U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

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NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER

VIA ELECTRONIC MAIL TO: stanley_chapman_iii@tcenergy.com

December 22, 2021

Mr. Stanley Chapman
SVP & General Manager, US NG Pipelines
Columbia Gas Transmission, LLC
7000 Louisiana Street
Houston, TX 77002

CPF 1-2021-045-NOPV

Dear Mr. Chapman:

On May 28, 2019, at approximately 10:30 PM local time, a gas leak caused a fire/explosion at a residence located on the property of Kemmer's Greenhouse and Farm Market (Kemmer's) at 2464 Pine Run Road in Mayport, Clarion County, Pennsylvania (the Incident). There was one person inside the residence at the time of the Incident who was transported to the hospital for in-patient treatment of burns and injuries.

At the time of the Incident, Columbia Gas Transmission, LLC (Columbia) indicated that the gas pipeline near Kemmer's, Line 4010, was an unregulated, Class 1 gathering line. Based on this information, the Pennsylvania Public Utilities Commission (PA-PUC) responded to the Incident and initiated a failure investigation.[1] During this failure investigation, however, Columbia confirmed that Line 4010 was operating under a FERC Certificate[2] and was subject to the jurisdiction and safety oversight of PHMSA. Therefore, PHMSA assumed the investigation of the

[1] Most gathering lines are intrastate pipeline systems that are inspected by the relevant State regulatory entity. The PA PUC has safety oversight of intrastate pipeline systems, including gas gathering pipelines, pursuant to 49 USC 60105-*State pipeline safety program certifications*.

[2] Line 4010 was originally constructed in 1926 as a transmission pipeline prior to its acquisition by Columbia in 1971.

Incident in May 2020, including a review of Line 4010's FERC status and class location designation. Based on PHMSA's initial investigation, it was determined that the impacted segment of Line 4010 was incorrectly classified as a Class 1, unregulated gas gathering line. This segment of Line 4010 should have been classified as a Class 3, Type B regulated onshore gas gathering line pursuant to § 192.12(b) as it is a metallic pipeline with a Maximum Allowable Operating Pressure that produces a hoop stress of less than 20% of Specified Minimum Yield Strength.

The Root Cause Failure Analysis (RCFA) performed by Keifner and Associates, dated February 2020, indicated the cause of the leak was due to stray current corrosion on Line 4010 that resulted from the cathodic protection (CP) system installed on Columbia's Line 134, which shares a common right-of-way (ROW) with Line 4010. When the pipeline failed, the released gas migrated from the leak site at the intersection of Pine Run Road approximately 100 feet into the basement area of the home where it ignited.[3]

As a result of the investigation, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items investigated and the probable violations are:

1. § 191.5 Immediate notice of certain incidents.

(a) At the earliest practicable moment following discovery, but no later than one hour after confirmed discovery, each operator must give notice in accordance with paragraph (b) of this section of each incident as defined in § 191.3.

Columbia failed to notify the National Response Center (NRC) at the earliest practicable moment following discovery, but no later than one hour after confirmed discovery of the Incident. Specifically, Columbia failed to notify the NRC until more than 13 hours after confirmed discovery of the incident. A reportable incident is an event that involves a release of gas from a pipeline that results in, among other things, personal injury necessitating in-patient hospitalization or estimated property damage of $122,000 or more. [4] "Confirmed discovery" of an incident "means when it can be reasonably determined, based on information available to the operator at the time a reportable event has occurred, even if only based on a preliminary evaluation."[5]

According to NRC records reviewed during PHMSA's investigation, the Incident occurred at 10:55 pm on May 28, 2019.[6] Shortly after the Incident occurred, at 11:10 PM, Columbia personnel arrived on scene and observed that the fire/explosion completely destroyed the residence at 2464 Pine Run Road, scattered debris more than 500 feet away, and caused extensive damage to two

[3] *See* PHMSA's Failure Investigation Report, June 7, 2021 (on file with PHMSA).

[4] *See also* Columbia's Operations and Maintenance Plan, Procedure 191.05 (incorporating the definition of "incident" and "confirmed discovery" in a manner consistent with the definitions set forth in 191.3).

[5] 49 C.F.R. § 191.3.

