Enbridge Gas Utah

Party Submission to the

National Transportation Safety Board

For the Investigation of

NTSB Accident Number PLD25FR001
South Jordan, UT
November 6, 2024

Submitted October 8, 2025

Jeffrey D. Hansen
Party Coordinator

Director, Pipeline Integrity
Integrity & Risk Management
Enbridge Gas

Table of Contents

I. Overview 1
II. Factual Information 1
A. Enbridge and Enbridge Gas Utah 1
B. Summary of Incident 3
C. History of Natural Gas Service to the Incident Residence, South Jordan, UT 3
D. Emergency Response Procedures 4
E. Response to the Incident 4
F. Integrity Management 8
G. Leak Survey 9
H. System Odorization 10
I. Historical Odor Complaints in Surrounding Neighborhood 11
III. Analysis 11
A. Emergency Response 11
B. Post Incident Leak Survey and Replacement of Main 11
C. Service Regulator Test 11
D. Slot Trenches 12
E. Gas Migration and Soil Testing 13
IV. Proposed Findings & Conclusions 13
V. Causation 13
VI. Post Incident Safety Improvements 14
A. Aldyl A Replacement 14
B. Update Leak Screening Procedures (Standard Practice 10-10-02) 14
C. Update Underground Gas Leak Procedure (Standard Practice 3-75-01) 14
D. Accelerated Leak Survey on Aldyl A Pipe System Wide 15
VII. Proposed Industry Recommendation 16

I. Overview

On November 6, 2024, at 3:09 p.m.[1], a natural gas explosion and fire occurred at 10593 South 3210 West (the Incident Residence) in South Jordan, UT causing one fatality. The explosion destroyed that residence and damaged several nearby residences. Significant concentrations of natural gas were found in the ground around the Incident Residence after the explosion. A leak was found approximately 150 feet from the Incident Residence on a 4-inch diameter plastic Aldyl A natural gas main line. A gas migration study employing computational fluid dynamics modeling with conservative soil characteristics and flow rates (intended to maximize horizontal migration) was unable to provide an explanation for the distance the gas traveled to the Incident Residence. The role of any possible sources of gas in the structure are unknown.

After the incident, the natural gas in the distribution system was found to be properly odorized. In the past year, there were two records of gas odor complaints in the area, but in both complaints a natural gas appliance was found to be the source of the odors.

II. Factual Information

A. Enbridge and Enbridge Gas Utah

Headquartered in Calgary, Alberta, Canada, Enbridge Inc. employs more than 16,000 people. Enbridge Inc.'s common shares trade under the symbol ENB on both the Toronto Stock Exchange (TSX) and New York Stock Exchange (NYSE).

In the natural gas pipeline sector, Enbridge Inc. transports about 20% of the natural gas consumed in the United States. Enbridge Inc. is the largest natural gas utility in North America, with a network that includes 110,606 miles of gas transportation and distribution main lines, and 64,453 miles of service lines. In September 2023, Enbridge Inc. announced the acquisition of three U.S.-based natural gas utilities, expanding its service to approximately three million customers across Ohio, Utah, Wyoming, Idaho, and North Carolina.

Enbridge Inc. purchased the former Dominion Energy Utah, Wyoming, Idaho local distribution company on May 31, 2024. Enbridge Gas Utah, Wyoming, Idaho employs 1,200 people. Between September 16, 2016, and May 31, 2024, Enbridge Gas Utah, Wyoming, Idaho was owned by Dominion Energy and operated as Dominion Energy Utah, Wyoming, Idaho. Prior to September 16, 2016, Enbridge Gas Utah, Wyoming, Idaho was owned by Questar Corporation and operated as Questar Gas Company.

Enbridge Gas Utah, Wyoming, Idaho serves more than 1.2 million customers across 33 counties in Utah, Wyoming, Colorado and Idaho. Figure 1 depicts these service areas. In 2024, Enbridge Gas Utah, Wyoming, Idaho operated approximately 33,120 miles of transmission and distribution pipelines.

[1] All time references in this document are local time (Mountain Standard Time)

