

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

<b>ELECTRONIC ANNUAL PIPELINE</b>	<b>)</b>	
<b>REPLACEMENT PROGRAM FILING OF APACHE</b>	<b>)</b>	<b>CASE NO.</b>
<b>GAS TRANSMISSION COMPANY, INC.</b>	<b>)</b>	<b>2025-00169</b>

**RESPONSES TO STAFF'S FIRST REQUEST FOR INFORMATION**  
**TO APACHE GAS TRANSMISSION CO., INC.**

**DATED JULY 18, 2025**

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

<b>ELECTRONIC ANNUAL PIPELINE</b>	)	<b>CASE NO.</b>
<b>REPLACEMENT PROGRAM FILING OF APACHE</b>	)	<b>2025-00169</b>
<b>GAS TRANSMISSION COMPANY, INC.</b>	)	

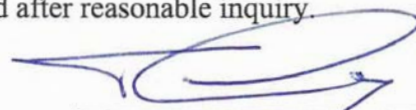
---

**VERIFICATION OF DAVID THOMAS SHIREY, JR.**

---


**STATE OF TEXAS**            )  
  )  
**COUNTY OF HUNT**         )

David Thomas Shirey, Jr., President of Apache Gas Transmission Company, Inc., being duly sworn, states that he has prepared certain of the following responses of Apache Gas Transmission Company, Inc. to the data requests issued by Commission Staff in Case No. 2025-00169 and that the matters and things set forth in his responses are true and accurate to the best of his knowledge, information, and belief, formed after reasonable inquiry.

  
\_\_\_\_\_  
David Thomas Shirey, Jr.

Subscribed, acknowledged and sworn to before me by David Thomas Shirey, Jr., President of Apache Gas Transmission Company Inc., on this 7<sup>th</sup> day of August 2025.



  
\_\_\_\_\_  
NOTARY PUBLIC, Notary # KYNP46724  
Commission expiration: March 9 2026

**APACHE GAS TRANSMISSION CO., INC.**  
**CASE NO. 2025-00169**  
**FIRST REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED JULY 18, 2025**

**REQUEST 1**

**RESPONSIBLE PARTY: David Shirey**

**Request 1.** Refer to the Annual Pipeline Replacement Plan (PRP) Report (Annual PRP Status Report) page 1. Explain why “Apache is not requesting an increase of the PRP fee...” in this filing.

**Response 1.** Apache’s statement on the 2025 PRP Status Report filed on May 30, 2025, states: “No rate increase is requested at this time.” When preparing its 2025 Annual PRP Status Report, Apache did not request an increase in the PRP fee because Apache does not need additional fees to meet the debt payments on the PRP loans at this time.

Following the submission of Apache’s 2024 PRP Status Report on May 31, 2024, and responses to three rounds of data requests, Apache received notice that the filing had been denied on March 31, 2025. Once the Commission’s Final Order was reviewed – specifically the statement on page 10 that “the Commission does not generally allow for the immediate expensing and recovery of capital projects through the PRP” – Apache began developing an alternate strategy. To date, Apache has:

- Met with Kentucky Highlands Investment Corporation to discuss securing loan approval (due to a strong lending history, Apache is confident that it can quickly secure loan approval);
- Identified two local loan programs, each for \$50,000, with 7- and 10-year terms which can close faster than SBA loans and will support project funding (an increase to the PRP fee will be necessary to recover debt service on these loans);
- Selected specific pipeline sections for replacement;
- Met on-site with a boring contractor on July 29, 2025 to obtain per-foot cost estimates for specific sections of pipeline which require directional boring;
- Determined that using 3" HDPE rather than 6" will be a more efficient use of available loan funds, due to significantly lower boring costs; and
- Began assembling documentation for both loan applications and for a forthcoming 2025 PRP project filing with the Commission.

**APACHE GAS TRANSMISSION CO., INC.**  
**CASE NO. 2025-00169**  
**FIRST REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED JULY 18, 2025**

**REQUEST 2**

**RESPONSIBLE PARTY: David Shirey**

**Request 2.** Refer to the Annual PRP Status Report pages 1-2.

- a. If Apache does not qualify for an additional loan to replace the 3” pipeline and recover the funds needed for debt payments, describe the financial impact of not securing this financing.
- b. State when Apache expects to make its decision regarding whether it will take out a loan to pay for the replacement of the 3” pipeline, and how long it will likely take before it knows if it will qualify for a loan.

**Response 2.**

- a. Apache is confident that the financing will be approved and has not developed a formal contingency plan. If the loan were not approved, Apache would be unable to proceed with the currently planned pipeline replacements in 2025. This would delay system improvements and require a reevaluation of future PRP filings and funding options.
- b. Apache made the decision to proceed with obtaining an additional \$100,000 in debt financing to support the replacement of 3” HDPE pipeline segments. The financing will be sought through the Kentucky Highlands Investment Corporation, which indicated that

approval should occur within approximately three weeks following the submission of a completed application. This approval will be contingent upon Apache having a financing application approved by the Commission.

Apache is currently assembling and finalizing the required documentation and expect to submit the full application in the near term. Apache will also be compiling the necessary information to file an application with the Commission for approval of the financing along with approval of a CPCN for the pipe replacement if a CPCN is required.

**APACHE GAS TRANSMISSION CO., INC.**  
**CASE NO. 2025-00169**  
**FIRST REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED JULY 18, 2025**

**REQUEST 3**

**RESPONSIBLE PARTY: David Shirey**

**Request 3.** Refer to the Annual PRP Status Report page 2. State when Apache will determine how much of the pipeline is exposed or insufficiently buried. If unknown, provide a status of the process.

**Response 3.** Apache completed field inspections to identify pipeline segments that are exposed. Apache is assessing whether all exposed segments can be repaired using the proceeds of the anticipated loans. The determination of pipeline segments that are insufficiently buried is ongoing.

**APACHE GAS TRANSMISSION CO., INC.**  
**CASE NO. 2025-00169**  
**FIRST REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED JULY 18, 2025**

**REQUEST 4**

**RESPONSIBLE PARTY: David Shirey**

**Request 4.** Explain if Apache or its affiliate Burkesville Gas Company, Inc. has a Gas Distribution Integrity Management Program (DIMP) plan or a Transmission Integrity Management Program (TIMP) plan. If so, provide copies of the plans.

**Response 4.** Apache maintains a TIMP and Burkesville maintains a DIMP. Copies of the TIMP and DIMP are attached.



# Apache Gas Transmission Company, Inc.

## Transmission Integrity Management Plan

TIMP

May 2019

# Table of Contents

Title	Page
1. Purpose and Scope .....	2
2. Administration .....	3
A. Responsibilities.....	3
B. Management Support.....	3
3. Definitions.....	3
4. Recordkeeping.....	4
5. Knowledge of Transmission System .....	4
6. Threat Identification.....	5
7. Threat Categories.....	5
8. Risk Evaluation and Ranking.....	9
9. Apache Gas Transmission Company, Inc. Threats .....	10
10. Implementation of Measures to Address Risk.....	10
11. Leak Management Program.....	11
12. Other Programs to Address Risk.....	11
13. Programs to Address Human Factors.....	12
14. Facility Inspections and Monitoring .....	13
15. Measurement of Performance, Monitoring Results, Evaluating Effectiveness.....	15
16. Periodic Evaluation and Improvement .....	15
Appendix A Description of System.....	16
Appendix B Leak History and Tables.....	17
Appendix C - Review of TIMP Plan.....	18

## 1. Purpose and Scope

On December 4, 2009 the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) added Subpart P "Gas Transmission Pipeline Integrity Management" to CFR 49 Part 192. Subpart P was created to require operators of gas transmission pipelines to develop and implement a gas transmission integrity management program (TIMP) that includes a written integrity management plan.