[6] The RCFA recorded the Incident as occurring at approximately 10:30 PM. *See* Kiefner & Associates Root Cause Failure Analysis of a Structure Fire in Mayport, PA Final Report No. 20-018 (Feb. 10, 2020) (on file with PHMSA).

other nearby structures.[7] The fire was still burning and an odor of natural gas was present.[8] The individual who was inside the residence during the Incident was transported by ambulance to the hospital for in-patient treatment for second-degree burns and other injuries.

At 12:10 AM, Columbia began leak surveying the right-of-way of Line 4010 and Line 134.
At 12:32 AM, Columbia identified a gas leak adjacent to Pine Run Road on the east side of Line 4010. Despite the availability of information upon which it could have reasonably been determined that a reportable event had occurred, Columbia failed to give notice within one hour of confirmed discovery. Specifically, information was available that a gas pipeline leak had initiated a fire/explosion that destroyed an occupied residence, sending an individual to the hospital for emergency medical treatment, and extensively damaged two other structures, yet Columbia failed to report the incident to the NRC until 2:04 PM on May 29, 2019.[9] This was more than 13 hours after the confirmed discovery of the incident and thus exceeded the one-hour reporting requirement for this reportable incident.

2. § 192.473 External corrosion control: Interference currents.

(a) …

(b) Each impressed current type cathodic protection system or galvanic anode system must be designed and installed so as to minimize any adverse effects on existing adjacent underground metallic structures.

Columbia failed to design and install the impressed current type cathodic protection system or galvanic anode system so as to minimize any adverse effects on existing adjacent underground metallic structures. Specifically, Columbia failed to minimize the adverse effects of the impressed current system installed on Line 134 in the vicinity of Kemmer's Greenhouse and Farm Market.

According to Columbia records presented to PHMSA, Line 134 consisted of a 10.75-inch diameter carbon steel gas transmission pipeline running parallel to Line 4010 in a common ROW. Both lines are owned and operated by Columbia. The section of Line 134 near the Incident location was not externally coated and an impressed current system, originally installed in 1992, was applied along with sporadic anodes throughout the CP system to bolster pipe-to-soil potentials. Line 4010 consisted of polyethylene wrapped steel pipe with no CP system installed. Field testing conducted by Kiefner and Associates confirmed the stray current corrosion and resulting pitting on Line 4010 was due to the CP system installed on Line 134 and the lack of

[7] *See* PHMSA's Failure Investigation Report, at Figure 2.

[8] The Fire Chief who responded to the Incident informed PHMSA that he noticed a strong smell of natural gas north of the Incident site when he arrived on scene that night, and saw gas venting from a white pipe near the road. *Id.* at 9.

[9] *See* NRC Report No. 1247157.

electrical bonding between the two pipelines.[10] In addition, a lack of stray current monitoring and mitigation efforts was a contributing factor of the Incident.[11]

Therefore, Columbia failed to minimize the adverse effects of the impressed current system installed on Line 134, in violation of § 192.473(b).

3. § 192.5 Class Locations.

(a) …

(b) Except as provided in paragraph (c) of this section, pipeline locations are classified as follows:

(1) …

(3) A Class 3 location is:

(i) …

(ii) An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)

Columbia failed to classify a segment of Line 4010 and Line 134 as a Class 3 location. Specifically, Columbia failed to classify Line 4010 and Line 134 near Kemmer's in Mayport, PA as a Class 3 location in accordance with § 192.5(b)(3)(ii). Records show that this segment of Line 4010 was being operated and maintained by Columbia as a Class 1, unregulated gas gathering line prior to the Incident. Records also show that Line 134, a regulated gas transmission line, has been operated as a Class 2 location in the area of Kemmer's. Both lines are located within a common ROW in this area.

In 2016 TransCanada, now TC Energy (TC), acquired the Columbia Pipeline Group (CPG). At the time of the acquisition, Line 4010 was classified as an onshore gas gathering line. The segment of Line 4010 adjacent to Kemmer's was identified as an unregulated Class 1 location. In September of 2017, TC contracted TRC Pipeline Services (TRC) to conduct a population density survey as part of integrating CPG's assets into TC's operations.

According to documentation provided by TC, a representative of TRC visited Kemmer's to confirm the occupancy and frequency at which the buildings were being used. As a result of the study, the classification remained unchanged as an unregulated Class 1 location. However, the TRC representative failed to consider this area as a place of public assembly that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period as outlined in § 192.5(b)(3)(ii). Documentation of an interview conducted between the TRC representative and the business owner indicated that Mr. Kemmer advised the TRC representative that 20 people

[10] *See* PHMSA Failure Investigation Report at 12–13; Kiefner & Associates Root Cause Failure Analysis of a Structure Fire in Mayport, PA Final Report No. 20-018 (Feb. 10, 2020) (on file with PHMSA).

