### **DEC 08 2010**

# VIA CERTIFIED MAIL AND FAX TO: 713-432-3737 [7005 1160 0001 0041 3214]

Ms. Rebecca Roberts President Chevron Pipe Line Company 4800 Fournace Place Bellaire, TX 77401

Re: CPF No. 5-2010-5032H

Dear Ms. Roberts:

Enclosed please find the Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It requires Chevron Pipe Line Company to take immediate corrective action with respect to a 10-inch-diameter hazardous liquid pipeline that experienced a failure in Salt Lake City, Utah, on December 1, 2010. This Corrective Action Order is being served by facsimile and certified mail under 49 C.F.R. § 190.5, and its terms and conditions are effective upon receipt.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese Associate Administrator for Pipeline Safety

Enclosures: Corrective Action Order and Copy of 49 C.F.R. § 190.233

cc: Mr. Chris Hoidal, Director, Western Region, PHMSA

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

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In the Matter of	)	
	)	
Chevron Pipe Line Company,	)	CPF No. 5-2010-5032H
	)	
Respondent.	)	
	)	

## **CORRECTIVE ACTION ORDER**

On December 1, 2010, the National Response Center (NRC) received a report from the Chevron Pipe Line Company (Chevron or Respondent) that a failure had occurred on its 10-inch-diameter hazardous liquid pipeline in Salt Lake City, Utah. The initial report, submitted at 11:54 a.m. Mountain Standard Time (MST), indicated that 100 barrels of crude oil had been released in the vicinity of Milepost (MP) 174.5, a high consequence area (HCA) that experienced an 800-barrel release of crude oil from that same pipeline on June 11, 2010.

On December 2, 2010, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), Western Region initiated an investigation of the accident. To date, that investigation has included a review of the records for the failed pipeline, a physical inspection of the failure site, and interviews with Chevron's employees. The information available at this time indicates that other areas of this pipeline could experience a similar event if immediate corrective actions are not taken.

Accordingly, I find that Chevron's 10-inch-diameter pipeline is hazardous to life, property, or the environment, and that the issuance of a Corrective Action Order (CAO) is warranted under 49 U.S.C. § 60112 and 49 C.F.R. § 190.233. I further find that a failure to issue a CAO expeditiously would result in likely serious harm to life, property, and the environment; therefore, I am waiving the requirement for prior notice and an opportunity for a hearing.

## **Preliminary Findings**

- Chevron is the operator a 182.5-mile hazardous liquid pipeline system that transports crude oil from a terminal in Rangely, Colorado, to a refinery in Salt Lake City, Utah (Salt Lake City Refinery).
- There are two 10-inch-diameter pipelines in Chevron's Rangely to Salt Lake City system: the Number 1 Line, an inactive line built in 1948, and the Number 2 Line, an active line built in 1952.

- The Number 2 Line receives crude oil in Rangely from a hazardous liquid gathering line system and at three other downstream injection points.
- The Number 2 Line has an elevation profile that ranges from 4,234 feet at the Salt Lake City Refinery to 8,450 feet at Wolf Creek Pass.
- The right-of-way (ROW) for the Number 2 Line includes several HCAs, particularly in the 50 mile segment that runs from Park City, Utah, to Salt Lake City, Utah.
- The Number 2 Line has 9 mainline block valves from the Hanna Pump Station (MP 108.5) to the Salt Lake City Refinery (MP 182.15).
- The Number 2 Line crosses Red Butte Creek at MP 174.5 on property that is owned by the University of Utah. Several public buildings, including an arboretum, auditorium, and dormitories, are located in the immediate area.
- On June 11, 2010, a failure occurred on the Number 2 Line near MP 174.5, resulting in the release of 800 barrels of crude oil. Chevron did not detect or respond to that failure for more than 10 hours.
- On June 17, 2010, Chevron installed a segment of 10-inch pipe in the Number 2 Line in a vault near MP 174.5 and Red Butte Road (Red Butte Vault). As a result of that installation, the portion of the Number 2 in the Red Butte Vault contained two valves: a 10-inch mainline block valve and a 6-inch valve (Affected Valve).
- On June 20, 2010, Chevron performed a 4-hour hydrostatic pressure test on the Number 2 Line from the Little Mountain Block Valve and Pressure Relief Station (MP 168.4) to the Salt Lake City Refinery (MP 182.5). As part of that pressure test, Chevron injected water mixed with a tracer dye into the Affected Valve.
- The manufacturer's specifications for the Affected Valve state that all fluids should be removed from the valve body after the performance of a hydrostatic pressure test, and that anti-freeze should be injected to ensure that any water in the valve does not adversely affect its operation during the winter months.
- The temperature in Salt Lake City, Utah, remained at or well below freezing from November 24, 2010, through December 1, 2010.
- On the morning of December 1, 2010, Chevron shutdown the Number 2 Line to perform routine maintenance activities. Operations resumed later that afternoon.
- At approximately 8:40 p.m. MST on December 1, 2010, Chevron shutdown the Number 2 Line after personnel in the pipeline control room observed abnormal pressure readings. Operations have not resumed since that time.
- At approximately 11:15 p.m. MST on December 1, 2010, Chevron response personnel arrived at the Red Butte Vault and discovered that the Affected Valve had failed,

