

To:
The Pennsylvania Public Utility Commission

February 24, 2022

Docket No.: [M-2021-3005572](#)

From:
Richard C. Culbertson
1430 Bower Hill Road
Pittsburgh, PA 15243
609- 410-0108

Subject: Public Comment on Proposed \$535,000 Civil Penalty Settlement with Columbia Gas of PA Concerning Over-pressurization of Distribution Systems

I thank the Pennsylvania Public Utility Commission for the invitation for public comment. With consideration of public comment, there is a chance of making things better and safer.

This is a serious and important question as to the proper fine/ settlement to stimulate safer operations of Columbia Gas. A satisfactory answer requires research, understanding, and wisdom.

Per federal regulators, overpressurized lines are a common cause of gas line explosions and house explosions. The San Bruno pipeline explosion in California on September 9 2010 was caused by the overpressurization of a pipeline ... eight people died.

This is an important question and issue because the over pressurization of pipelines has harmed Columbia Gas/ NiSource customers, employees, communities, and shareholders. NiSource, company, Columbia Gas of Massachusetts, and failure to control overpressurization has placed great harm on shareholders (over \$1 billion) and customers.

NiSource, the Parent of Columbia probably had an advantage over other publicly traded gas distributions companies in that NiSource operates in now six different states. The recognized presence of weaknesses, deficiencies, and best practices solutions can be spread over those six companies. Advantages are only advantages, however when they are exploited.

Below, I provide a series of publicly available exhibits about overpressurization and the struggles, incidences, and requirements that Columbia/ NiSource has had with the issue of overpressurization that has put customers, the public, and the company at risk.

When overpressurization occurs by a gas distribution company this can be a civil or a criminal violation. Regardless, of the penalty of \$535,000 – this is an indication of a serious breach of what was expected from the utility’s operations.

The best guidelines used to set the penalty is the **United States Sentencing Commission’s 2018 Chapter 8 – Sentencing Organizations**. <https://www.ussc.gov/guidelines/2018-guidelines-manual/2018-chapter-8>. That should still be used to validate any penalty from the Commission.

From this document -- Introductory Commentary (in part):

*“Third, the **fine range for any other organization should be based on the seriousness of the offense and the culpability of the organization**. The seriousness of the offense generally will be reflected by the greatest of the pecuniary gain, the pecuniary loss, or the amount in a guideline offense level fine table. Culpability generally will be determined by **six factors** that the sentencing court must consider. The four factors that increase the ultimate punishment of an organization are: (i) the involvement in or tolerance of criminal activity; (ii) the prior history of the organization; (iii) the violation of an order; and (iv) the obstruction of justice. The two factors that mitigate the ultimate punishment of an organization are: (i) the existence of an effective compliance and ethics program; and (ii) self-reporting, cooperation, or acceptance of responsibility.*

Fourth, probation is an appropriate sentence for an organizational defendant when needed to ensure that another sanction will be fully implemented, or to ensure that steps will be taken within the organization to reduce the likelihood of future criminal conduct.

These guidelines offer incentives to organizations to reduce and ultimately eliminate criminal conduct by providing a structural foundation from which an organization may self-police its own conduct through an effective compliance and ethics program. The prevention and detection of criminal conduct, as facilitated by an effective compliance and ethics program, will assist an organization in encouraging ethical conduct and in complying fully with all applicable laws. (Emphasis added)

To effectively answer the Commission’s question regarding the suitability of the fine it is important to review Exhibits 1 through 12. In summary:

Exhibit	Source/ topic	Significance
1	PUC Press Release	Request for public comments for a fine of \$535,000 for January 2018 overpressurizations occurrences. 2018 occurrences are only now being addressed by the PUC? Timeliness. If the PA PUC and Columbia/ NiSource had acted in a timelier manner, the occurrence in Massachusetts may not have occurred.

2	<p>Sentencing of Columbia Gas of Massachusetts of over criminal catastrophic event on September 13, 2018, of overpressurization occurrence, which led to the company being expelled from the state. Deferred Prosecution Agreement with the parent company, NiSource, Inc., which is still on probation. Updated January 7, 2021</p>	<p>Leonel Rondon was killed by the overpressurization incident and the resulting explosion. 22 individuals, including three firefighters. The fires and explosions damaged 131 structures, including at least 5 homes that were destroyed. NiSource was removed from the list as one of the world’s most ethical companies. Shortly after, the Governor of Massachusetts removed Columbia and put a rival utility in charge of the Columbia Gas disaster response.</p>
3	<p>49 C.F.R. §§ 192.605(a) Procedural manual for operations, maintenance, and emergencies.</p> <p>(a) <u>General. Each operator shall prepare and follow for each pipeline, a manual of written procedures.</u></p> <p>§192.605(b)(5)(b)(5) <u>Starting up and shutting down any part of the pipeline in a manner designed to assure operation</u> within the MAOP [maximum allowable operating pressure] limits prescribed by this part, plus the build-up allowed for operation of pressure-limiting and control devices.</p>	<p>(In part) --This manual is required to be updated and followed in the normal course of business. When failure occurs – where was the failure?</p> <p>Failures in pipeline operations are generally by Incorrect operations --- incorrect operating procedures or failure to follow a procedure.</p> <p>Further these requirements are mandatory by references in 49 CFR 192.7 -- ASME/ANSI B31.8S-2004 and incorrect operations. https://law.resource.org/pub/us/cfr/ibr/002/asme.b31.8s.2004.pdf</p>
4	<p>NiSOURCE, Inc. Defendant. Criminal, DEFERRED PROSECUTION AGREEMENT on or about February 25, 2020, with a term of 36 months. NiSource ...agrees, as to each of its subsidiaries involved in the distribution of gas through pipeline facilities ..., Pennsylvania, to implement and adhere to each of the recommendations from the National Transportation Safety Board ("NTSB") related to NTSB Accident ID PLD18MR003 regarding the Event.</p>	<p>The Deferred Prosecution Agreement regarding overpressurization event applies to operations of Columbia Gas of Pennsylvania/ NiSource may not have complied.</p> <p>Things that were supposed to have been fixed in Massachusetts should have been fixed in Pennsylvania as well.</p>

