaly at the failure site and other anomalies excavated in 2015 showed that these anomalies were generally more significant than the ILI results indicated they would be.
- Common practice in the pipeline industry is to provide the ILI vendor with field data from direct investigation of anomalies to validate the ILI tool's detection capabilities and limitations, the accuracy with which it can locate and size anomalies, and the confidence associated with the tool's measurements. After excavating, investigating, characterizing, and measuring anomalies from the results of various ILI surveys, Plains did not share its actual field findings with the ILI vendor so that it could enhance its interpretation of the ILI data.
- PHMSA's independent review of ILI surveys from the past 10 years show that Line 903, particularly the Gaviota to Sisquoc segment, has similar corrosion characteristics as Line 901 and a number of the anomalies had characteristics consistent with the failure site. Specifically, Line 903 has both localized and larger or "general" areas of external corrosion.
- Freeport-McMoRan Oil & Gas (Freeport) operates a 37-mile pipeline system from its Hidalgo, Hermosa and Harvest offshore platforms in the Point Arguello Offshore Field that feeds into Plains' Line 903 at Gaviota Station. Freeport shut down this pipeline system on May 30, 2015, because Line 903 had ceased operation on May 28, 2015.
- Line 903 between Gaviota and Pentland Station is currently filled with raw, unprocessed crude oil from Freeport's offshore platforms. This unprocessed crude may contain water, natural gas, and other impurities that contribute to internal corrosion. According to Freeport, the biocide and rust inhibitor in this crude oil will begin to lose effectiveness around November 2015, adding to the risk of accelerated internal corrosion on Line 903.
- Due to the number of corrosion-caused anomalies identified on Line 903 in past ILI surveys, particularly on the Gaviota to Sisquoc segment, it does not appear that Plains has an effective corrosion control program and the pipe can be expected to have degraded (lost metal due to corrosion) since the last ILI survey. Furthermore, leaving crude oil in Line 903 is likely to result in an increased potential for internal corrosion as the inhibitor loses its effectiveness. The crude oil in Line 903 needs to be removed from the pipeline and the line purged with an inert gas in order to prevent further degradation of the pipeline, and eliminate the potential harm it poses from an unintended release.
- Stress corrosion cracking (SCC) or environmentally-assisted cracking can be induced on a pipeline from the combined influence of tensile stress and a corrosive medium. As noted in PHMSA's Advisory Bulletin ADB-03-05 (issued October 7, 2003), SCC is

commonly associated with disbonded coatings. Disbonded coatings may prevent the cathodic protection current used for corrosion control from reaching the pipe surface and allow an SCC-susceptible environment to form between the pipe and coating. Tape coatings and shrink wrap sleeves are both coatings susceptible to disbondment and may lead to corrosion and possibly environmentally assisted cracking or SCC. Line 903 has shrink wrap sleeves on the girth welds, which could contribute to SCC.

Determination of Necessity for Amendment to the Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is or would be hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 and the regulations promulgated thereunder provide for the issuance of a Corrective Action Order, without prior notice and opportunity for hearing, upon a finding that failure to issue the Order expeditiously would result in the likelihood of serious harm to life, property, or the environment. In such cases, an opportunity for a hearing and expedited review will be provided as soon as practicable after the issuance of the Order.

After evaluating the preliminary findings in the CAO and Amendment No. 1 and the foregoing additional preliminary findings of fact, I find that continued operation of Line 901 and Line 903 without corrective measures is or would be hazardous to life, property, or the environment. Additionally, having considered the uncertainties as to the cause of the Failure, the location of the Failure, the similarities between the characteristics of the Affected Pipeline and Line 903, the material being transported, and the proximity of the pipelines to the Pacific Ocean and environmentally sensitive areas, I find that a failure to issue this Order expeditiously to require immediate corrective action would result in the likelihood of serious harm to life, property, or the environment.

Accordingly, this Amendment to the Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

The actions required by this Amendment No. 2 to the Corrective Action Order are in addition to the requirements that apply to Respondent's Affected Pipeline under the CAO issued on May 21, 2015, and Amendment No. 1 issued on June 3, 2015.