resulting in the release of an estimated 100 barrels of crude oil. By that time, crude oil had overfilled the Red Butte Vault and migrated downhill in the direction of Red Butte Creek.

- On December 4, 2010, Chevron removed the Affected Valve and found as-yet-unidentified fluid in one of its components. That fluid has been preserved and sent to a laboratory for further analysis and examination. Initial observations by PHMSA's investigators and Chevron personnel indicated that the body of the Affected Valve had been split at the bonnet joint.
- Chevron has increased its original estimate of the crude oil released as a result of the December 1, 2010 failure from 100 to 500 barrels.

### **Determination of Necessity for Corrective Action Order and Right to Hearing**

The bases for determining whether a pipeline facility requires corrective action are specified in 49 U.S.C. § 60112 and 49 C.F.R. § 190.233. Specifically, the Associate Administrator may issue a CAO after reasonable notice and the opportunity for a hearing, if he finds that a particular pipeline facility is or would be hazardous to life, property, or the environment. The terms of that CAO may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or any other action as appropriate. The Associate Administrator may also issue a CAO without notice and the opportunity for a hearing, if he finds that a failure to do so expeditiously will result in likely serious harm to life, property or the environment. In such cases, the opportunity for a hearing will be provided as soon as practicable after the issuance of the CAO.

Having reviewed the preliminary findings, I find that the continued operation of the Number 2 Line without corrective measures would be hazardous to life, property and the environment. The Number 2 Line has experienced two failures in the vicinity of MP 174.5 in the past 6 months: an 800-barrel release of crude oil in June 2010 and a 500-barrel release of crude oil in December 2010. The preliminary findings indicate that the failure to remove all of the test fluid (water) used during the June 2010 hydrostatic pressure test or to take appropriate action to ensure that any remaining water would not adversely affect the operation of the Number 2 Line may have caused or contributed to the December 2010 failure.

Significant portions of the Number 2 Line are also located in HCAs. That includes MP 174.5, the area that experienced the June 2010 and December 2010 failures and which contains several public buildings and a waterway. Furthermore, Chevron did not identify the location of the current release for more than two hours, despite the fact that the Red Butte Vault is approximately 8 miles from the Salt Lake City refinery and a prior failure had occurred in that area six months earlier. The hazardous nature and volume of the product transported, the possibility of similar conditions existing on other areas of the pipeline, including those located in HCAs, and the ongoing status of the investigation support such a finding as well.

I further find that a failure to issue a CAO expeditiously would result in likely serious harm to life, property, and the environment. That finding is supported by the elevation profile of the pipeline and topography of the surrounding areas; the operating conditions of the Number 2

Line; the existence of other components that could be adversely affected by Chevron's failure to perform the required maintenance after the June 2010 hydrostatic pressure test; its inability to promptly detect and respond to the June 11, 2010 and December 1, 2010 failures; and the ongoing status of the investigation into those failures. Accordingly, this CAO is issued without prior notice and opportunity for a hearing, and its terms and conditions are effective upon receipt.