5	<p>NTSB Accident Report and Recommendations P-18-007 -- Review and ensure that all records and documentation of your natural gas systems are traceable, reliable, and complete. (Urgent) Closed 07/22/2019</p> <p>P-18-009 -- Gas main pressures should be continually monitored during these modifications and assets should be placed at critical locations to immediately shut down the system if abnormal operations are detected. (Urgent) Closed 07/22/2019</p>	<p>Recommendations became requirements under the deferred prosecution agreement.</p>
6	<p>49 CFR § 192.195 Protection against accidental overpressuring. “[M]ust have pressure relieving or pressure limiting devices” (Effective at least by DOT August 1970.</p>	<p>Having these overpressuring devices have been required and should have been in place. For a long time.</p>
7	<p>Joe Hamrock, CEO – NOVEMBER 26, 2018, before U.S. Senate Committee “We will be installing automatic pressure control equipment, referred to as “slam-shut” devices, on low-pressure systems across our seven-state operating area.” [Including Pennsylvania]</p>	<p>It appears that NiSource did not comply with 49 CFR § 192.195 and only committed to doing so after the explosions and fires caused by overpressurization.</p>
8	<p>July 31, 2019, another overpressurization incident – blew up a home in Washington County, PA to smithereens with several injured – Columbia Gas –we’re sorry.</p>	<p>The NTSB recommendations that were closed because of corrections were not corrected sufficiently to avert this accident. No apparent NTSB or PA PUC investigation or follow-up. No apparent PA PUC enforcement action.</p> <p>No apparent NTSB or PA PUC investigation. No PUC enforcement action.</p>
9	<p>49 CFR § 192.513 Test requirements for <u>plastic pipelines</u>. (b) The test pressure must be at least 150% of the maximum operating pressure (.5 psi) or 50 psi (345 kPa) gauge, whichever is greater.</p> <p>The International Fuel Gas Fuel Code is 3 PSI or 3 psig after the service point that would cover the customer’s service line.</p>	<p>The regulation and standards for test methods and test pressure for plastic pipes have been established for about 50 years.</p>

10	<p>Columbia Gas of Pennsylvania STANDARDS FOR CUSTOMER SERVICE LINES, METERS, AND SERVICE REGULATORS (Plumber’s Guide)</p> <p>Requires for customer’s service lines and service lines 90 psi.</p>	
11	<p>On July 24, 2013, a contract worker sustained a severe injury while cutting off the plastic end cap on a plastic gas mainline being installed to replace an existing steel main.</p> <p>The first section tested held air at 90 pounds per square inch gage but was apparently not depressurized after the test, records show.</p> <p>The PUC and Columbia eventually reached a settlement on or about November 9, 2016.</p>	<p>The time of the accident and the time of settlement is unreasonable and shows a reckless disregard for the safety of workers on the part of Columbia and the Commission. Safety issues must be addressed immediately to address and prevent future occurrences. Apparently, Columbia and the Commission were unaware of the test pressure was 50, not 90 psi.</p> <p>At 90 psi with a 6” pipe it is ~28.3 square inches that is 2,547 cumulative pounds against the cap. At 50 psi that would have been 1,414, a significant difference.</p>
12	<p>Nov 11, 2021, Action News Channel 4</p> <p>More than 200 Columbia Gas workers authorize a strike. The workers said they are concerned about unsafe work by contractors.</p> <p>Union members said there have been at least 50 safety incidents caused by contractors over the last 13 months <u>involving equipment not being installed properly, leading to gas leaks in homes.</u></p>	<p>There is no other public information concerning these internal concerns.</p> <p>It is unknown the nature of these incidents and their root causes. Leaks in homes can put occupants’ and owners’ property at risk.</p>

What we find from the exhibits:

Requirements for the prevention of overpressurization have been a regulatory requirement for a long time – at least 50 years. Columbia had not complied with 49 CFR § 192.195 - Protection against accidental overpressuring. NiSource only got serious after the disaster in Massachusetts and when they were forced to.

The lack of compliance also existed in Pennsylvania operations.

The overpressurization incident in January 2018 of which Columbia is now being fined now – over four years later was not taken seriously by either NiSource/ Columbia or the Pennsylvania Public Utility Commission. Serious threats to the public need to be taken seriously and timely. If NiSource had taken the failures in Pennsylvania seriously, perhaps the disaster in Massachusetts may not have occurred. We do know, the safeguards that were supposed to be in place were not in place.