Figure 1 Enbridge Gas Utah, Wyoming, Idaho Service Territory

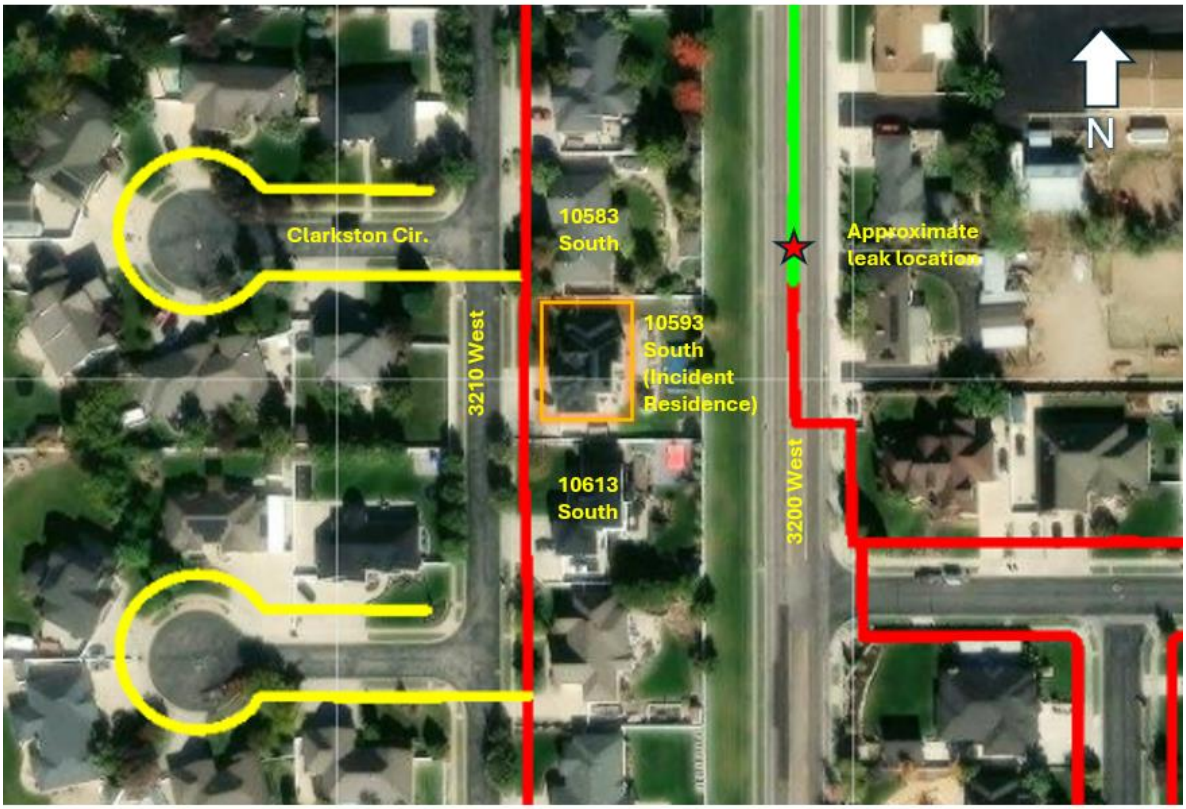

Figure 2 Incident Site

B. Summary of Incident

On November 6, 2024, at 3:09 p.m., a natural gas explosion and fire occurred at the Incident Residence causing one fatality. The explosion destroyed that residence and damaged several nearby residences. The service line and main line connected to the Incident Residence are in the front (to the west of) of the residence. Concentrations of natural gas were found in the ground around the Incident Residence and at elevated levels behind (to the east of) the Incident Residence and the residence directly to the north. A leak was found approximately 150 feet east-northeast of the Incident Residence on a 4-inch diameter plastic Aldyl A natural gas main line.

C. History of Natural Gas Service to the Incident Residence, South Jordan, UT

As shown in Figure 2, the Incident Residence is located between two roads which both have underground natural gas main lines. The gas supply for the Incident Residence comes from the 2-inch plastic main line located immediately in front (west) of the Incident Residence on the street labeled 3210 West. This main line was originally installed in the year 2000 and is made of TR418, medium density polyethylene (MDPE). The service line to the Incident Residence was ¾-inch and installed in 2013. The street (labeled 3200 West) is located behind (east) the residence where a 4-inch plastic Aldyl A main line (green), installed in 1976, runs north to south and transitions to a 2-inch plastic TR418 main line (red), installed in 2007 which continues south on 3200 West.

D. Emergency Response Procedures

When responding to a gas odors call, or an emergency incident similar to the one experienced here, the priority upon arriving onsite is to make the situation safe. To do this, the responding Enbridge Gas Utah employee will identify the location and extent of the gas by checking above ground structures, below ground infrastructure (such as sprinkler boxes and sewer systems), and using bar holes to check for sub-surface gas. When possible, the response would include verifying the gas and if the source of the gas is or is not inside structures (i.e., buildings). Once the extent of the gas has been determined, it is monitored until the source of the gas leak is located. The information gained while determining the location, or spread of, the gas is key to locating the source of the gas. Locations with higher gas concentrations are used to determine which main lines and service lines may be leaking. Then the main lines and service lines believed to be the source of the gas leak may be excavated or isolated and pressure tested to see if it can be determined whether they are the source of the gas leak.

In the emergency response for this incident, Enbridge Gas Utah followed the procedure of isolating and pressure testing the main on 3210 West and service from 3210 West to the Incident Residence initially, to determine the extent of the gas leak and then began to eliminate the potential sources of the gas leak. This was repeated several times and expanded as the irregular gas migration in this incident lead to increased complexity and time to locate the potential source of the gas.

E. Response to the Incident

On November 6, 2024, at 3:13 p.m. Enbridge Gas Utah received notification of the incident from Fire Emergency Dispatch. At 3:16 p.m. Enbridge Gas Dispatch made radio contact with its first responding technician and dispatched the technician to the Incident Residence at 10593 South 3210 West, South Jordan, UT. At 3:45 p.m. the first responding Enbridge Gas Utah technician arrived onsite to confirm a house explosion had occurred at 10593 South 3210 West, South Jordan UT. Upon arrival, the Enbridge Gas Utah technician checked in with the fire department and called Enbridge Gas Utah supervision. He then began performing leak detection activities.

Natural gas concentrations (i.e., percent of natural gas in the air) were found in the ground along the service line to the Incident Residence ranging from 68.2%[2] to 94.5%, dropping to 81% at the tap along the main line that serves the residences on 3210 West. Natural gas concentrations along the main line running south on 3210 West toward 10613 South (house to the south of the Incident Residence) ranged from approximately 73% to 81% at the tap on the main line for the Incident Residence. Natural gas concentrations dropped to approximately 52% mid-yard running south over the main line, down to 0% near the south fence line of the Incident Residence.

Additionally, 99.9% concentration of natural gas was found in the ground at the riser located near the south-west corner of 10583 South with gas concentrations ranging from approximately 83% down to 10% along the main line on 3210 West, quickly dropping as the leak screening/bar holing proceeded northward. Zero (0%) natural gas concentration was found north of the north fence line of house to the north of the Incident Residence.