The purpose of the program is to enhance safety by identifying and reducing gas transmission pipeline integrity risks. The rule requires that operators identify risks to their pipelines where an incident could cause serious consequences and focus priority attention in those areas. The rule also requires that operators implement a program to provide greater assurance of the integrity of their pipeline.

This written TIMP Plan addresses the rule which requires operators to develop and implement a program that addresses the following elements:

- a. Knowledge of Transmission System
- b. Threat Identification
- c. Risk Evaluation and Ranking
- d. Implementation of Measures to Address Risk
- e. Measurement of Performance, Monitoring Results and Evaluating Effectiveness
- f. Periodic Evaluation and Improvement
- g. Reporting Results

Managing the integrity and reliability of gas transmission pipelines is the primary goal for Apache Gas Transmission Company, Inc., with design, construction, operations and maintenance activities performed in Compliance with CFR 49 Part 192 requirements. The objective of this TIMP Plan is to establish the requirements to comply with Subpart P, pertaining to integrity management for gas transmission pipelines.

This written TIMP Plan applies to all of Apache Gas Transmission Company, Inc.'s transmission pipelines. Pipelines include the associated mains, services, service regulators, customer meters, valves and other appurtenances attached to the pipe such as metering stations, regulator stations and fabricated assemblies.

This plan is effective May 10, 2019 and will be communicated to all Apache Employees as well as to Burkesville Gas Company Employees as they are a Contractor working for and maintaining the Apache Pipeline System.

The Plan will be reviewed at least every 3 years to continually refine and improve the plan.

## 2. Administration

This section describes how the TIMP Program, including the TIMP written plan, is to be maintained and updated.

### A. Responsibilities

Apache Gas Transmission Company, Inc. is responsible for implementing, maintaining, updating this TIMP Plan. Burkesville Gas Company will be the contracted Administrator of this Plan.

### B. Management Support

Apache Gas Transmission Company, Inc. is committed to implementing the elements of this Plan in order to ensure the continued safety and reliability of its transmission systems. Apache Gas Transmission Company, Inc.'s responsibilities include but are not limited to:

1. Ensure periodic evaluations are completed and documented in accordance with Section 17
2. Submit the TIMP plan to Kentucky PSC upon request
3. Conduct a periodic review of the plan to evaluate the effectiveness of the Program and update as needed
4. Monitor regulatory activity and changes in regulation which could precipitate the need to modify the Program
5. Ensure records listed within Section 4 are properly maintained.
6. Submit Annual DOT Report to PHMSA and state commissions
7. Review the Operation and Maintenance Plan and make revisions as necessary as a result of the TIMP.

## 3. Definitions

TIMP            Transmission Integrity Management Program

Excavation Damage

Any impact that results in the need to repair or replace an underground facility due to a weakening, or the partial or complete destruction of the facility including, but not limited to the protective coating, lateral support, cathodic protection or the housing for line device or facility.

Excavation Ticket

A notification from the one-call notification center to the operator providing information of pending excavation activity for which the Company is to locate and mark facilities

#### Hazardous Leak

A leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

#### Integrity Management Plan

A written explanation of the mechanisms or procedures the company will use to implement the integrity management program and to ensure compliance with 49 CFR Subpart P.

#### PHMSA

The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.

#### NTSB National Transportation Safety Board

SME Subject Matter Experts are persons knowledgeable about design, construction, operations or maintenance activities, or the system characteristics of a particular transmission system.

### 4. Recordkeeping

The following records shall be maintained for a minimum of 10 years:

- i. The TIMP Plan
- ii. Copies of previous Plans
- iii. Records of data required to be collected to calculate performance measures
- iv. Records of mechanical fitting failures
- v. DOT Incident Reports
- vi. Safety Related Condition Reports

### 5. Knowledge of Transmission System

This section describes the infrastructure of Apache Gas Transmission Company, Inc. using reasonably available information from past and ongoing design, installation, operations and maintenance activities.

A description of the system will be found in Appendix A.

In order to determine threats and assess risks on its transmission system, Apache Gas Transmission Company, Inc. looked at the physical makeup of system components. This information was obtained from the last 5 years of records retained in Apache Gas Transmission Company, Inc.'s files.

Data collected on piping and appurtenances installed within the transmission system will include the location where it is installed and the material of construction. This information will be recorded, filed and retained at the Apache Gas Transmission Company, Inc. office. These records shall include the following information:

- i. Material Component (pipe, valve, fittings)
- ii. Material Type (plastic, steel) c. Diameter
- iii. Pipe wall thickness e. Pipe Grade
- iv. Manufacturer
- v. Person conducting pressure test h. Test Pressure
- vi. Test duration
- vii. Quantity
- viii. In Service date
- ix. Location (County, City, Street)

## **6. Threat Identification**

The purpose of this section is to describe the process used to identify threats and the process by which Apache Gas Transmission Company, Inc. determined if a threat exists.

## **7. Threat Categories**

An overview and discussion of each threat and sub-threat category is provided in following Sections A through H.

In addition to the Company's own experiences and information, categories considered are based on the following:

- i. Membership or participation in local, regional or national trade associations: including workshops, meeting and other forums where knowledge is shared
- ii. Networking with peer companies
- iii. Information received from manufacturers of pipeline materials
- iv. Information received from relevant government agencies
- v. Review of trade journals and magazines that publish material regarding gas transmission
- vi. PHMSA Advisory Bulletins
- vii. NTSB Reports and Recommendations applicable to natural gas pipelines

Through the periodic evaluation provisions contained with Section 17, the company will periodically review data from internal and external sources, such as those listed above, to determine if other potential threats ought to be considered. Potential threats may include those which are not currently evident based on reasonably available

data. Consideration of other potential threats could entail the collection of additional data such that the existence of such threats can be determined.

#### A. Corrosion

- a) External Corrosion - Corrosion is a process in which metal decomposes, as in the oxidation of iron in the presence of water by an electrolytic process. Metallic pipe depending upon age, soil conditions and other factors may be susceptible to corrosion; External corrosion begins on the exterior surface of certain metallic gas facilities. Significant corrosion may result in the release of gas from gas pipeline facilities.
- b) Internal Corrosion - Corrosion is a process in which metal decomposes, as in the oxidation of iron in the presence of water by an electrolytic process. Metallic pipe depending upon age, soil conditions and other factors may be susceptible to corrosion. Internal corrosion begins in the interior surface of certain metallic gas facilities. Significant corrosion may result in the release of gas from gas pipeline facilities.

#### B. Natural Forces

- a) Earth Movement - This threat is a result of a naturally occurring event (earthquakes, landslides or subsidence) which may cause land shifts which can undermine the construction integrity of pipelines.
- b) Lightning - This threat is a naturally occurring phenomenon. Gas facilities may be damaged and/or catch on fire due to a direct lighting strike. Gas facilities may also be compromised as a secondary effect from a lightning strike in the area. An example of such a secondary effect would be a fire started by lightning in an area which gas facilities are present that results in damage to a pipeline system asset.
- c) Other Storm Damage – This threat category includes heavy rains, floods and mudslides which may undermine the environment supporting the gas facilities and thereby compromise the construction integrity of such gas facilities. It also includes high wind events such as hurricanes and tornadoes.
- d) Frost - This broad threat category includes mechanical stress induced in a pipe or component when some or all of its parts are not free to expand or contract in response to changes in temperature or where components become inoperable because of freezing.

#### C. Excavation Damage

- a) Excavator Error - This threat may occur whenever the company, its contactors, or entities unrelated to the company fail to employ sage, prudent excavation techniques. This threat also includes excavation error when performing dredging or waterways or bodies of water.