The delay in enforcing Federal laws and regulations as well as Pennsylvania laws and regulations reflect very poorly on Columbia and Commission.

The root cause of this is the lack of required internal controls placed upon Columbia and the PUC. An adequate internal control–integrated framework would have prevented what happened in Pennsylvania and Massachusetts. That framework is the GAO Green Book on internal controls and the COSO Internal Control-Integrated Framework. This framework is the foundation of organizational governance. Just like with written building plans and the building – the framework must be recognized, built, used, maintained, and improved.

The details must be recognized and followed. The fact that Columbia Gas and the Commission allowed Columbia to use the wrong test methods for installation plastic pipe for over 50 years is unforgivable!

The regulations—for testing plastic pipes use 50 psi, but Columbia has used 90 psi at least over 50 years. How can so many be so wrong for so long? This regulatory violation should be viewed as a “key performance indicator.” If this is wrong, what can be expected to be right?

What is worse, on July 24, 2013, a contract worker sustained a severe injury while cutting off the plastic end cap on a plastic gas mainline. The test pressure uses was at 90 psi. Columbia paid a fine of \$50,000. The fine was not for using the wrong test methods of using the wrong test pressure and time of testing, but procedural issues. How could there have been internal and PUC investigations without noticing the wrong test method was used?

The NTSB recommended and the Department of Justice required various changes and improvements to NiSource’s operations in all their states of which they operate, including Pennsylvania. Those recommendations were considered complete and closed by the NTSB in early July 2019. In late July 2019, a house exploded in Washington County ... apparently what was supposed to have been fixed was not. There was no public record of a PA PUC investigation or enforcement.

Processes for settlement. The public does not know how the PUC reached this settlement. We know that Pennsylvania law, *PA Title 66 § 335. Initial decisions and release of documents*, applies.

*(c) Release of documents. whenever the commission conducts an investigation of an act or practice of a public utility and makes a decision, **enters into a settlement with a public utility** or takes any other official action, as defined in the Sunshine Act, with respect to its*

investigation, it shall make part of the public record and release publicly any documents relied upon by the commission in reaching its determination,"

Where are those documents that the Commission relied upon to reach the \$535,000?

In the Docket file, <https://www.puc.pa.gov/docket/M-2021-3005572> appears to be lacking documents relied upon to reach a determination.

The settlement does not appear to be sufficient and to provide assurances of adequate internal controls of Columbia's distribution system in the area of overpressurization.

Recommendations:

1. The Settlement as provided does not sufficiently fulfill the purpose of enforcement, punishment, adequate incentives, and requirements for corrective actions that may prevent harm to people and property.
2. The PUC should reinvestigate the incidents with an external independent and competent investigator of what happened in 2018, prior occurrences of pressurization, and other violations of over pressurizations.
3. The PUC should engage a third-party investigator and determine the root causes of delays of investigations and enforcement by the Commission of utility alleged crimes and violations of law, regulations, standards, and orders. In the case of Columbia, was this delayed action enforcing or protecting Columbia? Delayed justice sends the wrong message to Columbia and the public.
4. NiSource/Columbia appears to have a poor record in protecting the public, as such, they need additional oversight and supervision to provide assurance to the public and themselves they have effective internal control over their operations. In addition to the requirements of the COSO internal control – integrated framework of which they have adopted, and regulatory requirement 49 CFR 192.7 - ASME/ANSI B31.8S-2004," ... *For prescriptive-based integrity management programs, the alternative integrity assessment shall be an industry-recognized methodology, and be approved and published by an industry consensus standards organization.*"

"PA Title 66 § 2205. Duties of natural gas distribution companies. (a) Integrity of distribution system.-- (1) Each natural gas distribution company shall maintain the integrity of its distribution system at least in conformity with the standards established by the Federal Department of Transportation and such other standards practiced by the industry in a manner sufficient to provide safe and reliable service to all retail gas customers connected to its system consistent with this title and the commission's orders or regulations."

These industry standards from industry consensus standards organizations are API – Safety Management Systems 1173 with conformance with annual conformance assessments; ASTM 2279 – Guiding Principles of Asset Management; ISO 9000 Quality

Management; ISO 31000 Risk Management; ISO 45000 Safety Management; ISO 55000 Asset Management; ISO 37002 Whistle Blowing Management; ISO 37301 Compliance management systems; and ISO 19011, Guidelines for auditing management systems Compliance management systems. These should be integrated with Columbia's internal control system with annual conformance testing and assurance of conformance and compliance. The baseline assessment should begin immediately. With reports to the PA PUC, NiSource Audit Committee of the Board of Directors, the NiSource probation officer and made public as appropriate.

5. Order Columbia to retire Exhibit 10. Columbia Gas of Pennsylvania -- A NiSource Company STANDARDS FOR CUSTOMER SERVICE LINES, METERS, AND SERVICE REGULATORS (Plumber's Guide). This document is not an officially approved NiSource/ Columbia management document and provides incorrect information and is not trustworthy.
6. For the Commission, focus on the improvement of the internal controls and annual GAGAS audits of Columbia Gas, as required by Federal regulation 2 CFR 200 and Pennsylvania Management Directives.