[2] All gas readings are in percent gas

At approximately 5:45 p.m. on November 6 the service line (refer to Figure 3) to the Incident Residence was disconnected from the main line and tested. The service line pressure test passed with no leaks indicated.

The service tap (refer to Figure 3) to the house to the north of the Incident Residence was exposed at approximately 7:30 p.m. to facilitate testing of that service line. At approximately 9:00 p.m. on November 6 the service line (refer to Figure 3) to the 10583 South was tested and passed with no leaks indicated.

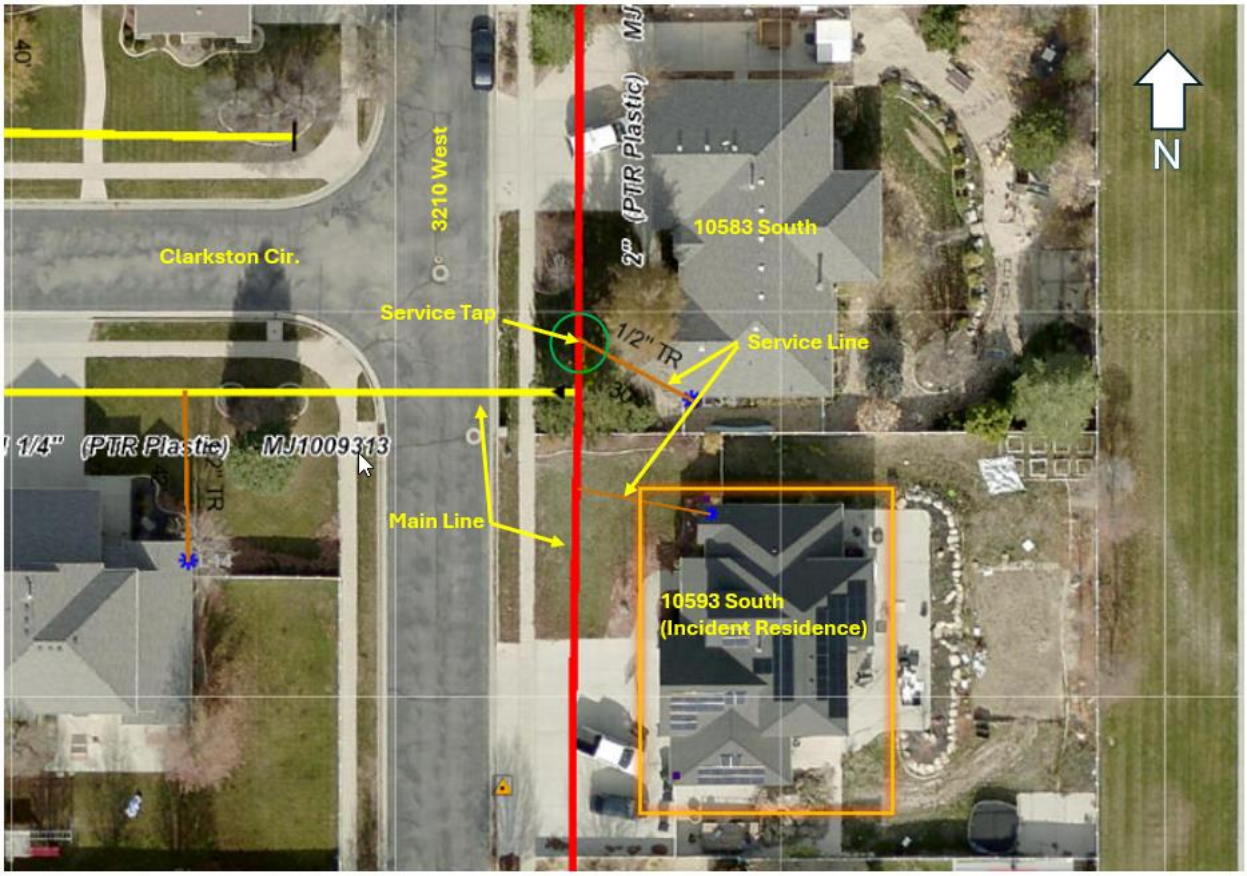

Figure 3 Service Line and Service Tap Locations - 10583 South 3210 West

At 11:00 p.m. on November 6, excavation activities began (refer to Figure 4 for details on excavation locations (points A, B, C and D)) to allow testing of the main line located west of the Incident Residence on 3210 West, between 5 feet south of the south fence line of the Incident Residence (point A) to approximately 5 feet south of the north fence line of the Incident Residence (point B). The main line was excavated in both locations (points A and B) and isolated to facilitate testing. At 12:04 a.m. on November 7, this main line segment was tested and passed with no leaks indicated.

At 1:00 a.m. on November 7, excavation activities began to test a 1.25-inch main line feeding Clarkston Circle, a cul-de-sac west of 3210 West. The main line (yellow) was running perpendicular to and was fed by the 2-inch main line (red) on 3210 West. At 1:10 a.m. Enbridge Gas Utah crews contacted an Enbridge Gas Utah employee to obtain and deploy a compressed natural gas (CNG) tailer to maintain

service to the residences in the cul-de-sac. The CNG trailer arrived, and deployment began at 2:15 a.m. The 1.25-inch main line was then disconnected in the park strip on the west side of 3210 West (point C).

At approximately 3:50 a.m. the 2-inch main line was tested from (point B) house to the north of the Incident Residence to (point D) and included the 1.25-inch main line (yellow) between (point B) and (point C) and passed with no leaks indicated.

All pressure tests were performed using compressed air at the operating pressure of 45 psig for 15 minutes per 100 feet of pipe.