- b) Locator Error - This threat may occur when a person charged with locating gas facilities incorrectly marks or fails to mark an underground gas facility.
- c) Poor Records – The threat may occur when an incomplete or inaccurate locate results from incomplete or inaccurate facility records.
- d) Failure to notify One Call Center – This threat may occur when the company, its contractors or entities unrelated to the company do not notify the one call system to give notice of intent to excavate.

#### D. Other Outside Force

- a) Fire/Explosion Not Caused by Gas – This threat may occur when a fire and/or explosion occurs and subsequently results in damage to gas facilities.
- b) Vehicular Damage – This threat may occur when the Company's gas facilities are damaged by motorized vehicles or equipment not engaged in excavation. An example would be damage to a meter set caused by vehicle impact.
- c) Damage Caused by Maritime Vessels - This threat may exist for damage to gas facilities by boats, barges, drilling rigs, or other maritime equipment or vessels set adrift. The threat also may exist for damage to gas facilities caused by impact of maritime equipment or vessels while they are engaged in their normal or routine activities not including excavation activities.
- d) Electrical Arcing from Other Equipment or Facility - This threat may exist whenever electric facilities are in close proximity to the Company's gas facilities. Damage to pipe or coating is possible in certain situations and conditions.
- e) Previous Mechanical Damage - This threat may exist where damage occurred to gas facilities at some time prior to the date it is discovered. It includes prior to the date it is discovered. It includes prior outside force damage of an unknown nature, prior natural force damage, and prior damage from other outside forces.
- f) Intentional Damage - this threat category consists of vandalism, terrorism or theft.

#### E. Material or Welds

Components in the transmission system may be susceptible to leaks, ruptures or other failures from defects with the material of the pipe components or joints due to faulty manufacturing procedures. Additionally, such defects may result from poor construction/installation practices, and in-service stresses such as vibration, fatigue and environmental cracking.

- a) Body of Pipe - This threat may exist from certain plastic pipe installed that may leak depending upon pipe resin, manufacturing and service conditions.



- b) Pipe Seam - This threat may exist due to poor weldment of steel pipe during the manufacturing process.
- c) Threaded Joint - This threat may occur due to insufficient thread sealant applied or substandard thread tolerances created during manufacture or fabrication.
- d) Weld - This threat may exist on poorly joined weld connections made during construction, installation or fabrication
- e) Fusion Joint - This threat may exist when joining plastic pipe to plastic pipe or fitting during construction, installation or fabrication.
- f) Mechanical Fitting - A threat may exist for pipe to pullout from mechanical fittings due to pullout forces that could include fatigue from seasonal temperature changes, ground movement, improper installation and deterioration of the fitting. Mechanical fittings may leak though the seal between the fitting and the pipe. Contributing factors may include a degradation of the seal over time or a change in the gas quality in the transmission system.
- g) Repair Device Failure - This threat may exist after the application of a repair device based on deterioration or improper installation of the device.
- h) Other Material Failure - This threat category exists for all other material failures not described specifically above.

#### F. Equipment Failure

- a) Malfunction of Pressure Regulating Equipment - This threat may exist due to malfunctions of control and relief equipment. Typically, the result of failed regulator components, alarm devices or relief valves.
- b) Valve Failure/Leakage - This threat may exist when valves fail to open or close on command or when component failure allows a bleed-through condition.
- c) Other Equipment Failure - This threat may exist due to failures on compressors, meters, or regulator stations where the failure resulted from a faulty component not listed above such as nipples, flanges, valve connections, line pipe collar, etc.

#### G. Incorrect Operations

Incorrect Construction/Operation - This threat may occur during installation, operating, maintenance or repair activities. Threats in this category include improper equipment selection or installation, poorly written procedures, not following written procedures, and unintentional ignition of the transported gas during a welding or maintenance activity, and training or judgment errors.

#### H. Other

- a) Miscellaneous - This threat category is reserved for threats that are known but cannot be attributed to threats that have been previously described in this section.
- b) Unknown - This threat category is reserved for threats for which the cause is not known.

The entire Apache Gas Transmission Company, Inc.'s system operates under the same environmental conditions; therefore, the system will not be segmented but reviewed as one system.

To classify threats, Apache Gas Transmission Company, Inc., will consider reasonably available information relating to the system's design, operation, maintenance, and environmental factors. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history and excavation damage experience.

### 8. Risk Evaluation and Ranking

Risk analysis is an ongoing process of understanding what factors affect the risk posed by threats to the gas transmission system and where they are relatively more important than others. The primary objective of ranking risk is to determine what risk poses the greatest threat to life and property.

In order to rank potential risk, the following formula is used:

Probability X Consequence X History of Leaks X Incident Probability Factor

#### A. Probability

Probability is based on the probability of the potential threat occurring on the operator's system. This is determined by the Operator and will be based on the geographical location of the system, type of material and the history of this threat in the system.

Probability multiplier number will be from 1 to 10

#### B. Consequence

Consequence number is based on the potential damage to life and property should this threat occur. This number shall be determined by the Operator using his Knowledge of the System.

Consequence multiplier number will be from 1 to 1.5

#### C. History of Leaks

History of Leaks is the percentages of the Operators leaks in the last five years that occurred in this potential threat. History of Leaks along with tables for ranking of threats will be found in Appendix B. History of Leak numbers are taken from "Gas

Leak & Report” located in the file in the Apache Gas Transmission Company, Inc. Office.

#### D. Incident Probability Factor

Incident Probability Factor is the percentage of leaks in each of the threats reported to PHSMA for the last five years of data available. Currently this percentage is as follows:

▪ Corrosion	0
▪ Natural Forces	92%
▪ Excavation	0
▪ Other Outside Forces	0
▪ Material & Welds	0
▪ Equipment Failure	8%
▪ Incorrect Operations	0
▪ <u>Other</u>	<u>0</u>
	100%

### 9. Apache Gas Transmission Company, Inc. Threats

Based on information from Appendix B

Appendix B reveals that Apache Gas Transmission Company, Inc. has minor threats to their natural gas system. History has shown that Apache Gas Transmission Company, Inc. has had Natural Forces with trees uprooting the pipeline when they have fallen as well as erosion from drainage ditches, creeks and rivers.

Due to the threats to the system, Apache Gas Transmission Company, Inc. will not implement any additional programs or decrease the frequencies of inspections that would be required to decrease threats. See Section 10 "Implementation of Measures to Address Risks".

### 10. Implementation of Measures to Address Risk

The purpose of this section is to describe how Apache Gas Transmission Company, Inc. implements measures aimed at achieving risk management. Risk Management is accomplished by acting to reduce the likelihood of an occurrence, by alleviating the consequences of an occurrence, or both. Appropriate actions are dependent upon the type of threat, occurrence, or both. Appropriate actions are dependent upon the type of threat, magnitude of risk, and the viability of the actions in effectively allocating resources to manage the relevant risk factors. Risk reduction activities can be in the form of high-level programs applied uniformly to a wide group of facilities or a single, specific activity aimed at a targeted facility.

The sections below describe various measures the Company has selected for the purpose of managing pipeline safety risks associated with the transmission system.

## 11. Leak Management Program

An effective leak management program includes locating leaks by visual inspection and leak survey equipment, timely response to customer notification of a gas odor and a variety of other means. It involves the use of qualified personnel to perform leak detection activities and the selection of appropriate leak detection equipment.

An effective leak management program includes evaluating the severity of leaks according to established classification criteria. These classifications criteria take into consideration the safety posed by the leak. The determination of leak migration is part of the process.