Conclusion: Again, I thank the Commission for the opportunity to provide comments. Overpressurization of pipelines is a very serious issue – people's lives and property depend upon the utility to not make mistakes. To do this, utility distribution companies must install multiple safeguards in their system and the Commission must make sure they do.

Sincerely,



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Backup Exhibits:

Exhibit 1.

[PUC Seeks Public Comment on Proposed Settlement with Columbia Gas of PA Concerning Over-pressurization of Distribution Systems](#)

Published on 2/3/2022

Filed under: [Gas](#)

<https://www.puc.pa.gov/press-release/2022/puc-seeks-public-comment-on-proposed-settlement-with-columbia-gas-of-pa-concerning-over-pressurization-of-distribution-systems>

Subject: Settlement Follows PUC Examination of 2018 over-pressurization Incidents on Columbia Gas Systems in Fayetteville, Franklin County and Rimersburg, Clarion County Beginning January 2018

HARRISBURG – The Pennsylvania Public Utility Commission (PUC) today moved to seek public comment on [a proposed settlement](#) addressing events that resulted in the over-pressurization of Columbia Gas distribution systems in Fayetteville, Franklin County and Rimersburg, Clarion County.

The Commission voted 3-0 today to publish the proposed settlement in the *Pennsylvania Bulletin* for comment. Concerned parties have 25 days from the publication of the proposed settlement to file their comments with the Commission, using the [PUC’s free eFiling system](#).

Joint Settlement Proposal

The joint settlement – which was submitted by the PUC’s independent Bureau of Investigation and Enforcement (I&E) and Columbia Gas – follows an informal I&E investigation into the cause and circumstances of events in January 2018, involving the natural gas distribution system in Fayetteville, along with events in May and June of 2018, involving the distribution system in Rimersburg.

According to the joint settlement, Columbia Gas of PA will pay a \$535,000 civil penalty addressing a series of alleged violations of state and federal pipeline safety regulations.

Additionally, the settlement requires Columbia Gas to identify and inventory all bypass valves in its system in Pennsylvania; rank the risks specific to those valves; and develop a replacement schedule and mitigation measures to prevent bypass valves from bleeding through or failing.

The settlement also calls for Columbia Gas to continue with procedural and operational changes that have already been implemented – including improvements to inspection and operation of valves and regulators; enhanced systems to monitor and warn operators when pressures are too high or too low; and additional standard operating procedures.

About the PUC

The Pennsylvania Public Utility Commission balances the needs of consumers and utilities; ensures safe and reliable utility service at reasonable rates; protects the public interest; educates consumers to make independent and informed utility choices; furthers economic development; and fosters new technologies and competitive markets in an environmentally sound manner.

Visit the PUC's website at puc.pa.gov for recent news releases and videos of select proceedings. You can also follow us on Twitter, Facebook, LinkedIn, Instagram, and YouTube. Search for the "Pennsylvania Public Utility Commission" or "PA PUC" on your favorite social media channel for updates on utility issues and other helpful consumer information.

###

Docket No.: [M-2021-3005572](#)

Exhibit 2

<https://www.justice.gov/usao-ma/victim-and-witness-assistance-program/united-states-v-bay-state-gas-company-dba-columbia-gas-massachusetts>

<https://www.sec.gov/Archives/edgar/data/1111711/000119312520051063/d872025dex101.htm>

United States v. Bay State Gas Company, d/b/a **Columbia Gas of Massachusetts**

Docket: 20-cr-10066-FDS

The United States Attorney's Office has charged Bay State Gas Company, doing business as Columbia Gas of Massachusetts ("Columbia Gas"), with violating the federal Pipeline Safety Act, 49 U.S.C. § 60123(a), 49 U.S.C. § 60118(a), and **49 C.F.R. §§ 192.605(a) and 192.605(b)(5)**. As part of the plea agreement, Columbia Gas has agreed to plead guilty to this offense and pay a criminal fine of approximately \$53 million. The United States Attorney's Office has also entered into a **Deferred Prosecution Agreement with the parent company of Columbia Gas, NiSource, Inc.**

based in Indiana, which, among other provisions, requires that NiSource make reasonable best efforts to sell Columbia Gas, forfeit any profit from the sale to the Government, and once sold stop all gas pipeline activities in Massachusetts.

Sentencing

Bay State Gas Company, d/b/a Columbia Gas of Massachusetts, was ordered by U.S. District Court Chief Judge F. Dennis Saylor IV to pay a criminal fine of \$53,030,116 which represents twice the amount of profits that CMA earned between 2015 and 2018 from a pipeline infrastructure program called the Gas System Enhancement Plan (GSEP). In addition to a fine, the Court also sentenced CMA to a three-year period of probation during which CMA's operations will be subject to a monitor to ensure CMA's compliance with federal and state safety regulations. The three-year period of probation will continue until CMA is sold to a qualified buyer.

Frequently Asked Questions

What are the charges and what do they mean?

Bay State Gas Company, doing business as Columbia Gas of Massachusetts ("Columbia Gas") was charged in federal court in Boston with violating the federal Pipeline Safety Act. The company has agreed to plead guilty and pay a criminal fine of approximately \$53 million, the largest criminal fine ever imposed for a violation of the Pipeline Safety Act. In addition to the plea agreement, the Government has also entered into a Deferred Prosecution Agreement ("DPA") with NiSource, Columbia Gas's parent company based in Indiana. As part of the agreement, NiSource has agreed to make reasonable best efforts to sell Columbia Gas and cease and desist all gas pipeline activities in Massachusetts. They also agreed to forfeit any profit or gain from the sale of Columbia Gas.

