



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

VIA CERTIFIED MAIL AND FAX TO: (719) 520-4899

Mr. Michael Catt
Vice President, Operations
Mojave Pipeline Operating Company
2 North Nevada, Suite 1000
Colorado Springs, CO 80944

Re: CPF No. 5-2012-1008S

Dear Mr. Catt:

Enclosed is a Notice of Proposed Safety Order (Notice) issued in the above-referenced case. The Notice proposes that you take certain measures with respect to your interstate natural gas transmission system known as the Mojave Pipeline to ensure pipeline safety. Your options for responding are set forth in the Notice. Your receipt of the Notice constitutes service of that document under 49 C.F.R. § 190.5.

We look forward to a successful resolution to ensure pipeline safety. Please direct any questions on this matter to me at 720-963-3160.

Sincerely,

Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: Notice of Proposed Safety Order
49 C.F.R. §190.239

cc: Mr. Alan Mayberry, Deputy Associate Administrator for Pipeline Safety, PHMSA

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WESTERN REGION
LAKEWOOD, CO 80228**

In the Matter of

Mojave Pipeline Operating Company,

Respondent.

CPF No. 5-2012-1008S

NOTICE OF PROPOSED SAFETY ORDER

Background and Purpose

On May 2, 2012, at approximately 8:05 a.m. P.S.T., a reportable accident occurred near Arvin, California on the Mojave Pipeline, an interstate natural gas pipeline. The accident resulted in the release of natural gas into the atmosphere (the Failure). The Mojave Pipeline Operating Company (Respondent or MPOC), a subsidiary of El Paso Natural Gas Company, operates approximately 500 miles of pipeline that connect with other pipeline systems including the El Paso Natural Gas system near Cadiz, California, the El Paso Natural Gas and Transwestern Pipeline Company, LLC systems at Topock, Arizona and the Kern River Gas Transmission Company system in California. This system also extends to customers in the vicinity of Bakersfield, California.¹

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. The cause of the Failure has not yet been determined.

As a result of the preliminary investigation by the Western Region, it appears that a condition or conditions exist on your pipeline facilities that pose a pipeline integrity risk to public safety, property or the environment. Pursuant to 49 U.S.C. § 60117(l), PHMSA is issuing this Notice of Proposed Safety Order to notify you of the preliminary findings of this investigation and propose that you take measures to ensure that the public, property, and the environment are protected from the potential risk.

¹ <http://www.sec.gov/Archives/edgar/data/31986/000119312512079791/d268735d10k.htm>

Preliminary Findings

- The Mojave Pipeline is a 42" natural gas transmission line that starts at the Topock Compressor Station at the California-Arizona border and runs west to Daggett, California which is 143 miles downstream of the Topock compressor station. At the Daggett compressor station, the Mojave Pipeline interconnects with the Kern River Gas Transmission Company's natural gas transmission pipeline system. From Daggett, the facilities known as the "Common Facilities" run west to a location near the City of Arvin where there is a junction of the 42-inch O.D. Line No. 1901 ("West Lateral") and the 30" O.D. Line No. 1902 (known as the "East Lateral").² This area is known as the Bifurcation Point (M.P. 118+1887).
- The MAOP of the Mojave Pipeline is 1200 psig from Topock, Arizona to Arvin, California. The two lines, Line 1901 and Line 1902, that leave the Bifurcation Point at Arvin, California have MAOPs of 930 psig.
- There are four (4) relief valves that come off of a 30" header downstream of El Paso's 42" mainline isolation valve #323 to protect the two lateral lines leaving the Bifurcation Point. The relief valves are set at 940, 950, 960, and 970 psig respectively. At the time of the failure, the highest pressure was 916 psig at the failure site. The vent piping for these devices were supported by two vertical members and a horizontal cross member at the Bifurcation Point.
- According to MPOC, on May 2, 2012, at about 4 a.m. Mountain Daylight Time (MDT), gas controllers for MPOC began noticing a drop of line pressure as measured at MLV 323 which is located at the Bifurcation Point. Approximately an hour later, Kern River took its compressor station at Good Springs off-line.³ The line pressure on the Common Facilities continued to drop at a slow steady rate. At approximately 5:45 am MDT, there was a somewhat more significant drop of pressure at the Bifurcation Point as reported to MPOC Gas Control by the pressure transmitter at MLV 323. MPOC Gas Control called an operations technician in the Bakersfield area to investigate the dropping pressure.⁴
- At approximately 9:20 MDT, MPOC Gas Control received a call from the Sycamore Golf Course reporting blowing gas in the area. Thereafter, the Mojave personnel in the field requested that the El Paso Operations Control Center close the valve and the other valves downstream of the release site. The line blew down by approximately 12:30 p.m. P.S.T. When the lines were fully shut-in, personnel determined all four relief valves in the Bifurcation Point were damaged.

² These facilities are known as "common facilities" because Mojave and Kern River have an undivided interest in the facilities and each company provides transportation services to its own customers on this portion of the pipe under its own FERC approved gas tariff.

