



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

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

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 19, 2014

Mr. Tad True
Vice President
Belle Fourche Pipeline Company
455 N Poplar St.
Casper, WY 82602

CPF 5-2014-5001M

Dear Mr. True:

Between November 14, 2011 and March 9, 2012, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code, investigated a November 14, 2011 release from your Sussex Diesel Pipeline System's Davis Station southwest of Gillette, Wyoming. The release spilled 1900 barrels of diesel onto the ground, causing contamination to the soil.

Spill Investigation Findings:

The Sussex Diesel Line ships diesel fuel from ConocoPhillips's Seminole pipeline to Belle Fourche's Hawk Point tank facility. The 6-inch pipeline begins at the Tinsdale station approximately 58 miles south of Buffalo, WY. The pipeline then continues northeast to the Sussex station and then to the Iberlin valve and pig launcher receiver site about 49 miles from the Tisdale station. At Iberlin the line diameter reduces to 4 inches. The pipeline then continues east about 30 miles to the Hawk Point terminal facility approximately 18 miles south of Gillette, WY. Between Iberlin and Hawk Point there is one breakout tank at the Davis facility.

PHMSA's investigation revealed that multiple operation and maintenance factors contributed to the occurrence and magnitude of the spill. The release occurred when a Belle Fourche Pipeline Company (BFPL) controller attempted a diesel delivery to the Hawk Point Station on the evening of November 13, 2013. Just after the controller started the booster pump at the Iberlin

Station, the pump shut down because it exceeded its high discharge pressure limit. The controller attempted a restart of the diesel delivery. The controller was unaware that he was pumping against two closed valves near the Davis Station, one going to the Davis Station tank and the second on the mainline going towards the Hawk Point Station.

Pumping against the closed valves caused the pipeline to exceed its normal operating pressures. Sometime between the first start up attempt and the restart, the flange gasket on the upstream side of the closed Davis mainline valve failed and resulted in the diesel fuel release. The controller was able to keep the Iberlin booster pump running by reducing incoming pressure. He did this by stopping one of the mainline pumps at the upstream Sussex terminal. The Iberlin pump discharge pressure was not exceeded since the diesel in the pipeline was escaping through the ruptured flange on the Davis valve.

From the investigation, PHMSA identified regulatory deficiencies that contributed to the occurrence and magnitude of the spill. The maintenance-related deficiencies are addressed in our Warning Letter, CPF 5-2014-5002W, dated February 19, 2014. PHMSA also identified apparent inadequacies within BFPL plans or procedures that contributed to the release, as described below:

1. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies....

(c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(9) In the case of facilities not equipped to fail safe that are identified under §195.402(c)(4) or that control receipt and delivery of the hazardous liquid or carbon dioxide, detecting abnormal operating conditions by monitoring pressure, temperature, flow or other appropriate operational data and transmitting this data to an attended location.

BFPL did not have adequate written procedures to provide safety during maintenance and normal operations for the Sussex Diesel Pipeline. BFPL had not developed written procedures to include the specific steps that a controller must take to detect abnormal pipeline conditions by monitoring pressure, temperature, flow or other appropriate operational data. While BFPL did have general written operating procedures, they lacked the specifics needed to correctly monitor for and detect abnormal operations on the pipeline system.

The Hawk Point Station diesel deliveries are received into a tank. There is a meter and a gauge inside the tank, but the controller did not check the meter or the gauge to see if product was actually being received. During the investigation, company personnel alluded to the fact that there are certain unwritten policies and procedures that personnel are supposed to understand and follow. 49 CFR Part 195402 requires all procedures, for both normal and abnormal operations, to be written and followed.

2. §195.402 Procedural manual for operations, maintenance, and emergencies.

(d) Abnormal operation. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded;

(1) Responding to, investigating, and correcting the cause of;

(i) Unintended closure of valves or shutdowns;

(ii) Increase or decrease in pressure or flow rate outside normal operating limits;

(iii) Loss of communications;

(iv) Operation of any safety device;

(v) Any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property.

BFPL did not have specific written procedures for correctly responding to, investigating, and correcting the cause of any of the conditions listed in § 195.402(d)(1). BFPL's written procedures are a paraphrasing of code language and do not provide sufficient guidance to the controller as to specific actions required during and after an abnormal operation. Furthermore, the procedures do not detail how to investigate and correct the cause of the abnormal operations.

When the Iberlin booster pump went down on high discharge pressure, the controller simply reset the line and attempted a restart instead of responding to, investigating, and correcting the cause of the abnormal operation. During the investigation, company personnel alluded to the fact that there are certain unwritten policies and procedures that personnel are supposed to understand and follow. 49 CFR Part 195402 requires all procedures, including abnormal operations, to be written and followed.

3. §195.402 Procedural manual for operations, maintenance, and emergencies.

(d) Abnormal operation. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded;

(2) Checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation.

(3) Correcting variations from normal operation of pressure and flow equipment and controls.

(4) Notifying responsible operator personnel when notice of an abnormal operation is received.

It was abnormal for the booster pump to go down on high discharge pressure, however the controller did not have written procedures to check variations from normal operation after that abnormal operation had occurred. The procedures that the controller is to follow must check variations from normal operations at sufficient critical locations in the system to determine continued integrity and safe operation. The controller also did not correct variations from normal operation of pressure and flow equipment and controls. Furthermore, the controller did not notify responsible operator personnel when an abnormal operation occurred. The controller interviewed by PHMSA stated that the requirements for 195.402(d)(2), (3), and (4) are generally “unwritten” control room policy.

Following the abnormal operation when the Iberlin pump went down on high discharge pressure, the controller did not check the system at sufficient critical locations for the next seven (7) hours. When he finally checked the Hawk Point tank, he discovered there was no diesel delivered over the previous evening. The operator does not have written procedures that are specific or timely enough to ensure compliance with 195.402(d)(2,3 and 4). These are needed to provide safety when design limits have been exceeded.

4. §195.446 Control room management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section. The procedures required by this section must be integrated, as appropriate, with the operator's written procedures required by § 195.402. An operator must develop the procedures no later than August 1, 2011, and must implement the procedures according to the following schedule. The procedures required by paragraphs (b), (c)(5), (d)(2) and (d)(3), (f) and (g) of this section must be implemented no later than October 1, 2011....

(b) Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller's prompt and appropriate response to operating conditions, an operator must define each of the following:

(2) A controller's role when an abnormal operating condition is detected, even if the controller is not the first to detect the condition, including the controller's responsibility to take specific actions and to communicate with others;

At the time of the pipeline failure on November 13, 2011, BFPL had not developed and implemented adequate Control Room Management Procedures to define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions, including the controller's responsibility to take specific actions and to communicate with others when an abnormal operating condition is detected.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. 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). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in 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 Final Order.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within [number of days] days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that BFPL maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Chris Hoidal, Director, Western Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 5-2014-5001M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



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

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*

cc: PHP-60 Compliance Registry
PHP-500 P. Katchmar (#136756)