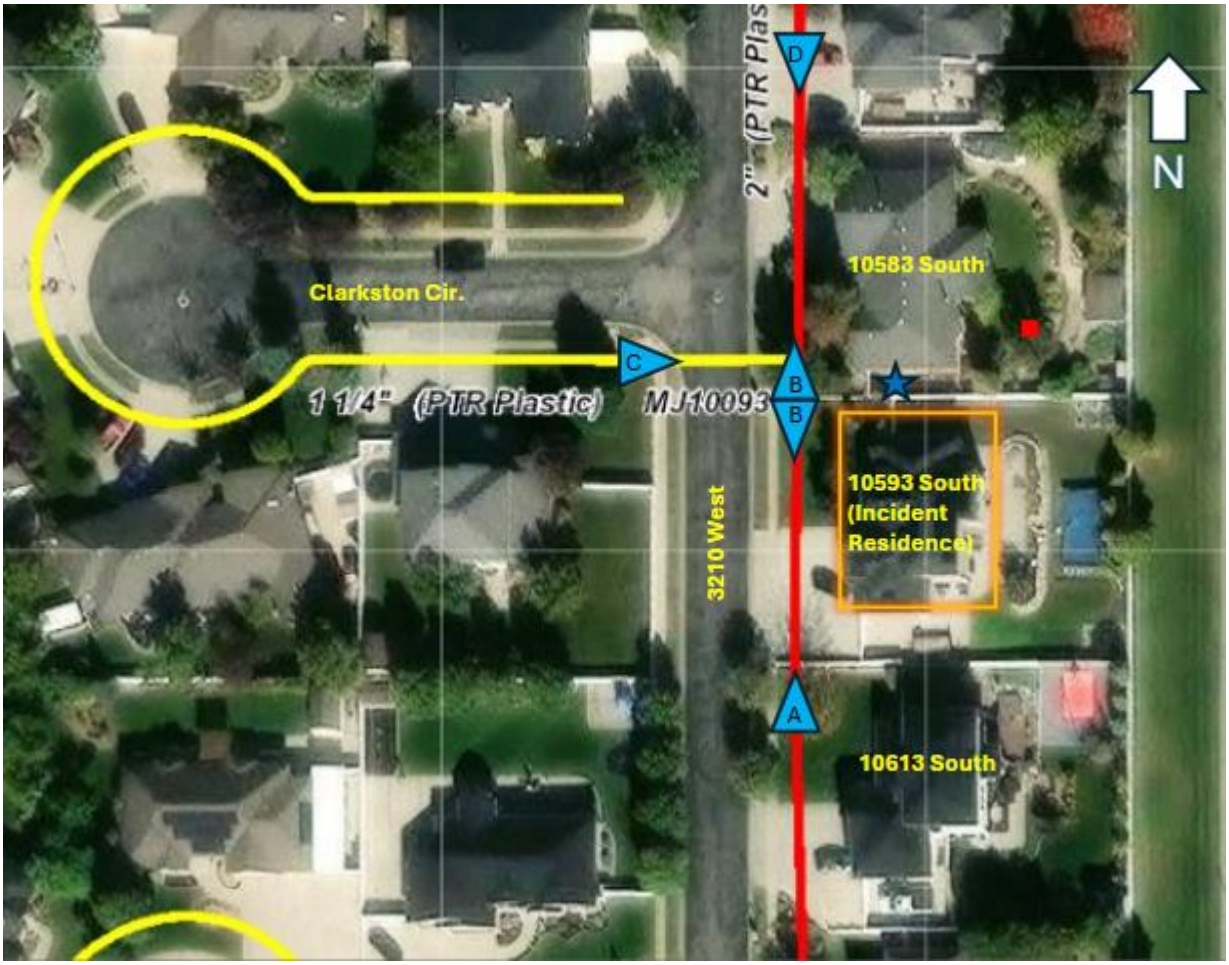

Figure 4 Excavation Locations for Pressure Testing Distribution Main Lines

Due to the results of the testing conducted with no leaks detected in any gas piping in front of, and closest to, the Incident Residence, where measurable gas concentration was found, the source of the natural gas could not be determined.

At approximately 4:30 a.m. on November 7 a bar hole was placed midway between the front and back (see blue star Figure 4) corners of the house north of the Incident Residence, approximately 5 feet south of the building. A reading of 26% natural gas was found. An additional bar hole (see red square

Figure 4) was then placed in the backyard of the house to the north of the Incident Residence. A reading of 45% natural gas was found. Both concentrations of these bar holes were lower than those found along the front (on 3210 West) of the Incident Residence.

Beginning at 4:50 a.m. on November 7 bar holes were placed along the grassy area between the fence east of the Incident Residence and the house to the north of the Incident Residence and 3200 West. Readings ranging from approximately 31% to 81% natural gas were found along the fence line and in the grassy area next to the west curb of 3200 West. Enbridge Gas Utah has a 4-inch main line running north and south on 3200 West, under the middle turning lane.

Between 5:00 a.m. and 6:00 a.m., holes were drilled in the asphalt on 3200 West to allow for bar hole testing. At 6:10 a.m. bar hole testing commenced along 3200 West above the 4-inch main line and natural gas concentrations were found along the main line both north and south, ranging from approximately 48% to 99%. Refer to Figure 5 for Bar Hole locations.