Within 10 days of receiving this Order, Respondent may request a hearing by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. The hearing will be held as soon as practicable, on a date that is mutually convenient to PHMSA and Respondent, in Denver, CO, or Washington, DC.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Respondent will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with public safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

### **Required Corrective Action**

Pursuant to 49 U.S.C. § 60112, I hereby order Chevron to take the following corrective actions with respect to the Number 2 Line:

- 1. Before resuming any transportation of hazardous liquid through the Number 2 Line, submit a written restart plan to the Director, Western Region, PHMSA for his approval. That restart plan must include provisions for:
  - a. Ensuring that the June 2010 hydrostatic pressure test will not adversely affect the future operation of the Number 2 Line by removing all fluids from appropriate facilities, components, valves, or equipment.
  - b. Ensuring that all pipeline facilities, components, appurtenances, and equipment affected by the June 2010 hydrostatic pressure test are inspected and maintained in accordance with the written procedures required under 49 C.F.R. §§ 195.401-402 and any other applicable standards, including the manufacturer's specifications.
  - c. Taking any other actions that may be necessary to ensure that the Number 2 Line is not hazardous to life, property and the environment.
- 2. Upon submission and satisfactory implementation of a restart plan that meets the conditions in Item 1, the Director may approve the transportation of hazardous liquids in the Number 2 Line.
- 3. If the Number 2 Line is restarted, Chevron must continuously monitor all valve vaults that are located between the Hanna Pump Station (MP 108.5) and Salt Lake Refinery (MP 182.5) for the next 48 hours. Chevron must also perform daily patrols of the ROW for that portion of the Number Line 2, with a primary focus on observing the

conditions of any above-ground pipeline facilities, until the Director authorizes the discontinuance of such patrols. If any leaks are detected in performing these activities, the Number 2 Line must be immediately shutdown until repairs or other appropriate remedial actions can be implemented.

- 4. Complete a full metallurgical examination and failure analysis of the Affected Valve within 30 days. A protocol for performing that mechanical and metallurgical testing must be submitted to the Director for prior approval.
- 5. Provide appropriate external leak detection systems for all above-ground pipeline facilities on the Number 2 Line between the Hannah Pump Station (MP 108.5) and Salt Lake Refinery (MP 182.5) within 60 days. Such systems must be capable of detecting leaks at the earliest practicable moment and of transmitting all necessary data to appropriate Chevron personnel. If adequate leak detection systems are installed, the Director will discontinue the daily patrols required under Item 5.
- 6. Submit an integrity verification and remedial work plan to the Director for approval within 90 days. The plan must contain appropriate provisions for addressing all known or suspected factors in the June 11, 2010, and December 1, 2010 failures.
- 7. Upon approval by the Director, the integrity verification and remedial work plans become incorporated into this Order and must be revised as necessary to incorporate the results of actions undertaken pursuant to this Order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities. Submit any such plan revisions to the Director for prior approval. The Director may approve plan elements incrementally.
- 8. Implement the integrity verification and remedial work plan as it is approved by the Director, including any revisions to the plan.
- 9. Submit a written report to the Director within 120 days that provides an analysis of whether additional valves should be installed on the Number 2 Line to ensure that its operation is not a threat to the public, property, or the environment. Chevron must consult with PHMSA and appropriate state and local officials in performing that analysis and preparing its written report.
- 10. Based on the information in the written report provided in Item 9, the Director may require the installation of such additional valves as are necessary to ensure that the operation of the Number 2 Line is not a threat to the public, property, or the environment.
- 11. Submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report for the period from December 1, 2010, through December 31, 2010, is due by January 31, 2011.
- 12. Maintain documentation of the costs associated with implementation of this Corrective Action Order. Include in each monthly report submitted, the to-date total costs

associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

13. The Director may approve each submission required under this Order in whole or in part and with or without modifications or conditions. Respondent must take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of a submission, Respondent must correct all deficiencies within the time specified by the Regional Director, and resubmit it for approval.

The Director may grant an extension of time for compliance with any of the terms of this Corrective Action Order upon submission of a timely written request demonstrating good cause for the relief requested.

The actions required by this Corrective Action Order are in addition to, and do not waive, any requirements that apply to Respondent's pipeline system under the Pipeline Safety Laws and Regulations or 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.

In accordance with 49 U.S.C. § 60122 and 49 C.F.R. § 190.223, failure to comply with this Order may result in the administrative 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.

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

Jeffrey D. Wiese	Date Issued	
Associate Administrator		
for Pipeline Safety		