Leaks are classified using the following criteria

Leaks that require immediate action (**Grade 1**) A leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous until the conditions are no longer hazardous.

Leaks scheduled for repair (**Grade 2**) A leak that is recognized as being non-hazardous at the time of detection, but justifies scheduled repair based on probable future hazard.

Monitored leaks (**Grade 3**) A leak that is non-hazardous at the time of detection and can be reasonable expected to remain non-hazardous.

### I. Act Appropriately

Once a leak has been located and evaluated, Apache Gas Transmission Company, Inc. takes actions that are consistent with the severity of the leak. This may include temporary or permanent repair, replacement, or other steps that reduce any immediate hazard posed by the leak. This may also include scheduling the leak for repair or periodic monitoring in the case of non-hazardous leaks.

### II. Keep Records

An effective leak management program includes the collection and recording of data pertinent to a leak to increase Apache Gas Transmission Company, Inc.'s knowledge of the system, measure its performance and comply with regulatory reporting requirements. Leakage information is to be documented on the applicable Company forms.

## 12. Other Programs to Address Risk

In addition to the leak management program, Apache Gas Transmission Company, Inc. has in place numerous programs and activities aimed at reducing the probability of pipeline failure and mitigating the consequences should a failure occur. The following sections describe some of the programs and the threats which are addressed.

## Public Awareness Program

Apache Gas Transmission Company, Inc. has in place a Public Awareness Procedure developed and implemented. The Program Administrator; Burkesville Gas Company, will provide annually to residents along the Apache Gas Transmission Pipeline:

- i. The description of the purpose and reliability of their gas facility.
- ii. An overview of the hazards of the pipeline and prevention measures used.
- iii. Information about damage prevention.
- iv. How to recognize and respond to a leak.
- v. How to get additional information.

## 13. Programs to Address Human Factors

### A. Operator Qualification Program

Apache Gas Transmission Company, Inc. has developed and implemented an Operator Qualification (OQ) Program. The program was developed in response to the operator qualification rule, the purpose of which is to minimize human error by establishing a verifiable, qualified workforce. In so doing, the Company reduces the consequences from human error and promotes personnel and public safety. Furthermore, operating and maintenance personnel are qualified to recognize and react to abnormal operating conditions.

The elements of the program are specified in the Company's Operator Qualification Plan. The purpose of the written plan is to develop a unified standard for qualification of pipeline operator and contractor/subcontractor personnel.

The OQ plan includes the following provisions:

- i. Identify covered tasks
- ii. Ensure through evaluation that individuals performing covered tasks are qualified
- iii. Allow individuals who are not qualified pursuant to Subpart N to perform a covered task if directed and observed by an individual that is qualified
- iv. Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Title 49 CFR Part 191
- v. Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task
- vi. Communicate changes that affect covered tasks to individuals performing those covered tasks
- vii. Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed

## B. Construction Inspection

Apache Gas Transmission Company, Inc.'s Management periodically reviews work done by Company or Contractor personnel to ensure the work is correctly performed in accordance with appropriate standards.

## C. O&M Manual

Apache Gas Transmission Company, Inc. has developed and implemented Operating and Maintenance Manual (O&M Manual). The O&M Manual sets forth Management's expectations of leadership to ensure compliance with 49 CFR Part 191 and 192 and applicable state regulations pertaining to the transmission of gas. The O&M Manual sets forth leadership's expectations of Company employees and contractors as to how certain activities must be performed. The O&M Manual are available to all employees in the Company and are made available to contractors performing such activities on behalf of the Company.

# 15. Facility Inspections and Monitoring

## A. Atmospheric Corrosion Monitoring

Inspections of above ground piping and related facilities exposed to the atmosphere are conducted in accordance with 49 CFR Part 192.

## B. Patrolling

Apache Gas Transmission Company, Inc. has no facilities under stress, therefore have no facilities to Patrol.

## C. Critical Valve Inspections

Apache Gas Transmission Company, Inc. has in place a program to inspect critical valves that are designated by the Company deemed necessary for the safe operation of the system. Each valve is checked for adequate lubrication and proper alignment to permit the use of a key, wrench, handle, or other operating device. Where applicable, each valve box or vault is cleared of any debris that may interfere or delay the operating of the valve. In addition, a sketch, map or other means of identifying and describing the location of the critical valve and other pertinent information must also be maintained. If a valve fails to operate satisfactorily, prompt remedial action is taken.

## D. Odor Level Monitoring

Apache Gas Transmission Company, Inc. has in place a program to monitor the proper concentration of odorant in the transmission system.

To assure the proper concentration of odorant, trained personnel of Apache Gas Transmission Company, Inc. and/or Contractors will perform periodic odorant tests to determine the concentration of odorant is sufficient to be detected by a person with a normal sense of smell. Records, including the name of the person conducting the odorant test, the date and location of the test are documented and retained in the office of Apache Gas Transmission Company, Inc. and/or Burkesville Gas Company.

## E. Emergency Manual

Apache Gas Transmission Company, Inc. maintains an Emergency Manual which contains written procedures aimed at minimizing the hazards resulting from a gas pipeline emergency.

The objectives of the manual are to provide for the appropriate preparation, management, reporting, and review of emergency events as further explained below.

- a) Preparation objectives are to establish guidelines to ensure that company personnel are prepared to respond to gas pipeline emergencies in an expedient manner, which protects the safety of employees and the public, and minimizes the impact of the emergency on the company, its customers, and the community.
- b) Management objectives are to pervade a framework for the delegation of responsibility, and the clear establishment of employee's roles during emergencies and incidents
- c) Reporting objectives are to establish reporting guidelines, and effectively communicate to all levels of management; circumstantially sensitive events or incidents on the Company's pipelines facilities and to provide guidance in submitting telephonic and written reports to DOT and/or State Utility Commissions are required.
- d) Review objectives include a facilitated, open process of sharing information about pipeline emergency events/incidents with the desired outcomes being increased learning and improved performance. These outcomes will be achieved in an environment of trust with a non-threatening discussion of actions, the sharing of knowledge, and duplication of successes throughout the organization, the top priority is an increase in the institutional knowledge required to handle pipeline emergency situations.

The written procedures include, but are not limited to, the following:

- a) Receiving, identifying, and classifying notices of events which require immediate response by the operator
- b) Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.
- c) Prompt and effective response to a notice of each type of emergency
- d) Training the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures
- e) Reviewing employee activities to determine whether the procedures were effectively followed in each emergency

## **16. Measurement of Performance, Monitoring Results, and Evaluating Effectiveness**

The objective of this section of the plan is to establish a process by which performance measures are monitored in order to evaluate the effectiveness of the TIMP Program. Performance measures can assist Apache Gas Transmission Company, Inc. in the ongoing evaluation of perceived threats and risk level. The evaluation of performance measures may lead to unexpected results that may include the recognition of threats not previously identified.

Program evaluations will help the company answer the following questions:

- a) Were the TIMP Program objectives accomplished
- b) Were pipeline integrity and safety effectively improved through the TIMP Program

Apache Gas Transmission Company, Inc. will collect data through their Operations and Maintenance Work Orders.

The following data will be collected as required by 49 CFR Part 192.1007:

- a) Number of Hazardous Leaks Either Eliminated or Repaired
- b) Total number of Leaks Either Eliminated or Repaired, Categorized by Cause
- c) Number of Hazardous Leaks Either Eliminated or Repaired, Categorized by Material

The performance measures listed above are to be collected and documented on an annual basis, and all of the data should reflect the previous calendar year. In accordance with the requirement of Section 17 "Periodic Evaluation and Improvement", the performance measures are analyzed on an annual basis to determine if the goals of the TIMP Program are being achieved.