³ Kern River's Good Spring compressor station is located approximately 234 miles upstream of the Bifurcation Point.

⁴ This information was received from MPOC and has not been independently verified.

- Mojave reported the Failure to the National Response Center (NRC Report No. 1010322) on May 2, 2012, at approximately 9:28 a.m. (PST). In the NRC Report, Mojave estimated the duration of the release was approximately 40 minutes.
- The Failure occurred approximately six miles southwest of the Arvin city limits near the Sycamore Canyon golf course. The release occurred in a fenced area at the southwest corner of a golf course. The north, east, and south sides of the facility is bordered by an orchard. The entire area is a fairly remote agricultural area. There were no known injuries, fire, or evacuation resulting from the Failure.
- The Mojave Pipeline was built between 1991-1992.
- The cause of the failure is unknown and the investigation is still ongoing. .

Proposed Issuance of Safety Order

Section 60117(l) of Title 49, United States Code, provides for the issuance of a safety order, after reasonable notice and the opportunity for a hearing, requiring corrective measures, which may include physical inspection, testing, repair, or other action, as appropriate. The basis for making the determination that a pipeline facility has a condition or conditions that pose a pipeline integrity risk to public safety, property, or the environment is set forth both in the above-referenced statute and 49 C.F.R. § 190.239, a copy of which is enclosed.

After evaluating the foregoing preliminary findings of fact and considering the age of the pipe involved, the hazardous nature of the product transported, the circumstances surrounding this Failure, including the uncertainties of the cause of the Failure and the potential for the conditions that caused the Failure to be present elsewhere on the Mojave Pipeline, the fact that this line services populated areas downstream, and the likelihood that the conditions could recur on other areas of the pipeline and potentially impact its serviceability, it appears that the continued operation of the affected pipeline without corrective measures would pose a pipeline integrity risk to public safety, property, or the environment.

Accordingly, PHMSA issues this Notice of Proposed Safety Order to notify Respondent of the proposed issuance of a safety order and to propose that Respondent take measures specified herein to address the potential risk.

Response to this Notice

In accordance with § 190.239, you have 30 days following receipt of this Notice to submit a written response to the official who issued the Notice. If you do not respond within 30 days, this constitutes a waiver of your right to contest 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 Safety Order.

In your response, you may notify Chris Hoidal (Director) that you intend to comply with the terms of the Notice as proposed, or you may request that an informal consultation be scheduled. *Informal consultation provides you with the opportunity to explain the circumstances associated with the risk condition(s) alleged in the notice and, as appropriate, to present a proposal for a work plan or other remedial measures, without prejudice to your position in any subsequent hearing.* If you and PHMSA agree within 30 days of informal consultation on a plan and schedule for you to address each identified risk condition, we may enter into a written consent agreement (Agreement). PHMSA would then issue an administrative consent order incorporating the terms of the Agreement.

If an Agreement is not reached, or if you have elected not to request informal consultation, you may request an administrative hearing in writing within 30 days following receipt of the Notice or within 10 days following the conclusion of an informal consultation that did not result in a consent agreement, as applicable. Following a hearing, if the Associate Administrator finds the facility to have a condition that poses a pipeline integrity risk to the public, property, or the environment in accordance with § 190.239, the Associate Administrator may issue a Safety Order.

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), you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted, along with the complete original document, and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

In your correspondence on this matter, please refer to CPF **5-2012-1008S** and for each document you submit, please provide an additional copy in electronic format whenever possible.

Proposed Corrective Measures

Pursuant to 49 U.S.C. § 60117(1) and 49 C.F.R. § 190.239, PHMSA proposes to issue a Safety Order to Mojave Pipeline Operating Company (MPOC) incorporating the following remedial requirements with respect to the segment of the Mojave Pipeline running from the Daggett Compressor station to the end of Lines 1901 and 1902 (Affected Segment):

1. Submit and execute a return to "reduced" service plan, for the Director's review prior to restart.
2. Within two weeks of receipt of the Notice, submit a protocol for a metallurgical analysis to the Director for approval prior to conducting the metallurgical analysis. Following approval by PHMSA, have an independent third party perform a Metallurgical Analysis to be completed within 45 days following receipt of such approval. The testing and analysis shall be completed as follows:

- (A) Document the chain of custody when handling and transporting the failed pipe section and other evidence originating from the failure site;
 - (B) Utilize mechanical and metallurgical testing protocols, including selection of the testing laboratory, approved by the Director;
 - (C) Prior to commencing the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow a PHMSA representative to witness the testing; and
 - (D) Ensure that the testing laboratory distributes all resulting reports in their entirety, whether draft or final, to the Director at the same time they are made available to Respondent.
3. When the Affected Segment is returned to service, operate the Affected Segment at a reduced pressure such that the pressure as measured at Mainline Valve 323 does not exceed 824 psig, which is a 10% reduction from the pre-failure pressure. MOPC Gas Control working in conjunction with operations personnel in the field must conduct remote monitoring and on-site, in-person monitoring of the pressure at the MLV 323 at the Bifurcation Point 24 hours a day, 7 days a week, until such time the Director agrees it is safe to return to full operating pressure.
 4. Prior to asking for return to full operating pressure, provide independent, adequate overpressure protection for the Mojave Pipeline Bifurcation Station that does not rely on safety devices provided by the Kern River Gas Transmission pipeline system or MOPC's Daggett Station, and ensure that the MAOP levels of the Mojave Pipeline both upstream and downstream of the Bifurcation Station are not exceeded.
 5. Conduct a forensic investigation of the SCADA data on the Common Facilities to determine whether there was any tampering or corruption of the SCADA pressure data.
 6. Evaluate available methods to further test the validity of the data being collected by the SCADA telemetry at the Bifurcation Point.
 7. Complete an internal root cause investigation team and prepare a report of the root cause analysis (RCA). The RCA report will be completed within 90 days after the issuance of the proposed safety order and submitted to the Director. At the request of the Director of the Western Region, representatives of MPOC shall meet with PHMSA to discuss the findings and the need for additional analysis before acceptance. At a minimum, the RCA should address the items in Appendix A.
 8. If the RCA indicates the cause of the failure may be indicative of more systemic operational issues, e.g. more widespread than a failure of one or two pieces of equipment, the Director may direct MPOC to develop and submit an appropriate Integrity Verification and Remediation Plan (IVRP) for other locations on the Common Facilities. If required, the IVRP shall be submitted to the Director for approval within 45 days following the submittal of the RCA report. The Director may approve plan elements incrementally. The IVRP, and any revisions, will be incorporated into the Safety Order.

9. If an IVRP is required, MPOC will prepare and submit monthly progress reports starting 30 days after approval of the IVRP by the Director. The monthly reports will provide sufficient detail to allow the Director to track the process of the IVRP. MPOC will provide the Director an opportunity to have PHMSA personnel observe and inspect any activities required by the IVRP as they occur.

10. *Extensions of Time.* The Director may grant an extension of time for compliance with any of the terms of the safety order upon a written request timely submitted demonstrating good cause for an extension.

11. The Director may allow the removal or modification of the pressure restriction set forth in item 3 upon a written request from MPOC demonstrating that the hazard has been abated and that restoring the pipeline to its pre-failure operation pressure is justified based on a reliable engineering analysis showing that the pressure increase is safe considering all known defects, anomalies, and operating parameters of the pipeline.

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

13. *Documentation.* It is requested, but not mandated, that the MPOC maintain documentation of the safety improvement costs associated with fulfilling this Safety Order and submit the total to Chris Hoidal, Director, Western 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.

The actions proposed by this Notice of Proposed Safety Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Parts 190 through 199, 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.

After receiving and analyzing additional data in the course of this proceeding, PHMSA may identify other safety measures that need to be taken. In that event, Respondent will be notified of any proposed additional measures and, if necessary, amendments will be made to the safety order.



Chris Hoidal
Director, Western Region
Pipeline and Hazardous Materials Safety Administration

5/9/12
Date issued

Appendix A

- 1. Develop and submit a timeline of all pertinent actions executed by control room personnel, field personnel, and supervisory personnel starting on May 2, 2012 at 3:00 AM PST through blow down completion at ~12:30 PST on May 2, 2012. Please include all personnel whose actions could have contributed to the release event at BIPT, affected the emergency response to the release or assisted in the immediate investigation of the release. Please provide all names, titles and cell phone numbers for each person.**
- 2. SCADA data including raw data and pressure and flow trends for Daggett Compressor Station (CS), each data point down the mainline up to Bifurcation Point (BIPT), including two data points downstream (DS) of BIPT on each lateral (lines 1901 and 1902). Please include any additional SCADA information that is pertinent to the investigation even if not specifically identified here.**
- 3. All alignment sheets and piping and instrumentation diagrams (P&ID) showing pressure transmitters, valve installations as well as telemetry points along the line from the Kern River interconnect at Daggett CS through two data points or mainline valves DS of BIPT.**
- 4. Manufacturing specifications of all valves on the line from Daggett CS through BIPT and including two valves DS of BIPT on each lateral.**
- 5. Pipe specifications for the 42" mainline from Daggett CS and the 30" line and 42" line DS of BIPT generally. Please include manufacturer, SMYS, API designation, MAOP and how determined, wall thickness, coating type, installation date(s) for each separate line section.**
- 6. Maintenance records for all mainline valves from Daggett CS through BIPT and two valves DS of BIPT on each lateral and relief valves at BIPT to include the past two DOT inspections and any other maintenance work performed at BIPT in the last two years.**
- 7. Any facility work orders or project files for BIPT for the past two years.**
- 8. Current/updated P&IDs for Daggett CS and BIPT.**
- 9. Relief valve capacity calculations for each relief valve at BIPT.**
- 10. Utilize a forensic specialist from the relief valve manufacturer on MPOC RCA investigation team.**
- 11. Original design specification for the relief piping and support system and any subsequent modification and/or recalculations after each significant change in operational parameters.**