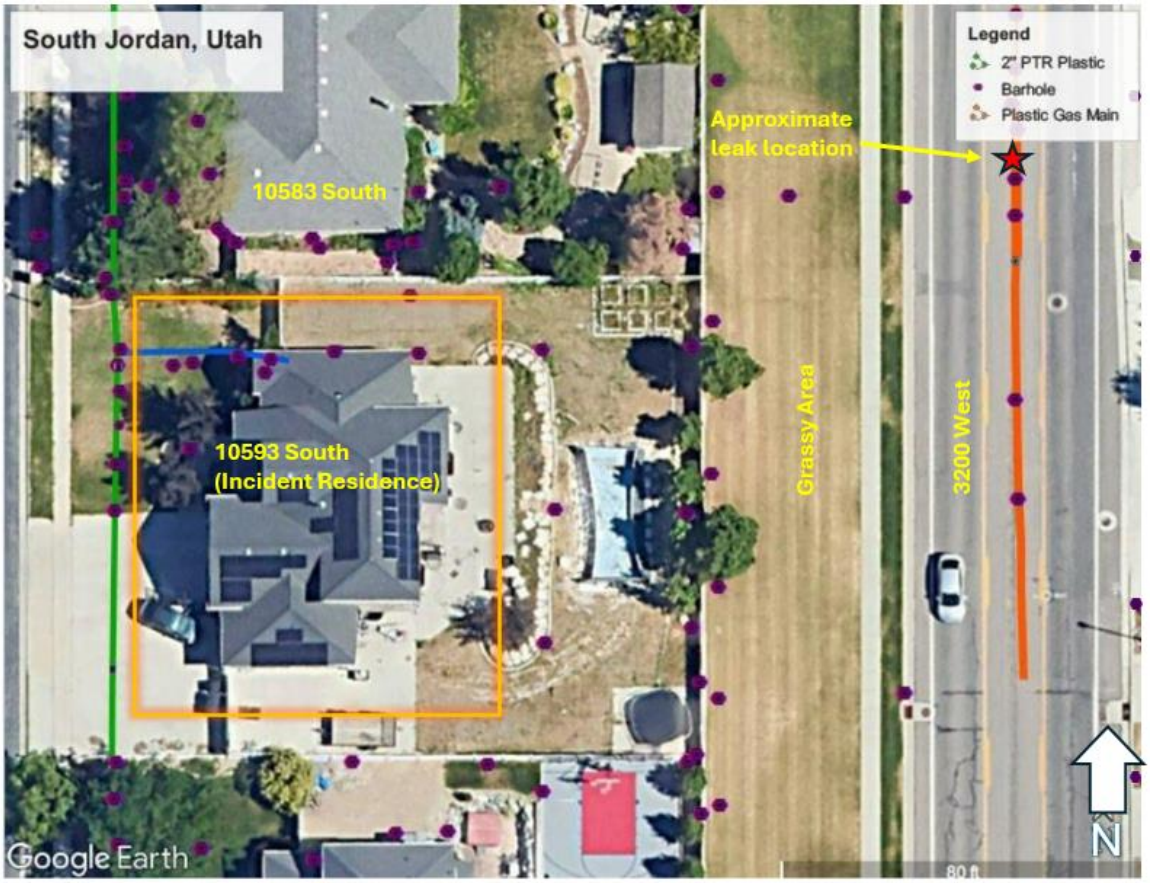

Figure 5 Bar Hole Locations

At 7:15 a.m. the street excavation crew arrived on-site. At 8:00 a.m., traffic control was in place and excavation activities commenced. Excavation activities began at the south end where the highest gas concentration was found and where the main line transitioned from a 4-inch pipe to a 2-inch pipe. No leak was found; excavation continued northward along the 4-inch main line. At approximately 12:10

p.m. a natural gas leak was found on the 4-inch pipe approximately 40 feet north of the initial excavation point.

At 12:16 p.m. on November 7 the main line on 3200 West was isolated at the south end of the excavation near the 2-inch reduction and the 4-inch main line was isolated at a previously excavated hole located to the north of the section, where the highest concentrations of natural gas were found, which secured the leak. The leak on the pipeline on 3200 West was located approximately 150 feet east-northeast from the Incident Residence.

Bar hole readings were also taken east of 3200 West, and no gas concentrations were found.

F. Integrity Management

Enbridge Gas Utah implemented its Distribution Integrity Management Program (DIMP) on August 8, 2011. Section 2 of the DIMP plan states:

> *"In compliance with the requirements set forth in the DIMP Rule, Company has written and implemented this Integrity Management Plan for Natural Gas Distribution Pipelines (IM Plan) to explain the procedures Company will use to manage the integrity of its entire gas distribution Pipeline System. (49 CFR §§ 192.1003, 192.1005)"*[3]

The Enbridge Gas Utah DIMP plan consists of seven elements:

1. Knowledge of the Pipeline System,
2. Threat Identification,
3. Evaluation of Risk,
4. Identification and Implementation of Measures to Address Risks,
5. Measuring Performance, Monitoring Results, and Evaluating Effectiveness,
6. Periodic Evaluation and Improvement; and
7. Reporting Results.

Enbridge Gas Utah's DIMP plan (revision 3G) was in place on November 6, 2024, at the time of the South Jordan incident. The DIMP plan expands how Enbridge Gas Utah implements the seven elements of the program. The element, Knowledge of the Pipeline System, discusses the development of this knowledge and where it is stored, and how it is maintained and updated. This knowledge of the pipeline system is used to identify the applicability of threats to the distribution pipeline system. The eight[4] different threat categories, as well as NTSB Investigation reports, Pipeline and Hazardous Materials Safety Administration (PHMSA) Notices and Advisory Bulletins, Plastic Pipe Database Committee (PPDC) reports, and system operating data (including material types and leak histories), are all utilized to identify potentially applicable integrity threats. Enbridge Gas Utah is also a member of the American Gas Association (AGA) and participates on the AGA DIMP committee which allows Enbridge

[3] Bates 000201

[4] Eight threat categories: corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment failure, incorrect operations, and other issues. For definitions of these categories, see PHMSA Instructions (rev 6-2023) for completing Form PHMSA F 7100.1-1 (Distribution Annual Report Instructions) Part C.