Leakage performance measures are compared to an established baseline. This is to be the average of the previous five calendar years. In some cases, data may not be available for the previous five years. In such situations, the Company will use what data is available.

## **17. Periodic Evaluation and Improvement**

Apache Gas Transmission Company, Inc. will conduct a complete re-evaluation of this Plan no less than every 3 years. Trends in each of the performance measures listed in Appendix B will be reviewed during the re-evaluation. If any performance measures indicate that any of the additional action taken is not effective in reducing the risk it is intended to address, Apache Gas Transmission Company, Inc. will consider implementing additional actions to address that risk.

Re-evaluation of the Plan will also occur when changes occur on the system that may significantly change the risk of failure.



## Description of System

Apache Pipeline Gas System serves the Burkesville Gas Company in Cumberland County, located in South Central Kentucky. Cumberland County has a population of approximately 6,900 citizens and the city of Burkesville has a population of approximately 1,600 citizens. The Apache Pipeline Gas System has a total of 1 customer. They are the sole supplier of gas to Burkesville Gas Company.

Apache has one point of delivery (POD) located in Metcalfe County. The supplier is Texas Eastern Transmission LP (Enbridge, Inc.). Burkesville Gas is responsible for the maintenance and operation of the Apache Gas System and Pipeline.

The Apache Pipeline POD is owned by Texas Eastern Transmission LP. From the POD to Apache's High-Pressure Station, the Maximum Allowable Operating Pressure is 1200 psig. The outlet from the High-pressure Station has a Maximum Allowable Operating Pressure (MAOP) is 166.7 psig. This goes to the Park Station inlet. The Park Station outlet is MAOP of 60 psig. This Apache Gas Transmission System is serving 1 customer (Burkesville Gas Company).

Any Farm Taps coming off of the Apache Gas Transmission System is owned and operated by Burkesville Gas Company and operated and maintained by Burkesville Gas Company.

Gas supplied by Texas Eastern Transmission LP is pipeline quality gas, therefore, Burkesville Gas has not experienced any liquid problems. Apache Gas Transmission Company Inc. odorizes the gas at the purchase station.

The system contains approximately 2.5 miles of 4" Steel and 18 miles of 3" and 6" HDPE plastic pipe. The Steel Pipeline is under cathodic protection with sacrificial anodes and monitored by Burkesville Gas Company.

Appendix B Section 8 "Risk Evaluation and Ranking"												
Threat							2014	2015	2016	2017	2018	2019
1	Corrosion						0	0	0	0	0	0
		External										
		Internal										
2	Natural Forces						1	0	0	0	0	1
		Earth Movement					1					1
		Lightning										
		Storm Damage										
		Frost										
3	Excavation Damage						0	0	0	0	0	0
		Excavator Error										
		Locator Error										
		Poor Records										
		Failure to Notify										
4	Outside Forces						0	0	0	0	0	0
		Fire Explosions										
		Vehicular Damage										
		Electrical Arcing										
		Previous Mechanical Damage										
		Intentional Damage										
5	Material or Welds						0	0	0	0	0	0
		Pipe										
		Joint										
		Weld										
		Mechanical Fitting										
		Repair Device Failure										
6	Equipment Failure						0	1	1	1	0	0
		Malfunction of Pressure Reg.						1	1	1		
		Valve Failure										
		Other Equipment Failure										
7	Incorrect Operations						0	0	0	0	0	0
8	Other						0	0	0	0	0	0

## Appendix B con't

### Risk Ranking for Apache Pipeline Gas System

Threat	Probability	Consequence	History	Incident Probability
Corrosion	1.2	1.1	0	0%
Natural Forces	3.0	1.1	2	92%
Excavation	1.6	1.3	0	0%
Other Outside Forces	1.8	1.2	0	0%
Material & Welds	1.0	1.1	0	0%
Equipment Failure	0.5	1.1	3	8%
Incorrect Operations	0.0	1.1	0	0%
Other	0.0	1.1	0	0%

See Section 8 for definitions of Risk multipliers

# Apache Pipeline Gas TIMP Review

NAME	TITLE	REVIEW/UPDATE	DATE
Tom Shirey	President	Updated Appendix A	11-25-19
Tom Shirey	President	Updated Appendix A	7-28-2025
Tom Shirey	President	Updated Appendix B Supplement	7-31-2025

# **Burkesville Gas Company**

## **Distribution Integrity Management Plan**

**DIMP**

**November 2019**

**Burkesville Gas Company**  
**119 West Upper Street**  
**Burkesville, KY**

**Prepared By: OQ Resources, LLC**  
**Hustonville, KY**

## Table of Contents

Title	Page
1. Purpose and Scope .....	2
2. Administration .....	3
A. Responsibilities.....	3
B. Management Support .....	3
3. Definitions .....	3
4. Recordkeeping .....	4
5. Knowledge of Distribution System .....	4
6. Threat Identification .....	5
7. Threat Categories .....	5
8. Risk Evaluation and Ranking .....	9
9. Incident Probability Factor .....	10
10. Burkesville Gas Company Threats .....	10
11. Implementation of Measures to Address Risk .....	10
12. Leak Management Program .....	11
13. Other Programs to Address Risk .....	11
14. Programs to Address Human Factors .....	12
15. Facility Inspections and Monitoring .....	13
16. Measurement of Performance, Monitoring Results, Evaluating Effectiveness .....	15
17. Periodic Evaluation and Improvement .....	15
Appendix A Description of System.....	16
Appendix B Leak History and Tables.....	17
Appendix C - Review of DIMP Plan .....	18

## 1. Purpose and Scope

On December 4, 2009 the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) added Subpart P "Gas Distribution Pipeline Integrity Management" to CFR 49 Part 192. Subpart P was created to require operators of gas distribution pipelines to develop and implement a gas distribution integrity management program (DIMP) that includes a written integrity management plan.

The purpose of the program is to enhance safety by identifying and reducing gas distribution pipeline integrity risks. The rule requires that operators identify risks to their pipelines where an incident could cause serious consequences and focus priority attention in those areas. The rule also requires that operators implement a program to provide greater assurance of the integrity of their pipeline.

This written DIMP Plan addresses the rule which requires operators to develop and implement a program that addresses the following elements:

- a. Knowledge of Distribution System
- b. Threat Identification
- c. Risk Evaluation and Ranking
- d. Implementation of Measures to Address Risk
- e. Measurement of Performance, Monitoring Results and Evaluating Effectiveness
- f. Periodic Evaluation and Improvement
- g. Reporting Results

Managing the integrity and reliability of gas distribution pipelines is the primary goal for Burkesville Gas Company, with design, construction, operations and maintenance activities performed in Compliance with CFR 49 Part 192 requirements. The objective of this DIMP Plan is to establish the requirements to comply with Subpart P, pertaining to integrity management for gas distribution pipelines.

This written DIMP Plan applies to all of Burkesville Gas Company's distribution pipelines. Pipelines include the associated mains, services, service regulators, customer meters, valves and other appurtenances attached to the pipe such as metering stations, regulator stations and fabricated assemblies.

This plan is effective November 2019.

The Plan will be reviewed at least every 3 years to continually refine and improve the plan.

## 2. Administration

This section describes how the DIMP Program, including the DIMP written plan, is to be maintained and updated.

### A. Responsibilities

Tom Shirey, Owner, Burkesville Gas Company, is responsible for implementing, maintaining, updating this DIMP Plan.