Are there charges against individuals at the company?

The settlement is with Columbia Gas and no individuals were charged. As noted in the documents filed with the court, **Columbia Gas is being held accountable for the catastrophic event on September 13, 2018**, when a series of gas explosions in Lawrence, Andover and North Andover **damaged 131 buildings, destroyed three homes, injured 22 people, killed one and severely injured another.**

Who will receive the \$53 million?

Columbia Gas has agreed to pay the government \$53 million dollars, in addition to the profit of any sale of the company. Under the applicable statutes, the government is unable to award victims compensation. As with most criminal fines, the monies collected as part of this settlement will be directed to the Crime Victims Fund which is a major funding source for victim services throughout the United States. Columbia Gas has voluntarily paid individuals, businesses and municipalities since the event occurred. There are also pending lawsuits in the lower courts. As part of the agreement the company must resolve all pending civil claims and remains responsible for any prior voluntary payments of restitution to the victims of the event including individuals, business and municipalities. In addition, the Pipeline Safety Division of the Massachusetts Department of Public Utilities ("MA DPU") has also filed two civil enforcement actions against Columbia Gas that remaining pending. More information about the MA DPU enforcement actions can be found at <https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bydivision>.

I am a Columbia Gas customer. What does this mean for me?

Under the terms of the agreement, NiSource, the parent company for Columbia Gas has agreed to make reasonable best efforts to sell Columbia Gas. Under Massachusetts law, the sale or merger of a public utility has to be approved by the MA DPU. During that time, before any sale, a monitor will oversee compliance with the recommendations from the NTSB's investigation into the incident. The monitor will also report monthly to the U.S. Attorney's Office, the MA DPU and the Massachusetts Attorney General's Office. This process is expected to take at least several months.

Am I entitled to be present at the hearing or speak at the hearing?

Individuals who may be interested in providing a statement to the Court about the impact that this case may have had on them, please send your questions to the following email address: USAMA.VictimAssistance@usdoj.gov.

Documents

- [Press Release](#)
- 11. NiSource also agrees, as to each of its subsidiaries involved in the distribution of gas through pipeline facilities in Massachusetts, Indiana, Ohio, Pennsylvania, Maryland, Kentucky and Virginia to implement and adhere to each of the recommendations from the National Transportation Safety Board ("NTSB") related to NTSB Accident ID PLD18MR003 regarding the Event. [Information](#)
- [Plea Agreement](#) (<https://www.justice.gov/usao-ma/page/file/1252071/download>, February 25, 2020)

(Updated January 7, 2021)

Plea Agreement (between the Department of Justice and NiSource CEO Joe Hamrock, February 25, 2020.

11. Breach of Plea Agreement

If the U.S. Attorney determines that Defendant has failed to comply with any provision of this Plea Agreement, has engaged in any of the activities set forth in Paragraph 4(a)-(i) **or has committed any crime following Defendant's execution of this Plea Agreement**, the U.S. Attorney may, at his sole option, be released from his commitments under this Plea Agreement and the DPA in their entirety by notifying Defendant, through counsel or otherwise, in writing. The U.S. Attorney may also pursue all remedies available to him under the law, regardless of whether he elects to be released from his commitments under this Plea Agreement and/or the DP A.

Exhibit 3.

49 C.F.R. §§ 192.605(a) and 192.605(b)(5).

<https://www.law.cornell.edu/cfr/text/49/192.605>

§ 192.605 Procedural manual for operations, maintenance, and emergencies.

(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, [distribution lines are also required] 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 once 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** [maximum allowable operating pressure] limits prescribed by this part, plus the build-up allowed for operation of pressure-limiting and control devices.

Pipeline [49 CFR § 192.3](#)

Pipeline means **all parts of those physical facilities through which gas moves in transportation**, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

(Note this does not include pipes belonging private property owners. customer's service line or house lines. Transportation stops upon delivery.)

Exhibit 4

NiSOURCE, Inc.)) Defendant.) ____ **Criminal** . DEFERRED PROSECUTION AGREEMENT _____)
DEFERRED PROSECUTION AGREEMENT

<https://www.justice.gov/usao-ma/page/file/1252061/download>

<https://www.sec.gov/Archives/edgar/data/1111711/000119312520051063/d872025dex101.htm>

11. NiSource also agrees, as to each of its subsidiaries involved in the distribution of gas through pipeline facilities in Massachusetts, Indiana, Ohio, **Pennsylvania**, Maryland, Kentucky and Virginia to implement and adhere to each of the **recommendations** from the National Transportation Safety Board ("NTSB") related to NTSB Accident ID PLD18MR003 regarding the Event.