Gas Utah to benefit from industry knowledge of distribution integrity management experts from across the country.

Aldyl A pipe is identified in the DIMP plan as a sub-threat of the pipe or weld threat category. Aldyl A is the trade name for a medium density polyethylene plastic pipe manufactured from 1966-1999 first by Dupont then starting in 1991 by Uponor company. Enbridge Gas Utah installed Aldyl A main lines and services starting in 1969 and stopped using Aldyl A in 1999.

First generation Aldyl A was produced from 1966 to 1970 from a resin that had a low resistance to slow crack growth. Enbridge Gas Utah installed the first generation of Aldyl A starting in 1969 and in its latest risk analysis conservatively considers that it could have been installed up through 1973. Second generation Aldyl A was produced from 1970 to 1983 from a resin that had an improved resistance to slow crack growth compared to first generation Aldyl A. Enbridge Gas Utah installed second generation Aldyl A starting in 1970 and in its latest risk analysis conservatively considers that it could have been installed up through 1986.

Risk of the Aldyl A threat is evaluated by determining the relative likelihood of a threat leading to a failure multiplied by the relative consequence. Enbridge Gas Utah uses a relative risk model to determine the relative risk of threats to the natural gas distribution system and started developing a probabilistic DIMP risk model in October 2024. The probabilistic model will provide a quantified risk score for threats once developed instead of risk score that is in relation to the other threats to Enbridge Gas Utah's natural gas distribution system.

Measures that can be implemented to mitigate risk for all eight threat categories and their sub-threats applicable to Enbridge Gas Utah's distribution system are identified in Section 9 of the DIMP plan. Leak survey is identified as one of the measures that can be used to mitigate risk. Enbridge Gas Utah typically leak surveys one fifth, approximately 6,200 miles, of a majority of its distribution system each year in compliance with PHMSA regulations. Business districts are leak surveyed on an annual basis. "

The DIMP plan and program are reviewed annually. During the annual review, the integrity of the system is evaluated, new threats are added and mitigation for the new threats are identified.

DIMP metrics are reported annually to PHMSA and the Utah Office of Pipeline Safety in the Distribution Annual Report (Form PHMSA F 7100.1-1), and includes information on age, materials, miles of pipe and number of services, and counts of leaks by cause.

G. Leak Survey

Enbridge Gas Utah complies with the federal pipeline safety requirements (49 CFR 192.723(b)(2) Distribution Systems: Leakage Surveys for conducting leak surveys of the distribution system. The distribution system surrounding the Incident Residence is on a reoccurring survey schedule which is required to be surveyed at least once every 5 calendar years at intervals not to exceed 63 months. The two most recent leak surveys performed prior to the incident on the distribution system around and including the Incident Residence were completed on May 1, 2017, with no leaks found then again on April 29, 2022, with no leaks found on all mains and services.

H. System Odorization

Enbridge Gas Utah performs bi-monthly odorization checks to ensure that the system is adequately odorized and follows the federal pipeline safety requirements found in 49 CFR Part 192.625, Odorization of Gas. After the incident, odorization checks were performed on the same day (November 6, 2024) using an Odorator,[5] in three locations that were near the Incident Residence (refer to Figure 6 for locations). These checks[6] confirmed that the gas was properly odorized and met the requirement that a concentration in air of one-fifth of the lower explosive limit, the gas is readily detectable by a person with a normal sense of smell.

Figure 6 Odorization Sample Site Locations

[5] An odor intensity test instrument
[6] Bates 000628-000629

I. Historical Odor Complaints in Surrounding Neighborhood

Enbridge Gas Utah has no history of natural gas odor complaints from the account at the Incident Residence. In the surrounding neighborhood (comprising 149 residences), in the past year, there were two records of gas odor complaints, but in both complaints a natural gas appliance was found to be the source of the odors (i.e., not the distribution system itself).

III. Analysis

A. Emergency Response

Enbridge Gas Utah's emergency response to the incident was timely. Enbridge Gas Utah arrived within 30 minutes of receiving the call from dispatch and followed its procedures and safety protocols. This included bar holing to determine the extent of any gas in the ground, which was documented on the company bar hole sheets[7]. Based on the results of the bar hole testing, Enbridge Gas Utah pressure tested the service lines serving the Incident Residence and 10583 South. Enbridge Gas Utah also tested the 2-inch main line running in front (west) of the Incident Residence as well as the 1.25-inch main line serving a cul-de-sac (Clarkston Circle) just west of 10583 South. All of the pressure tests confirmed that there were no gas leaks on any of these pipelines.

Enbridge Gas Utah worked through the night and ultimately found a leak that was located on 3200 West, approximately 150 feet east-northeast of the Incident Residence.

B. Post Incident Leak Survey and Replacement of Main

On November 8 through November 20, Enbridge Gas Utah performed multiple leak surveys in the surrounding area of the Incident Residence that included several city blocks and did not detect any additional below ground natural gas leaks. On November 14 through November 20, Enbridge Gas Utah replaced all Aldyl A main associated with the leak (approximately 1,000 feet of main and 4 services) under 3200 West.