### B. Management Support

Burkesville Gas Company is committed to implementing the elements of this Plan in order to ensure the continued safety and reliability of its distribution systems. Burkesville Gas Company's responsibilities include but are not limited to:

1. Ensure periodic evaluations are completed and documented in accordance with Section 17
2. Submit the DIMP plan to Kentucky PSC upon request
3. Conduct a periodic review of the plan to evaluate the effectiveness of the Program and update as needed
4. Monitor regulatory activity and changes in regulation which could precipitate the need to modify the Program
5. Ensure records listed within Section 4 are properly maintained.
6. Submit Annual DOT Report to PHMSA and state commissions
7. Review the Operation and Maintenance Plan and make revisions as necessary as a result of the DIMP.

## 3. Definitions

DIMP - Distribution Integrity Management Program

Excavation Damage

Any impact that results in the need to repair or replace an underground facility due to a weakening, or the partial or complete destruction of the facility including, but not limited to the protective coating, lateral support, cathodic protection or the housing for line device or facility.

Excavation Ticket

A notification from the one-call notification center to the operator providing information of pending excavation activity for which the Company is to locate and mark facilities



#### Hazardous Leak

A leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

#### Integrity Management Plan

A written explanation of the mechanisms or procedures the company will use to implement the integrity management program and to ensure compliance with 49 CFR Subpart P.

#### PHMSA

The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.

#### NTSB National Transportation Safety Board

**SME** Subject Matter Experts are persons knowledgeable about design, construction, operations or maintenance activities, or the system characteristics of a particular distribution system.

### **4. Recordkeeping**

The following records shall be maintained for a minimum of 10 years:

- i. The DIMP Plan
- ii. Copies of previous Plans
- iii. Records of data required to be collected to calculate performance measures
- iv. Records of mechanical fitting failures
- v. DOT Incident Reports
- vi. Safety Related Condition Reports

### **5. Knowledge of Distribution System**

This section describes the infrastructure of Burkesville Gas Company using reasonably available information from past and ongoing design, installation, operations and maintenance activities.

A description of the system will be found in Appendix A.

In order to determine threats and assess risks on its distribution system, Burkesville Gas Company looked at the physical makeup of system components. This information was obtained from the last 5 years of records retained in Burkesville Gas Company's files.

Data collected on piping and appurtenances installed within the distribution system will include the location where it is installed and the material of construction. This information will be recorded, filed and retained at the Burkesville Gas Company office. These records shall include the following information:

- i. Material Component (pipe, valve, fittings)
- ii. Material Type (plastic, steel) c. Diameter
- iii. Pipe wall thickness e. Pipe Grade
- iv. Manufacturer
- v. Person conducting pressure test h. Test Pressure
- vi. Test duration
- vii. Quantity
- viii. In Service date
- ix. Location (County, City, Street)

## **6. Threat Identification**

The purpose of this section is to describe the process used to identify threats and the process by which Burkesville Gas Company determined if a threat exists.

## **7. Threat Categories**

An overview and discussion of each threat and sub-threat category is provided in following Sections A through H.

In addition to the Company's own experiences and information, categories considered are based on the following:

- i. Membership or participation in local, regional or national trade associations: including workshops, meeting and other forums where knowledge is shared
- ii. Networking with peer companies
- iii. Information received from manufacturers of pipeline materials
- iv. Information received from relevant government agencies
- v. Review of trade journals and magazines that publish material regarding gas distribution
- vi. PHMSA Advisory Bulletins
- vii. NTSB Reports and Recommendations applicable to natural gas pipelines

Through the periodic evaluation provisions contained with Section 17, the company will periodically review data from internal and external sources, such as those listed above, to determine if other potential threats ought to be considered. Potential threats may include those which are not currently evident based on reasonably available data. Consideration of other potential threats could entail the collection of additional data such that the existence of such threats can be determined.

A. Corrosion

- a) External Corrosion - Corrosion is a process in which metal decomposes, as in the oxidation of iron in the presence of water by an electrolytic process. Metallic pipe depending upon age, soil conditions and other factors may be susceptible to corrosion; External corrosion begins on the exterior surface of certain metallic gas facilities. Significant corrosion may result in the release of gas from gas pipeline facilities.
- b) Internal Corrosion - Corrosion is a process in which metal decomposes, as in the oxidation of iron in the presence of water by an electrolytic process. Metallic pipe depending upon age, soil conditions and other factors may be susceptible to corrosion. Internal corrosion begins in the interior surface of certain metallic gas facilities. Significant corrosion may result in the release of gas from gas pipeline facilities.

B. Natural Forces

- a) Earth Movement - This threat is a result of a naturally occurring event (earthquakes, landslides or subsidence) which may cause land shifts which can undermine the construction integrity of pipelines.
- b) Lightning - This threat is a naturally occurring phenomenon. Gas facilities may be damaged and/or catch on fire due to a direct lighting strike. Gas facilities may also be compromised as a secondary effect from a lightning strike in the area. An example of such a secondary effect would be a fire started by lighting in an area which gas facilities are present that results in damage to a pipeline system asset.
- c) Other Storm Damage – This threat category includes heavy rains, floods and mudslides which may undermine the environment supporting the gas facilities and thereby compromise the construction integrity of such gas facilities. It also includes high wind events such as hurricanes and tornadoes.
- d) Frost - This broad threat category includes mechanical stress induced in a pipe or component when some or all of its parts are not free to expand or contract in response to changes in temperature or where components become inoperable because of freezing.

C. Excavation Damage

- a) Excavator Error - This threat may occur whenever the company, its contactors, or entities unrelated to the company fail to employ sage, prudent excavation techniques. This threat also includes excavation error when performing dredging or waterways or bodies of water.
- b) Locator Error - This threat may occur when a person charged with locating gas facilities incorrectly marks or fails to mark an underground gas facility.

- c) Poor Records – The threat may occur when an incomplete or inaccurate locate results from incomplete or inaccurate facility records.
- d) Failure to notify One Call Center – This threat may occur when the company, its contractors or entities unrelated to the company do not notify the one call system to give notice of intent to excavate.

#### D. Other Outside Force

- a) Fire/Explosion Not Caused by Gas – This threat may occur when a fire and/or explosion occurs and subsequently results in damage to gas facilities.
- b) Vehicular Damage – This threat may occur when the Company's gas facilities are damaged by motorized vehicles or equipment not engaged in excavation. An example would be damage to a meter set caused by vehicle impact.
- c) Damage Caused by Maritime Vessels - This threat may exist for damage to gas facilities by boats, barges, drilling rigs, or other maritime equipment or vessels set adrift. The threat also may exist for damage to gas facilities caused by impact of maritime equipment or vessels while they are engaged in their normal or routine activities not including excavation activities.
- d) Electrical Arcing from Other Equipment or Facility - This threat may exist whenever electric facilities are in close proximity to the Company's gas facilities. Damage to pipe or coating is possible in certain situations and conditions.
- e) Previous Mechanical Damage - This threat may exist where damage occurred to gas facilities at some time prior to the date it is discovered. It includes prior to the date it is discovered. It includes prior outside force damage of an unknown nature, prior natural force damage, and prior damage from other outside forces.
- f) Intentional Damage - this threat category consists of vandalism, terrorism or theft.

#### E. Material or Welds

Components in the distribution system may be susceptible to leaks, ruptures or other failures from defects with the material of the pipe components or joints due to faulty manufacturing procedures. Additionally, such defects may result from poor construction/installation practices, and in-service stresses such as vibration, fatigue and environmental cracking.

- a) Body of Pipe - This threat may exist from certain plastic pipe installed that may leak depending upon pipe resin, manufacturing and service conditions.
- b) Pipe Seam - This threat may exist due to poor weldment of steel pipe during the manufacturing process.