Exhibit 5 <https://www.nts.gov/investigations/Pages/pld18mr003.aspx>

Accident No PLD18MR003

Accident Date 9/13/2018

Location Merrimack Valley, MA

What Happened

On September 13, 2018, about 4:00 p.m. local time, a series of structure fires and explosions occurred after high-pressure natural gas was released into a low-pressure natural gas distribution system in the northeast region of the Merrimack Valley in the Commonwealth of Massachusetts. The natural gas distribution system was owned and operated by Columbia Gas of Massachusetts, a subsidiary of NiSource, Inc. Columbia Gas of Massachusetts delivers natural gas to about 325,000 customers in Massachusetts. One person was killed and 22 individuals, including three firefighters, were transported to local hospitals due to injuries; seven other firefighters incurred minor injuries. The fires and explosions damaged 131 structures, including at least 5 homes that were destroyed in the city of Lawrence and the towns of Andover and North Andover. Most of the damage occurred from fires ignited by natural gas-fueled appliances; several of the homes were destroyed by natural gas-fueled explosions. Fire departments from the three municipalities were dispatched to the fires and explosions. First responders initiated the Massachusetts fire-mobilization plan and received mutual aid from neighboring districts in Massachusetts, New Hampshire, and Maine. Emergency management officials had National Grid United States (the electric utility) shut down electrical power in the area, the state police closed local roads, and freight and passenger railroad operations in the area were suspended. Columbia Gas of Massachusetts shut down the low-pressure natural gas distribution system, affecting 10,894 customers, including some outside the area who had their service shut off as a precaution.

Recommendations

- [P-18-005](#)
- [P-18-006](#)
- [P-18-007](#)
- [P-18-008](#)
- [P-18-009](#)
- [P-19-014](#)
- [P-19-015](#)
- [P-19-016](#)
- [P-19-017](#)
- [P-19-018](#)

P-18-005

Overall status	Closed - Acceptable Action
Mode	Pipeline
On Most Wanted List	No
Priority level	Non-urgent
Times reiterated	0
Is hazmat	Yes
Is NPRM	No
SR coding	Personnel, Training / proficiency / check Procedures / Regulations, Design/Production/Manufacturing Procedures / Regulations, Oversight/Auditing Quality / Safety Management, Safety policy and objectives Quality / Safety Management, Safety assurance Quality / Safety Management, Safety promotion
Date issued	11/15/2018
Overall date closed	10/24/2019

Safety Recommendation Number Safety Recommendation Recipient Safety Recommendation Text
Priority

P-18-005

Commonwealth of Massachusetts

Eliminate the professional engineer licensure exemption for public utility work and require a professional engineer's seal on public utility engineering drawings.

P-18-006

NiSource

Revise the engineering plan and constructability review **process across all of your subsidiaries** to ensure that **all applicable departments review construction documents for accuracy, completeness, and correctness**, and that the documents or plans be sealed by a professional engineer **prior to commencing work. (Urgent)**

P-18-007

NiSource

Review and ensure that all records and documentation of your natural gas systems are traceable, reliable, and complete. (Urgent)

P-18-008

NiSource

Apply management of change process to all changes **to adequately identify system threats that could result in a common mode failure. (Urgent)**

P-18-009

Develop and implement control procedures during modifications to gas mains to mitigate the risks identified during management of change operations. **Gas main pressures should be continually monitored during these modifications and assets should be placed at critical locations to immediately shut down the system if abnormal operations are detected. (Urgent)**

Exhibit 6.

49 CFR § 192.195

Protection against accidental overpressuring.

(a) General requirements. Except as provided in [§ 192.197](#), each [pipeline](#) that is connected to a [gas](#) source so that the [maximum allowable operating pressure](#) could be exceeded as the result of pressure control failure or of some other type of failure, **must have pressure relieving or pressure limiting devices that meet the requirements of [§§ 192.199](#) and [192.201](#).**

(b) Additional requirements for distribution systems. Each distribution system that is supplied from a source of [gas](#) that is at a higher pressure than the [maximum allowable operating pressure](#) for the system must -

(1) Have pressure regulation devices capable of meeting the pressure, load, and other service conditions that will be experienced in normal [operation of the system, and that could be activated in the event of failure](#) of some portion of the system; and

(2) Be designed so as to prevent accidental overpressuring.

The section of the DOT Safety Regulations was published by DOT in **August 1970.**

Exhibit 7.

JOINT STATEMENT OF MR. JOE HAMROCK CHIEF EXECUTIVE OFFICER, NiSOURCE BEFORE THE UNITED STATES SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION NOVEMBER 26, 2018

<https://www.commerce.senate.gov/services/files/A5192D6E-17D3-4A80-8C22-232DA4E6A1F5>

“After September 13, we suspended construction work on low-pressure systems, only

performing work necessary for compliance and safety. Since then, we have identified additional ways to make our low-pressure systems safer and reduce the risk of over-pressurization. We are also taking steps to respond to and execute on the NTSB's safety recommendations.

As part of this effort, we continue to evaluate opportunities to engineer fail-safe measures in our gas delivery systems. We have already committed to invest approximately \$150 million to achieve the following infrastructure improvements:

- **OVER-PRESSURE PROTECTION DEVICES: We will be installing automatic pressure control equipment, referred to as “slam-shut” devices, on low-pressure systems across our seven-state operating area.** [Including Pennsylvania] These devices provide an additional level of control and protection. They operate like circuit-breakers; when they sense operating pressure that is too high or too low, they shut down the flow of gas to the system, regardless of the cause. These devices operate independently of other pressure control devices, so they will automatically shut down the system to prevent over-pressurization.
- **REMOTE MONITORING:** As an additional layer of protection, we will install remote monitoring devices on low-pressure systems so that gas control centers have an ability to receive pressure alarms on a real time basis. In the event a system is shut down by the “slam-shut” devices described above, the remote monitors **will enable us to respond more quickly to restore service to customers.**

Exhibit 8.