C. Service Regulator Test

The service regulator (a Honeywell American Meter 1813C Residential Service Gas Pressure Regulator) from the Incident Residence was taken into custody by the Utah Deputy State Fire Marshall after the incident. It was later submitted to GTI Energy for testing to verify its operability[8]. The testing aimed to assess the regulator's performance based on established standards, including set point, lock-up pressure, and relief valve operation. The tests were conducted according to the procedures outlined in ANSI B109.4-2021: Self-Operated Diaphragm-Type Natural Gas Service Regulators for Nominal Pipe Size 1-¼ Inches (32 mm) and Smaller with Outlet Pressures of 2 psig (13.8 kPa) and Less, with air used as the test medium.

The Honeywell American Meter 1813C Residential Service Gas Pressure Regulator performed as expected in all test categories, demonstrating reliable operation within the defined parameters for set

[7] Bates 000179-000188
[8] Bates 001201-001237

point, lock-up, and relief functionality as specified in ANSI B109.4-2021. The regulator's performance was consistent across repeated tests, meeting the regulatory and safety standards required for residential gas service applications.

D. Slot Trenches

In an effort to understand the potential source of gas being attributed to the leak identified on 3200 West, on March 19, 2025, Enbridge Gas Utah participated with other outside parties in a dig of an L-shaped (see Figure 7 for location) slot trench in the backyard (east) of the Incident Residence. The purpose of the slot trench was to observe the different layers of soil as well as look for any possible preferential paths for the gas to migrate. An additional slot trench three feet deep and approximately 15 feet in length was also excavated in the large grassy area just east of the fence line of the same property, parallel to the fence. Based on the observations conducted in the field during this exercise there was nothing out of the ordinary and therefore no preferential path was discovered for the gas to migrate to the residence. The NTSB was aware of the investigation and was provided with these results.

Figure 7 Slot Trench Location

E. Gas Migration and Soil Testing

Enbridge Gas Utah contracted with a third-party consultant, with the NTSB's permission, to conduct a computational modeling analysis[9] based on specific, limited assumptions to determine whether natural gas from the leak location on 3200 West could have migrated subsurface to the subject residence. This gas migration study even with conservative soil characteristics and flow rates (intended to maximize horizontal migration) was unable to provide an explanation for the distance the gas traveled to the Incident Residence.

The assumptions included more than double the estimated flow rate provided to PHMSA on the incident report (Form PHMSA F 7100.1). The depth of the pipeline (34 inches based on company construction procedures) and the position of the leak (conservatively assumed to be facing the structure). The analysis included data obtained from soil samples taken near the site and field observations. Computational fluid dynamics (CFD) modeling was used to determine pressure and velocity distributions for the natural gas that leaked from the 4-inch main line.

The model was created with conservative anisotropic properties for the soil (i.e., much more porous in the horizontal direction than in the vertical direction) and showed that less than 0.06% of the leaking natural gas reached the Incident Residence's foundation. CFD modeling results indicated that natural gas migration to the Incident Residence was negligible and effectively zero leaving a gas migration path unexplained.

We note due to the confidentiality of the NTSB investigation we were unable to share the bar hole testing data showing the concentrations of gas measured at the Aldyl A leak and around the Incident Residence. Once these confidentiality limitations are lifted, further analysis may be possible.

IV. Proposed Findings & Conclusions

A. The incident appears to have been a natural gas explosion. Bar hole testing showed the presence of natural gas in the ground around the Incident Residence.
B. Enbridge Gas Utah responded appropriately and followed its procedures in shutting off gas to the Incident Residence and in identifying the possible locations for leaking gas. The procedures included eliminating, through pressure testing, the potential leaks on the main line and service lines adjacent to the residence, which were the most likely locations for the source of leaking gas based on the bar hole readings taken.
C. The system was properly odorized at the time of the incident, based on the odorization tests completed on the day of the incident.
D. The Enbridge Gas Utah equipment (natural gas meter and service regulator) serving the Incident Residence were operating properly.

V. Causation

Although there are unknowns, including the gas migration path, the most plausible cause of the incident based on all the known information is the identified leak on 3200 West. No other leaks were found and

[9] Bates 001239 - 001275

bar hole testing showed high concentrations of gas in the ground between the leak location and the Incident Residence. In addition, a secondary source of gas from within the residence is possible but no evidence of that was found.

VI. Post Incident Safety Improvements

Enbridge Gas Utah has taken the following actions to improve pipeline safety:

A. Aldyl A Replacement

Enbridge Gas Utah replaced all Aldyl A pipe associated with the leak (approximately 1,000 feet of 4-inch Aldyl A main line and four Aldyl A service lines) on 3200 West. The replacement project started on November 14, 2024, and was completed on November 20, 2024.

Enbridge Gas Utah will continue to invest in updating and replacing infrastructure as part of an ongoing system modernization program utilizing risk-based decision making to prioritize these efforts. This system modernization will include the replacement of early vintage Aldyl A pipe.

B. Update Leak Screening Procedures (Standard Practice 10-10-02)

This Company Standard Practice, 10-10-02, Leak Screening Procedures, was updated to require leak screening around the perimeter of any structure associated with the performance of a leak screen. Also included in this update is the requirement to investigate other gas facilities in the area, when applicable, which are not the facility or facilities serving the structure. This update will increase the speed and likelihood of finding potential leaking natural gas from piping not associated with specific premises.

C. Update Underground Gas Leak Procedure (Standard Practice 3-75-01)

The graphic in Company Standard Practice, 3-75-01, Underground Gas Leak Procedure, was updated to reflect bar hole testing at each of the corners of a structure should natural gas be found near the perimeter of the structure during a leak screen. This update will increase the likelihood of finding potential leaking natural gas from piping not associated with specific premises. Refer to Figure 8 for updated graphic.

