Overpressure date: 03/01/2004

Station #: 1330

Station Name: McKinney Ave

System #: 38061013

- Inlet pressure: 50 psig
- Outlet pressure: MAOP LP 13” WC
- Overpressure: 4.5 psig

Root Cause

- Trash was under the seat of the bypass valve. The regulators had 100% lockup as found.

Remediation

- Cleared obstruction from bypass valve.

Recommendation

- At the time of the incident, the former CDC Excursion Team recommended to install a pressure recorder and 1” non-primary relief valve.

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE
REFER TO OUR FILE

May 9, 2013

REFERENCE:
NC-16-13

Mr. Robert Kitchell
Vice-President and General Manager
Columbia Gas of PA
121 Champion Way
Suite 100
Canonsburg, PA 15317

Dear Mr. Kitchell:

On March 22, 2013, Pennsylvania Public Utility Commission's Gas Safety Inspector, Mr. Ralph Graeser, inspected Columbia Gas of Pennsylvania's records at the Baldwin, Pennsylvania facility.

As a result of the inspection, the Gas Safety Division of the Pennsylvania Public Utility Commission has discovered that Columbia Gas of Pennsylvania is in violation of the following state and federal regulations:

(1) **49 CFR §192.13 What general requirements apply to pipelines regulated under this part?**

(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

(2) **49 CFR §192.605 Procedural manual for operations, maintenance, and emergencies.**

Each operator shall include the following in its operating and maintenance plan:

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

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

(5) Starting up and shutting down any part of the pipeline in a manner designed to assure operation within the MAOP limits prescribed by this part, plus the build-up allowed for operation of pressure-limiting and control devices.

During Mr. Graeser's investigation of the over pressure of the Kerns Avenue low system in Pittsburgh on March 21, 2013, he found that the segment of pipe with a MAOP of 1psig operated over 2psig. On March 21, 2013 a MO Herron Construction Crew under the direction of the Columbia Gas Company construction inspector was making the final low pressure tie in to a section of existing main. This was tie in L on the tie in procedure. A gauge was installed on the new pipe and the existing system at the tie in location on Kerns Avenue. A Khoulman Gauge was installed on the existing system at 1904 Elmdale Road to monitor pressure in the remaining low pressure system after the pipe was squeezed off. The new low pressure pipeline was being supplied gas through a new regulator station on Elmdale Road R-4770. The existing low pressure main was being supplied by the old regulator station on Kerns Avenue R-4073. After the gauges were installed on all the low pressure systems, a bypass line was installed from the new main to the existing main on Kerns Avenue. A squeeze was made on the existing low pressure main on Kerns Avenue. At that time the Khoulman Gauge at 1904 Elmdale Road shot the fluid from the gauge indicating a pressure increase of 2psig or more in the remaining low pressure system supplied by regulator R-4073. The existing line remained squeezed off while another Khoulman Gauge was installed on the remaining pipe at 1904 Elmdale Road. The pressure rose to 2 psig and went back to 12"wcg two more times. There were 4 residences being supplied gas from the R-4073 regulator station. All 4 were turned off at the meter and the appliances were checked for damage. There was no damage found. Each meter remained off until the service line was installed on the new low pressure main. The tie in was completed without further issues. The regulator station on Kerns Avenue R-4073 was turned off and purged of gas.

A review of the Columbia Distribution Operator Qualification L1B, Tapping & Stopping Pipelines section Verifying and Monitoring Pressure on page 34 states "In addition, special consideration should be given to monitoring pressures at regulator stations where the tie in significantly affects the normal flow of gas through the station. For example, if the tie in involves shutting down a section of pipeline immediately downstream of a regulator supply, bypass valve or regulator orifice, leak through may occur which may cause a buildup of downstream pressure and a possible overpressure." A review of this tie in a section of pipe on Kerns Avenue was being shut down between the regulator station and the pressure monitoring gauge on Elmdale Road. The crew monitoring the pressure could not control the flow of gas at the Kerns Avenue Regulator which allowed the overpressure of the remaining low pressure system to occur. Had the crew monitored the pressure and flow of the existing low pressure system at the Kerns Avenue Regulator actions could have been taken to prevent this overpressure.

Therefore, you are hereby requested to submit to this office in writing, on or before June 6, 2013, the following steps that will prevent these violations from occurring in the future:

(1) Provide as part of the written tie in plan to include personnel that would be able to monitor and control pressure at regulator stations during a tie in that has a regulator station feeding gas to the system.

(2) Train all inspectors and engineers responsible for tie in plans on what personnel should be used to monitor and control the flow of gas from a regulator station.

This office is committed to ensuring that all natural gas companies comply with the provisions of the Public Utility Code. Therefore, you are advised that, if you fail to comply with the above requests this office will initiate all appropriate enforcement actions pursuant to the Public Utility Code against the utility and its officers, agents and employees.

Yours truly,

[redacted]

Paul J. Metro, Manager
Gas Safety Division
Bureau of Investigation and Enforcement

PM:bb

PC: Michael E. Hoffman, Manager, I&E
Ralph Graeser, Gas Safety Supervisor

Columbia Gas of Pennsylvania

A NiSource Company

Robert M. Kitchell
General Manager

Southpointe Industrial Park
121 Champion Way, Ste. 100
Canonsburg, PA 15317
[redacted]

June 5, 2013

Mr. Paul J. Metro
Commonwealth of Pennsylvania
PA Public Utility Commission
Bureau of Investigation and Enforcement
Gas Safety Division
P.O. Box 3265
Harrisburg, PA 17105-3265

RE: NC 16-13

Dear Mr. Metro:

The following is my response on behalf of Columbia Gas of Pennsylvania, Inc. "(Columbia)" to your letter dated May 9, 2013 regarding Mr. Ralph Graeser's inspection of records at the Baldwin, Pennsylvania facility.