‘We Are Deeply Sorry’: Columbia Gas Takes Responsibility For Washington County Explosion <https://pittsburgh.cbslocal.com/2019/08/01/columbia-gas-claims-responsibility-north-franklin-township-explosion/>

https://observer-reporter.com/news/localnews/columbia-gas-takes-responsibility-for-north-franklin-house-explosion/article_cae8aba0-b48d-11e9-bf4f-9f2adf966f39.html

Five Injured.



photo credit: Pittsburgh Post-Gazette

“While our processes are designed to catch such anomalies; unfortunately, the combination of our review process, including our initial project design process and our additional secondary field survey that we completed, we did not identify that fact that the home was connected to the section of gas main that was being upgraded,” Huwar said.

Because of that, a necessary pressure regulator was never added to the home, resulting in the blast.

“When the new system was engaged, and because the pressure regulator was not added, the elevated pressure lead to a leak, which caused the explosion,”

Exhibit 9.

§ 192.513 Test requirements for plastic pipelines.

(a) Each segment of a plastic [pipeline](#) must be [tested](#) in accordance with this section.

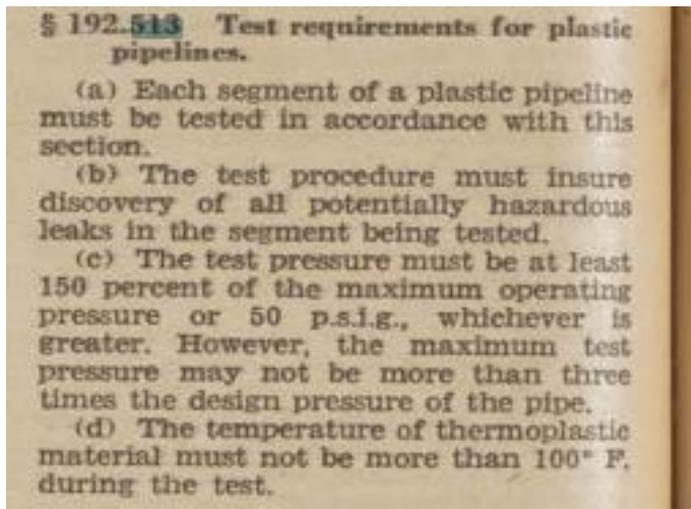
(b) The test procedure must insure discovery of all potentially hazardous leaks in the segment being tested.

(c) The test pressure must be at least 150% of the maximum operating pressure or **50 psi (345 kPa) gauge, whichever is greater.** However, the maximum test pressure may not be more than 2.5 times the pressure determined under § 192.121 at a temperature not less than the pipe temperature during the test.

(d) During the test, the temperature of thermoplastic material may not be more than 100 °F (38 °C), or the temperature at which the material's long-term hydrostatic strength has been determined under the listed specification, whichever is greater.

[35 FR 13257, **Aug. 19, 1970**, as amended by Amdt. 192-77, 61 FR 27793, June 3, 1996; 61 FR 45905, Aug. 30, 1996; Amdt. 192-85, 63 FR 37504, July 13, 1998; Amdt. 192-124, 83 FR 58719, Nov. 20, 2018]

35 FR 13257



101.4.1 Gas. The provisions of the International Fuel Gas Code shall apply to the installation of gas piping from the point of delivery [at the Curb valve or property line per the tariff.]

“406.4.1 Test pressure. The test pressure to be used shall be no less than 1 and 1/2 times the proposed maximum working pressure, (that is .5 PSI) **but not less than 3 psig** (20 kPa gauge), irrespective of design pressure. <https://up.codes/s/inspection-testing-and-purging>

Exhibit 10.

Columbia Gas of Pennsylvania -- A NiSource Company

STANDARDS FOR CUSTOMER SERVICE LINES, METERS, AND SERVICE REGULATORS

(Plumber's Guide)

4.2 NEW AND REPLACED SERVICE LINES

Additional requirements for new and replaced customer-owned service lines and meter setting installations.

4.2.1 New Construction Pressure Test Requirements (2" and under)*

A new customer service line shall be given a pressure test after construction and before being placed in service to demonstrate that it is gas tight. Service lines shall be pressure tested at **1.5 x MAOP or 90 psig**, whichever is greater, for at least **5 minutes** with **no drop** in pressure, and a leakage check shall be made at operating pressure of all exposed fittings in the service line that were not included in the pressure test.

Note: For service lines to operate at pressures above 99 psig, consult the Gas Company.