- c) Threaded Joint - This threat may occur due to insufficient thread sealant applied or substandard thread tolerances created during manufacture or fabrication.
- d) Weld - This threat may exist on poorly joined weld connections made during construction, installation or fabrication
- e) Fusion Joint - This threat may exist when joining plastic pipe to plastic pipe or fitting during construction, installation or fabrication.
- f) Cast Iron Bell Joint - A threat may exist due to quality of the bell and spigot joints, the depth of frost in the ground and the freeze and thaw cycles of the earth surrounding the joints.
- g) Mechanical Fitting - A threat may exist for pipe to pullout from mechanical fittings due to pullout forces that could include fatigue from seasonal temperature changes, ground movement, improper installation and deterioration of the fitting. Mechanical fittings may leak though the seal between the fitting and the pipe. Contributing factors may include a degradation of the seal over time of a change in the gas quality in the distribution system.
- h) Repair Device Failure - This threat may exist after the application of a repair device based on deterioration or improper installation of the device.
- i) Other Material Failure - This threat category exists for all other material failures not described specifically above.

#### F. Equipment Failure

- a) Malfunction of Pressure Regulating Equipment - This threat may exist due to malfunctions of control and relief equipment. Typically, the result of failed regulator components, alarm devices or relief valves.
- b) Valve Failure/Leakage - This threat may exist when valves fail to open or close on command or when component failure allows a bleed-through condition.
- c) Other Equipment Failure - This threat may exist due to failures on compressors, meters, or regulator stations where the failure resulted from a faulty component not listed above such as nipples, flanges, valve connections, line pipe collar, etc.

#### G. Incorrect Operations

Incorrect Construction/Operation - This threat may occur during installation, operating, maintenance or repair activities. Threats in this category include improper equipment selection or installation, poorly written procedures, not following written procedures, and unintentional ignition of the transported gas during a welding or maintenance activity, and training or judgment errors.

## H. Other

- a) Miscellaneous - This threat category is reserved for threats that are known but cannot be attributed to threats that have been previously described in this section.
- b) Unknown - This threat category is reserved for threats for which the cause is not known.

The entire Burkesville Gas Company's system operates under the same environmental conditions; therefore, the system will not be segmented but reviewed as one system.

To classify threats, Burkesville Gas Company, will consider reasonably available information relating to the system's design, operation, maintenance, and environmental factors. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history and excavation damage experience.

## 8. Risk Evaluation and Ranking

Risk analysis is an ongoing process of understanding what factors affect the risk posed by threats to the gas distribution system and where they are relatively more important than others. The primary objective of ranking risk is to determine what risk poses the greatest threat to life and property.

In order to rank potential risk, the following formula is used:

Probability X Consequence X History of Leaks X Incident Probability Factor.

### A. Probability

Probability is based on the probability of the potential threat occurring on the operator's system. This is determined by the Operator and will be based on the geographical location of the system, type of material and the history of this threat in the system.

Probability multiplier number will be from 1 to 10

### B. Consequence

Consequence number is based on the potential damage to life and property should this threat occur. This number shall be determined by the Operator using his Knowledge of the System.

Consequence multiplier number will be from 1 to 1.5

### C. History of Leaks

History of Leaks is the percentages of the Operators leaks in the last five years that occurred in this potential threat.

9. Incident Probability Factor

Incident Probability Factor is the percentage of leaks in each of the threats reported to PHMSA for the last five years of data available. Currently this percentage is as follows:

▪ Corrosion	0
▪ Natural Forces	0
▪ Excavation	67%
▪ Other Outside Forces	0
▪ Material & Welds	0
▪ Equipment Failure	33%
▪ Incorrect Operations	0
▪ <u>Other</u>	<u>0</u>
	100%

History of Leaks along with tables for ranking of threats will found in Appendix B.

History of Leak numbers are taken from “Gas Leak & Report” located in the file in the Burkesville Gas Company Office.

10.Burkesville Gas Company Threats

Based on information from Appendix B

Appendix B reveals that Burkesville Gas Company has no threats to their natural gas system. History indicates they have had only 2 valve failures and 4 dig-ins in the past 5 years. There has been only 1 dig-in since 2010 and none since 2012.

Due to the lack of threats to the system, Burkesville Gas Company will not implement any additional programs or decrease the frequencies of inspections that would be required to decrease threats. See Section 11 "Implementation of Measures to Address Risks"

11.Implementation of Measures to Address Risk

The purpose of this section is to describe how Burkesville Gas Company implements measures aimed at achieving risk management. Risk Management is accomplished by acting to reduce the likelihood of an occurrence, by alleviating the consequences of an occurrence, or both. Appropriate actions are dependent upon the type of threat, occurrence, or both. Appropriate actions are dependent upon the type of threat, magnitude of risk, and the viability of the actions in effectively allocating resources to manage the relevant risk factors. Risk reduction activities can be in the form of high-

level programs applied uniformly to a wide group of facilities or a single, specific activity aimed at a targeted facility.

The sections below describe various measures the Company has selected for the purpose of managing pipeline safety risks associated with the distribution system.

## **12. Leak Management Program**

An effective leak management program includes locating leaks by visual inspection and leak survey equipment, timely response to customer notification of a gas odor and a variety of other means. It involves the use of qualified personnel to perform leak detection activities and the selection of appropriate leak detection equipment.

An effective leak management program includes evaluating the severity of leaks according to established classification criteria. These classification criteria take into consideration the safety posed by the leak. The determination of leak migration is part of the process.

Leaks are classified using the following criteria

Leaks that require immediate action (Grade 1) A leak that represents an existing or probable hazard to persons or property, and requires immediate repair or continuous until the conditions are no longer hazardous.

Leaks scheduled for repair (Grade 2) A leak that is recognized as being non-hazardous at the time of detection, but justifies scheduled repair based on probable future hazard.

Monitored leaks (Grade 3) A leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous.

### **I. Act Appropriately**

Once a leak has been located and evaluated, Burkesville Gas Company takes actions that are consistent with the severity of the leak. This may include temporary or permanent repair, replacement, or other steps that reduce any immediate hazard posed by the leak. This may also include scheduling the leak for repair or periodic monitoring in the case of non-hazardous leaks.

### **II. Keep Records**

An effective leak management program includes the collection and recording of data pertinent to a leak to increase Burkesville Gas Company's knowledge of the system, measure its performance and comply with regulatory reporting requirements. Leakage information is to be documented on the applicable Company forms.

## **13. Other Programs to Address Risk**

In addition to the leak management program, Burkesville Gas Company has in place numerous programs and activities aimed at reducing the probability of pipeline failure and mitigating the consequences should a failure occur. The following sections describe some of the programs and the threats which are addressed.



## Public Awareness Program

Burkesville Gas Company has in place a Public Awareness Procedure developed and implemented to provide its customers twice annually:

- i. The description of the purpose and reliability of their gas facility.
- ii. An overview of the hazards of the pipeline and prevention measures used.
- iii. Information about damage prevention.
- iv. How to recognize and respond to a leak.
- v. How to get additional information.

## 14. Programs to Address Human Factors

### A. Operator Qualification Program

Burkesville Gas Company has developed and implemented an Operator Qualification (OQ) Program. The program was developed in response to the operator qualification rule, the purpose of which is to minimize human error by establishing a verifiable, qualified workforce. In so doing, the Company reduces the consequences from human error and promotes personnel and public safety. Furthermore, operating and maintenance personnel are qualified to recognize and react to abnormal operating conditions.

The elements of the program are specified in the Company's Operator Qualification Plan. The purpose of the written plan is to develop a unified standard for qualification of pipeline operator and contractor/subcontractor personnel.