[11] *Id.*

occupied the property on average throughout the week.[12] He also indicated that during peak season, closer to spring and summer holidays, the greenhouse business and farmer's market can see higher occupancy, around 100 people, but only for 2 to 3 days per week.[13]

Therefore, Kemmer's satisfies the definition of a place of public assembly as outlined in § 192.5(b)(3)(ii), and Columbia failed to classify the segment of Line 4010 and Line 134 near Kemmers as a Class 3 location.

4. § 192.9 What requirements apply to gathering lines?

(a) …

(d) *Type B lines*. An operator of a Type B regulated onshore gathering line must comply with the following requirements:

(1) …

(2) If the pipeline is metallic, control corrosion according to requirements of subpart I of this part applicable to transmission lines except the requirements in §192.493 (inline inspection).

Columbia failed to comply with the code requirements for Type B Gathering lines as outlined under § 192.9(d)(2). Specifically, Columbia failed to cathodically protect the area on Line 4010 near Kemmer's in accordance with the requirements of subpart I applicable to transmission lines. As noted above, the RCFA indicated the cause of the leak was due to stray current corrosion on Line 4010 that resulted from the CP system installed on Line 134.

Line 4010 was not cathodically protected and was not bonded to Line 134 to reduce the effects of the stray current. Because Line 4010 was operated as an unregulated Class 1 gathering line, no corrosion control procedures, plans, or monitoring activities were implemented. In a response to a PHMSA data request on February 17, 2021, Columbia confirmed that it did not have any cathodic records as requested for Line 4010.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed $225,134 per violation per day the violation persists, up to a maximum of $2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed $222,504 per violation per day the violation persists, up to a maximum of $2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed $218,647 per violation per day the violation persists, up to a maximum of $2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed $213,268 per violation per day, with a maximum penalty not to exceed $2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed $209,002 per violation per day, with a maximum penalty not to exceed $2,090,022.

[12] *See* PHMSA Violation Report at Exhibit A-01.

[13] *Id.*; *See also* PHMSA's Failure Investigation Report at 12–13.

We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of $1,064,400 as follows:

Item number	PENALTY
1	$27,600
2	$518,400
3	$518,400

Warning Item

With respect to Item Number 4, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct this item. Failure to do so may result in additional enforcement action.

Proposed Compliance Order

With respect to Item 3, pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Columbia Gas Transmission, LLC. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be 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).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. 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 you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to **CPF 1-2021-045-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

ROBERT THOMAS BURROUGH

Digitally signed by ROBERT THOMAS BURROUGH
Date: 2021.12.22 11:29:39 -05'00'

Robert Burrough
Director, Eastern Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Enforcement Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Columbia Gas Transmission, LLC (Columbia) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Columbia with the pipeline safety regulations:

A. In regard to Item 3 of the Notice pertaining to § 192.5(b)(3)(ii), Columbia must implement a class location change from a Class 1 to a Class 3 on the Type B gathering Line 4010 in the area of Kemmer's Greenhouse and Farm Market and comply with applicable requirement as outlined in § 192.9(d) within **1 year** of receipt of the Final Order.

B. In regard to Item 3 of the Notice pertaining to § 192.5(b)(3)(ii), Columbia must implement a class location change from a Class 2 to Class 3 on transmission line 134 in the area of Kemmer's Greenhouse and Farmer's Market and comply with the applicable requirements for transmission pipelines in Class 3 areas under Part 192 within **1 year** of receipt of the Final Order.

C. In regard to Item 3 of the Notice pertaining to § 192.5(b)(3)(ii), Columbia must review, assess, and implement as necessary the recommendations outlined in the "Root Cause Failure Analysis of a Structure Fire in Mayport, PA" prepared by Kiefner and Associates, dated February 10, 2020. Columbia must submit a report to PHMSA summarizing the review and implementation of recommendations to prevent similar incidents from occurring in the future. The report must be submitted within **90 days** of receipt of the Final Order.

D. It is requested (not mandated) that Columbia maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Robert Burrough, Director, Eastern 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.