Columbia Gas Field Engineering personnel will meet with a Measurement and Regulation employee during the process of preparing the written tie-in plan for a project, in order to get their input and recommendations, when the following project criteria is met:

1. Replacement work and tie-in is on a system being fed by a single regulator.
2. Tie-in is being made directly to the inlet and/or outlet of a district regulator.
3. Tie-in work is being conducted within 1,000 lineal feet of the inlet or outlet of a district regulator.
4. Replacement work will reduce the number of customers on a gas distribution system to less than 100.
5. Project involves the installation of a new or replacement district regulator station.
6. Tie-in work is being completed on systems with known pressure problems.
7. Replacement work involves separating systems and/or, isolating regulator stations.

The tie-in plan will instruct the responsible Construction Coordinator and pipeline contractor representative of the need to utilize qualified measurement and regulation employees to monitor and control the flow of gas while completing the tie-in procedures.

I trust these actions will address the concerns in your original correspondence. Should you wish to discuss the issue further, please do not hesitate to contact me at [redacted]

Sincerely,

[redacted]

Robert M. Kitchell

Cc: Rick Burke
Ken Christman

Columbia Gas of Ohio
A NiSource Company

March 28, 2012

Mr. Peter Chace
Manger of Gas Pipeline Safety Section
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

Re: Service Failure Report:
Wellston, Ohio
Date of Incident: 02/28/12

Dear Mr. Chace:

Please find enclosed a Service Failure Report from Columbia Gas of Ohio, Inc. ("Columbia") concerning the above-referenced matter. Also, this letter serves as the final report required by Ohio Administrative Code Section 4901:1-16-05 (B).

Should you have any question or require additional information, please do not hesitate to contact me at [redacted]

Sincerely,

[redacted]

Rob Smith
Manager, Operations Compliance
Columbia Gas of Ohio, Inc.

The Public Utilities Commission of Ohio

Public Utilities Commission of Ohio
Service Monitoring and Enforcement Department
180 East Broad Street, 7th Floor
Columbus, OH 43215

Service Failure Report

Operator

Operator	Columbia Gas of Ohio
Street Address	200 Civic Center
City, State, Zip Code	Columbus, OH 43215
Company Contact	Rob Smith
Telephone	[redacted]

Service Failure

Street Address: Multiple Streets		City, Village or Township: Wellston	County: Jackson
Date: 2/28/12	Approximate Time: 3:00pm	Duration of service failure: 14.00 hrs	Number of customers without service: 314

Cause of service failure, if known	Operator error during an M&R station inspection resulted in accidental over-pressurization of downstream system.
Description of property damage to operator	Corresponding Service Failure.
Emergency action taken	Columbia immediately shut down the feed to the system for safety. We isolated the affected customers and performed a leakage inspection for safety after restoring gas service to the system. The house lines were tested as customer's gas service was re-established.
Actions taken to minimize the possibility of a recurrence (within sixty days after discovery)	Columbia suspended the Operator Qualifications of the employee responsible for the over pressurization. An investigation was performed and an after action review conducted to convey what happened across our operating areas to prevent reoccurrence.

Return within thirty days after the service failure occurred to:

E-mail: [redacted]
Fax:
Mail: Chief, Gas Pipeline Safety Section
Public Utilities Commission of Ohio
180 East Broad Street, 7th Floor
Columbus, Ohio 43215-3793

Columbia Gas of Ohio
A NiSource Company

June 7, 2019

Mr. Peter Chace
Manger of Gas Pipeline Safety Section
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

Re: Service Failure Report:
622 Munson Ave.
Zanesville, OH
43701

Dear Mr. Chace:

Please find enclosed a Service Failure Report from Columbia Gas of Ohio, Inc. ("Columbia") concerning the above-referenced matter. Also, this letter serves as the final report required by Ohio Administrative Code Section 4901:1-16-05 (B).

Should you have any question or require additional information, please do not hesitate to contact me at [redacted].

Sincerely,

[redacted]

Rob Smith
Manager, Operations Compliance
Columbia Gas of Ohio, Inc.

The Public Utilities Commission of Ohio

Public Utilities Commission of Ohio
Service Monitoring and Enforcement Department
180 East Broad Street, 7th Floor

Service Failure Report

Operator	
Operator	Columbia Gas of Ohio
Street Address	290 W. Nationwide Blvd
City, State, Zip Code	Columbus, OH 43215
Company Contact	Rob Smith
Telephone	[redacted]

Service Failure			
Street Address: 622 Munson Ave.		City, Village or Township: Zanesville	County: Muskingum
Date: 5-9-2019	Approximate Time: 13:51	Duration of service failure: 80 hrs	Number of customers without service: 617
Cause of service failure, if known	Main line system was shut down for safety due to an over pressurization following a regulator station being placed back in to operation.		
Description of property damage to operator	Corresponding service failure.		
Emergency action taken	Main line system was shut down and system pressure reduced to atmospheric pressure. Customers' gas meters and electric were shut off for safety.		
Actions taken to minimize the possibility of a recurrence (within sixty days after discovery)	Installed over pressure protection at the two stations feeding the system. Changed procedures to prevent a reoccurance.		

Return within thirty days after the service failure occurred to:

The Public Utilities Commission of Ohio

Public Utilities Commission of Ohio

Service Monitoring and Enforcement Department

180 East Broad Street, 7th Floor

E-mail: [redacted]

Fax:

Mail: Chief, Gas Pipeline Safety Section

Public Utilities Commission of Ohio

180 East Broad Street, 7th Floor

Columbus, Ohio 43215-3793