The OQ plan includes the following provisions:

- i. Identify covered tasks
- ii. Ensure through evaluation that individuals performing covered tasks are qualified
- iii. Allow individuals who are not qualified pursuant to Subpart N to perform a covered task if directed and observed by an individual that is qualified
- iv. Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Title 49 CFR Part 191
- v. Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task
- vi. Communicate changes that affect covered tasks to
- vii. individuals performing those covered tasks
- viii. Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed

## B. Construction Inspection

Burkesville Gas Company's Management periodically reviews work done by Company or Contract personnel to ensure the work is correctly performed in accordance with appropriate standards.

## C. O&M Manual

Burkesville Gas Company has developed and implemented Operating and Maintenance Manual (O&M Manual). The O&M Manual sets forth Management's expectations of leadership to ensure compliance with 49 CFR Part 191 and 192 and applicable state regulations pertaining to the distribution of gas. The O&M Manual sets forth leadership's expectations of Company employees and contractors as to how certain activities must be performed. The O&M Manual are available to all employees in the Company and are made available to contractors performing such activities on behalf of the Company.

# 15. Facility Inspections and Monitoring

## A. Atmospheric Corrosion Monitoring

Inspections of above ground piping and related facilities exposed to the atmosphere are conducted in accordance with 49 CFR Part 192.

## B. Patrolling

Burkesville Gas Company has no facilities under stress, therefore have no facilities to Patrol.

## C. Critical Valve Inspections

Burkesville Gas Company has in place a program to inspect critical valves that are designated by the Company deemed necessary for the safe operation of the system. Each valve is checked for adequate lubrication and proper alignment to permit the use of a key, wrench, handle, or other operating device. Where applicable, each valve box or vault is cleared of any debris that may interfere or delay the operating of the valve. In addition, a sketch, map or other means of identifying and describing the location of the critical valve and other pertinent information must also be maintained. If a valve fails to operate satisfactorily, prompt remedial action is taken.

## D. Odor Level Monitoring

Burkesville Gas Company has in place a program to monitor the proper concentration of odorant in the distribution system.

To assure the proper concentration of odorant, trained personnel of Burkesville Gas Company will perform periodic odorant tests to determine the concentration of odorant is sufficient to be detected by a person with a normal sense of smell. Records, including the name of the person conducting the odorant test, the date and location of the test are documented and retained in the office of Burkesville Gas Company.

## E. Emergency Manual

Burkesville Gas Company maintains an Emergency Manual which contains written procedures aimed at minimizing the hazards resulting from a gas pipeline emergency.

The objectives of the manual are to provide for the appropriate preparation, management, reporting, and review of emergency events as further explained below.

- a) Preparation objectives are to establish guidelines to ensure that company personnel are prepared to respond to gas pipeline emergencies in an expedient manner, which protects the safety of employees and the public, and minimizes the impact of the emergency on the company, its customers, and the community.
- b) Management objectives are to pervade a framework for the delegation of responsibility, and the clear establishment of employee's roles during emergencies and incidents
- c) Reporting objectives are to establish reporting guidelines, and effectively communicate to all levels of management; circumstantially sensitive events or incidents on the Company's pipelines facilities and to provide guidance in submitting telephonic and written reports to DOT and/or State Utility Commissions are required.
- d) Review objectives include a facilitated, open process of sharing information about pipeline emergency events/incidents with the desired outcomes being increased learning and improved performance. These outcomes will be achieved in an environment of trust with a non-threatening discussion of actions, the sharing of knowledge, and duplication of successes throughout the organization, the top priority is an increase in the institutional knowledge required to handle pipeline emergency situations.

The written procedures include, but are not limited to, the following:

- a) Receiving, identifying, and classifying notices of events which require immediate response by the operator
- b) Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.
- c) Prompt and effective response to a notice of each type of emergency
- d) Training the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures
- e) Reviewing employee activities to determine whether the procedures were effectively followed in each emergency

## **16. Measurement of Performance, Monitoring Results, and Evaluating Effectiveness**

The objective of this section of the plan is to establish a process by which performance measures are monitored in order to evaluate the effectiveness of the DIMP Program. Performance measures can assist Burkesville Gas Company in the ongoing evaluation of perceived threats and risk level. The evaluation of performance measures may lead to unexpected results that may include the recognition of threats not previously identified.

Program evaluations will help the company answer the following questions:

- a) Were the DIMP Program objectives accomplished
- b) Were pipeline integrity and safety effectively improved through the DIMP Program

Burkesville Gas Company will collect data through their Operations and Maintenance Work Orders.

The following data will be collected as required by 49 CFR Part 192.1007:

- a) Number of Hazardous Leaks Either Eliminated or Repaired
- b) Total number of Leaks Either Eliminated or Repaired, Categorized by Cause
- c) Number of Hazardous Leaks Either Eliminated or Repaired, Categorized by Material

The performance measures listed above are to be collected and documented on an annual basis, and all of the data should reflect the previous calendar year. In accordance with the requirement of Section 17 "Periodic Evaluation and Improvement", the performance measures are analyzed on an annual basis to determine if the goals of the DIMP Program are being achieved.

Leakage performance measures are compared to an established baseline. This is to be the average of the previous five calendar years. In some cases, data may not be available for the previous five years. In such situations, the Company will use what data is available.

## **17. Periodic Evaluation and Improvement**

Burkesville Gas Company will conduct a complete re-evaluation of this Plan no less than every 3 years. Trends in each of the performance measures listed in Appendix B will be reviewed during the re-evaluation. If any performance measures indicate that any of the additional action taken is not effective in reducing the risk it is intended to address, Burkesville Gas Company will consider implementing additional actions to address that risk.

Re-evaluation of the Plan will also occur when changes occur on the system that may significantly change the risk of failure.

## Appendix A

### Description of System

Burkesville Gas System serves the city of Burkesville in Cumberland County located in South Central Kentucky. Cumberland County has a population of approximately 6,900 citizens and the city of Burkesville has a population of approximately 1,600 citizens. The Gas System has a total of 270 customers.

The City of Burkesville has one point of delivery (POD) located in Cumberland County. the supplier is Apache Gas and Burkesville Gas is responsible for Apache Gas System and Pipeline.

Burkesville Gas System also has Farm Taps along the Apache Transmission Line.

### Farm Taps Points of Delivery/Receipt for Burkesville and Apache

	Name	Number of Services	Outlet Pressure in Psi
1	Matt Hurt	1	30
2	Fisher	2	30
3	Homing Creek	1	30
4	Norris	1	30
5	Marrowbone Store	1	30
6	Gingerich	2	30
7	Dry Kiln	1	30
8	Pitcock	1	30
9	Muse	1	30
10	Eshes	1	30
11	Hostetter	1	30
12	Dutch Creek	10	30
13	Allen Creek Road (a)	3	30
14	Allen Creek Road (b)	2	30

The Burkesville POD is owned by Apache Gas. The outlet operating pressure of this POD is approximately 60 PSIG. This system contains one district regulator located serving approximately 270 customers. The outlet pressure from the district regulator is 15 PSIG. The first cut regulator from the 66 PSIG line has an external relief valve and all the service regulators have internal relief valves.

Gas supplied by Apache Gas is pipeline quality gas, therefore Burkesville Gas has not experienced any liquid problems.

The system contains approximately 21 miles of pipe plastic. With no pipe being Steel Pipe no Cathodic Protection is needed.

The system contains no outstanding environmental factors that would contribute to a threat; therefore, the entire gas system will be evaluated as one.

# Burkesville Gas DIMP Review

NAME	TITLE	REVIEW/UPDATE	DATE
Tom Shirey	Owner	Update Appendix A	11-25-2019
Tom Shirey Earl Taylor	Owner OQ Resources, LLC	Review and Farm Tap List	07.28.25
Tom Shirey	President	Updated Appendix B Supplement	07.31.2025