Within 10 days of receipt of this Amendment, Respondent may contest its issuance and obtain expedited review either by answering in writing or requesting a hearing under 49 C.F.R. § 190.211, to be held as soon as practicable under the terms of such regulation, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Western

Region, OPS (Director). If Respondent requests a hearing, it will be held telephonically or in-person in Lakewood, Colorado, or Washington, D.C.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken on the Affected Pipeline or Plains' Line 903. In that event, PHMSA will notify Respondent of any additional measures that are required and another Amendment Order will be issued, if necessary. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Pursuant to 49 U.S.C. § 60112, I hereby order Plains to immediately take the following corrective actions with respect to Line 903:

1. **Empty and Purge Line 903:** Plains must empty and purge Line 903 between Gaviota and Pentland Stations and fill it with an inert gas.
 - a. Plains must submit a purge plan to the Director for review and approval within 15 days after receipt of this Order and prior to initiating purge activities.
 - b. The purge plan must include the following:
 - i. Identification and remediation of any anomalies with characteristics similar to the Line 901 failure location. During the investigation of each anomaly location, Plains must collect all appropriate data regarding the anomaly depth, length, width, and physical characteristics, including sampling of any corrosion by-products of any anomaly excavated.
 - ii. Plains must provide the vendor who performed previous ILI tool runs and analysis from 2012 to the present with the field measured data and request that the ILI vendor use the field data to re-evaluate the ILI results in order to identify any additional anomalies that must be remediated per § 195.452(h) or that have characteristics similar to the Line 901 failure location. Plains must provide a list of additional identified anomalies to the Director prior to commencing the purge.
 - iii. A step-by-step plan of how the purge will be executed, including operating pressures and implementation schedule.
 - iv. A list of enhanced preventive and mitigative measures that Plains will implement to monitor the pipeline during the purge activity, including, but not limited to, increased patrols of the pipeline right-of-way with attention to nearby drainages, culverts, and highly populated areas, pressure monitoring, and emergency response personnel's ability to respond in a reasonable timeframe.
 - v. Purging operations must commence during early daylight hours.
 - vi. Training of personnel on the local operation of Line 903 during the purge, including coordination of the Midland Control Room and training of personnel on emergency response procedures.

- c. Plains must notify the Director and local and state responders 5 business days prior to commencing the purging operations.
2. **Shutdown:** After purging Line 903, Plains must not operate Line 903 between Gaviota and Pentland stations until authorized to do so by the Director. The Pentland to Emidio segment of Line 903 may continue to operate under the 80% pressure restriction requirement of Amendment No. 1.
3. Plains must provide the Director with 5 business days' notice prior to commencing any investigation and remediation of anomalies (i.e., digs and repairs) and ILI tool runs.
4. Plains must use a third-party American Society of Non-Destructive Testing (ASNT) Level III certified contractor to complete a non-destructive testing analysis at the specific location of each ILI feature or anomaly that requires investigation and remediation under the requirements of the CAO, Amendment No. 1, and this Amendment No. 2. If the ILI feature or anomaly is at a girth weld with shrink sleeves, the contractor must perform a magnetic particle inspection of the weld area or use other appropriate technology to check for stress corrosion cracking (SCC).
5. The Corrective Action Order Documentation Report required by Item 12 of the CAO must include a summary of all inspections, assessments, evaluations, and analysis required by this Amendment No. 2 to the CAO.

The actions required by this Amendment No. 2 to the Corrective Action Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under the CAO, 49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101, *et seq.*, or under any other provision of Federal or State law.

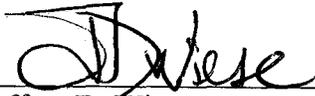
Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator shall be final.

Be advised that all material you submit in response to this enforcement action is subject to being 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).

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

In your correspondence on this matter, please refer to CPF No. 5-2015-5011H and for each document you submit, please provide a copy in electronic format whenever possible.

The terms and conditions of this Amendment No. 2 to the Corrective Action Order are effective upon receipt.



Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

NOV 12 2015

Date Issued