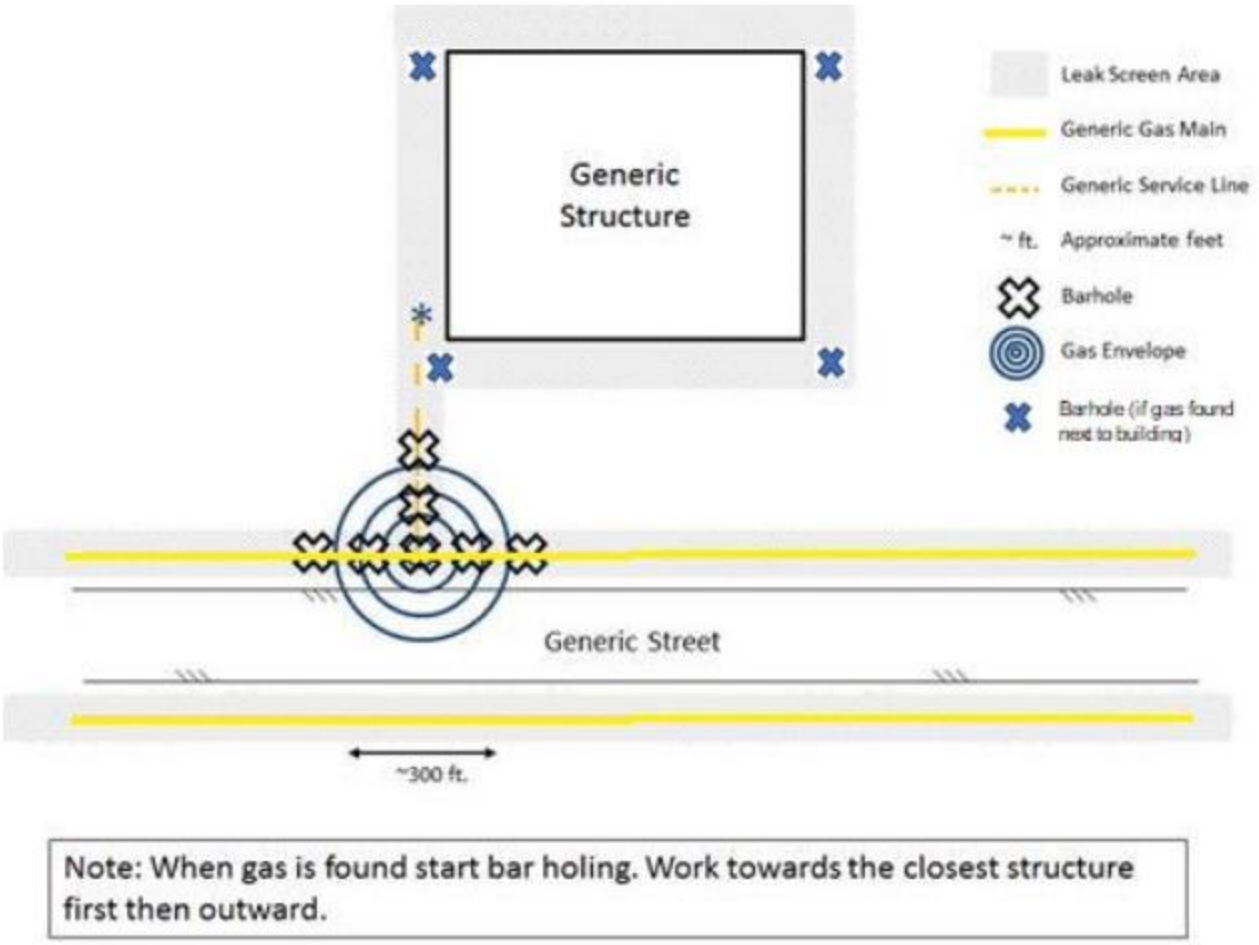

Figure 8 Standard Practice 3-75-01, Updated Graphic

D. Accelerated Leak Survey on Aldyl A Pipe System Wide

As an accelerated action under DIMP, an Advanced Mobile Leak Detection (AMLD) system has been implemented to enhance leak detection capabilities for the purpose of conducting risk-informed accelerated leak surveys on Aldyl A pipe. The AMLD system uses parts-per-billion leak detection sensors, and an algorithm along with environmental conditions at the time of the survey to evaluate the survey area for potential natural gas leaks. Any leaks identified are then investigated by the Enbridge Gas Utah leak survey team to determine if a leak exists on the system in the indicated area. If a leak is found it is graded (based on the location and conditions of the leak) and scheduled for repair. Traditional leak survey equipment uses parts-per-million sensors.

A detailed risk analysis of the Aldyl A system was completed to help prioritize these accelerated leak surveys. This risk analysis consisted of evaluation of the probability of a leak developing on the Aldyl A main and service line pipes multiplied by the consequence of the said leak occurring and resulting in an incident. This risk analysis resulted in three categorizations, based on the vintage and past leak history as well as other factors. These categorizations are noted as Phase 1, Phase 2, and Phase 3 priorities. The AMLD survey has been completed on the Phase 1 priorities, covering all Aldyl A main line piping

and the associated service lines identified in the risk analysis. The AMLD survey is currently underway on the Phase 2 priorities.

In 2026, Enbridge Gas Utah plans to repeat these surveys for Phase 1 and Phase 2 and survey all Phase 3 Aldyl A main line piping and associated service lines. The frequency of these accelerated AMLD leak surveys in future years will be determined based on the data collected from the surveys completed in 2025 and 2026.

VII. Proposed Industry Recommendation

Consider implementing accelerated actions in your DIMP program for early vintages of Aldyl A.