Revised: 06/01/2021

PROPRIETARY

A.4.2.1 New Construction Pressure Test Requirements (2" and under)* &

A.4.3 ABANDONED, TEMPORARILY DISCONNECTED, OR PARTIALLY REPLACED*

Service Line Testing

Service Lines 2" & Under, New or Repaired, GS 1500.010			
Minimum Test Requirements:	Time		Pressure
	300 ft and less	301 ft to 1,750 ft	
MDPE Plastic Pipe	5 minutes	1 hour	90 psig
HDPE Plastic Pipe	5 minutes	1 hour	150 psig
Steel Pipe (less than 30% SMYS)	5 minutes	1 hour	1.5 x MAOP* or 90 psig, whichever is greater

Note: Contact the Gas Company for lengths over 1,750 feet

Revised: 06/01/2021

PROPRIETARY

Service Lines Sizes 3", 4" and 6", New or Repaired, GS 1500.010			
Minimum Test Requirements:	Time		Pressure
	200 ft and less	201 ft to 400 ft	
MDPE Plastic Pipe	1 hour	2 hours	90 psig
HDPE Plastic Pipe	1 hour	2 hours	150 psig
Steel Pipe (less than 30% SMYS)	1 hour	2 hours	1.5 x MAOP* or 90 psig, whichever is greater

Note:

1. When the test time is required to be greater than 1 hour, a pressure recording gauge shall be used to record the test pressure.
2. Contact the Gas Company for testing sizes greater than 6", lengths greater than 400 ft or steel pipe at or above 30% SMYS

Exhibit 11.

<https://archive.triblive.com/local/pittsburgh-alleghey/columbia-gas-to-pay-50k-fine-under-proposal-to-settle-alleged-safety-violations/>

Columbia Gas to pay **\$50K fine** under proposal to settle alleged safety violations

**TRIB
LIVE**

TRIBUNE-REVIEW | **Wednesday, Nov. 9, 2016** 6:12 p.m.

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EMAIL NEWSLETTERS

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Columbia Gas and state Public Utility Commission investigators have reached a proposed agreement that calls for the utility to pay a **\$50,000 fine and revise its operating procedures to settle alleged safety violations from two injury incidents in Western Pennsylvania.**

Details of the settlement proposal were unveiled Thursday, when the PUC voted 5-0 to make it available for [public comment for 20 days](#) as required by regulation before the commission considers final approval.

The PUC's independent Bureau of Investigation & Enforcement alleges **Columbia's "failure to take adequate precautions, exercise reasonable care, and provide necessary training on the company's operating procedures" contributed to injuries to two contract workers in separate incidents during pipeline work.**

On July 24, 2013, **a contract worker sustained a severe injury while cutting off the plastic end cap on a plastic gas main line** being installed to replace an existing steel main in the area of Long Valley Drive, Coraopolis Road, Laurel Ridge Road and East Ridge Road in Kennedy. After installing the new line, the system did not hold pressure in a test, indicating a leak on the line, PUC records indicate.

Two days later, the contractor crew and Columbia construction coordinators returned to the job site and cut the 2,200-foot main line into three sections and pressurized each section separately to determine the source of the leak. **The first section tested held air at 90 pounds per square inch gage but was apparently not depressurized after the test, records show.**

After it was eventually determined that the final 320-foot section of the pipe was the source of the leak, a contract worker returned to the first section to cut the plastic end cap off the line in preparation for connecting the pipe segments. The worker was using a rotary pipe cutter to remove a cap on one section when — unbeknownst to him that it was pressurized — **the cap blew off and struck the worker in the lower leg, PUC records state. He was transported to Allegheny General Hospital for treatment.**

PUC enforcement investigators say they were unable to determine whether the contract worker was directed to cut the end cap or was acting on his own. However, the investigators alleged Columbia and its **contractor failed to "exercise reasonable care" or follow the utility's "safety during testing" standards" in the mishap.**

The second incident occurred Nov. 25, 2013, on East Clyde Street in Wampum, Lawrence County, where Columbia was installing a plastic gas line to resolve a gas supply problem. PUC records show a contractor crew was “pigging,” or running a cleaning device through the pipe, when the worker injured his foot and ankle and had to be transported to a local hospital for treatment. An investigation determined a member of the contractor crew had not successfully passed Columbia's qualification test for replacing and repairing gas lines and that Columbia and the contractor failed to exercise reasonable care” to prevent the worker from being injured.

Columbia disputes or disagrees with some of the alleged violations. Under the settlement agreement, Columbia admits no wrongdoing but agrees to take corrective action and implement several revisions to its training and operating procedures to prevent injuries.

Among other things, Columbia will: Accelerate its enhanced operator qualification training for Columbia contractors from a three- to two-year cycle; provide physical identifiers on all sections of gas main under test pressure and revise pressure testing training procedures; and verify that all required contractors and Columbia employees have completed training to prevent and respond to potentially hazardous situations.

In addition, Columbia agrees to pay a \$50,000 civil penalty, which it cannot recover from ratepayers. Columbia has been cooperative with the PUC investigations but contends neither incident involves gas safety issues that fall under the PUC's jurisdiction.

If the settlement is not approved or the agreement is modified by the commission members, both parties have the right to withdraw from the settlement

Exhibit 12.



<https://www.wtae.com/article/columbia-gas-workers-authorize-strike/38221293>

Updated: 7:35 AM EST Nov 11, 2021

More than 200 Columbia Gas workers authorize strike

CANONSBURG, Pa. —

More than 200 Columbia Gas employees have voted to strike over the next few days.

The workers said they are concerned over unsafe work by contractors.

Union members said there have been at least 50 safety incidents caused by contractors over the last 13 months involving equipment not being installed properly, leading to gas leaks in homes.