

# SAFETY INITIATIVES

Atmos Energy's commitment to safety is a core value, reflected in our Vision Statement, and permeates our culture. It is evident in our people, policies, practices, and procedures. We live this safety value; it is part of who we are. Our holistic approach to managing safety involves observing, evaluating, and adapting to changing and challenging conditions. We are committed to continuous improvement as we work to achieve our vision of being the safest provider of natural gas service.

Our focus on safety has continued throughout this investigation. Approximately one year after the accident on February 23, 2018, Atmos provided a summary to the NTSB of initiatives that were underway, or ones we committed to take, to enhance safety. An updated summary of those can be found below and a few of the continuous improvement safety initiatives that Atmos has undertaken related specifically to the investigation are included in our Party Submission:

## 1. Damage Prevention

Atmos has been and will continue to be a champion for damage prevention. Our third-party damage rate continues to outperform the industry average. In our last fiscal year (2019), the number of third-party damages on our system decrease by almost 5%, even though the number of line locates increased by 9%. To further reduce the risk of third-party excavation damage, Atmos:

- Audited more of our 3<sup>rd</sup> party line locating services to determine what actions can be taken to further reduce third party excavation damage.
- Strengthened our 'Watch and Care' program to require additional follow-up with excavators who have called in a line locate ticket.
- Started flagging and/or marking the location of newly installed pipe and associated facilities to bring immediate visibility to their location while our facilities map records are updated.
- Added new reporting metrics to better evaluate the performance of our damage prevention program.
- Implemented a Damage Prevention Ambassador Program that encourages employees to proactively stop by excavation sites to provide damage prevention materials to excavators and ensure proper 811 notification.
- Is working to complete the roll out of LocusView so that by the end of 2020 all distribution construction crews can capture and transmit detailed data on new pipe installation through a mobile app. To date, over 700 construction crews (internal and contractors) are using LocusView. This includes as-built maps, tracking and traceability of materials, joints and associated information. LocusView's high accuracy GPS creates as-built maps that are integrated directly into Atmos' GIS.

- Developed safety mascots and ambassadors Gus the Gopher and Rosie the Skunk to engage customers and the public in remembering to call 811 before you dig and using your senses to detect natural gas. In July of 2018, Atmos' "Gus the Gopher for Call 811" won top video in the external category of the American Gas Association Safety Awareness Video Excellence awards.



## 2. Pipeline Safety Management System

In July 2015, the American Petroleum Institute (API) issued Recommended Practice 1173 (RP1173) outlining a Pipeline Safety Management System (PSMS). This is a voluntary measure, not required by code or regulation. The American Gas Association (AGA) recommended RP1173 for industry adoption in May 2019. With respect to PSMS, Atmos:

- Participated in industry workshops and discussion groups to learn more about PSMS after its issuance by API in 2015.
- Engaged an industry leading third-party expert in 2016 to examine its practices in light of RP1173, and also conducted a self-assessment for one of its operating divisions.
- Continued to participate in industry discussion groups and workshops to gain expertise and better understand how to develop and implement PSMS across its entire organization.

- After February 23, 2018, accelerated the implementation of PSMS by updating its initial self-assessment and engaging its industry leading third-party expert to perform an enterprise wide PSMS assessment and gap analysis.
- Developed a roadmap and draft PSMS program documents to allow it to reach significant and widespread maturity across all elements of a PSMS - a task that RP1173 recognizes is a journey.
- Added a Director level resource to support this accelerated implementation effort.

PSMS is supported at the highest levels of the organization, with a corporate officer primarily responsible for the adoption and implementation of PSMS. Atmos' corporate Risk Management and Compliance Committee (RMCC) is responsible for ongoing governance of PSMS and reporting to the Company's Management Committee.

### **3. Procedures**

We regularly review and revise our procedures as we continue to learn from our own experiences and those of others in the industry. Internal subject matter experts (SMEs) participate in the review and development of these procedures. Our leak survey and leak investigation procedures have been updated to include mandatory 911 notification and the establishment of a Safety Perimeter when a hazardous condition is discovered.

### **4. Training**

Our commitment to the training of our highly skilled employees is evident and a tangible example of that is the Charles K. Vaughan Center in Plano, TX which opened in late 2010. This state-of-the art, industry leading facility, serves as the technical training location for our front-line employees from across our eight-state operation. The multi-week technical training programs are structured in a manner where the focus is on job-readiness. To help achieve this, our employees spend approximately 20% of their time in the classroom and 80% of their time performing hands-on training. As part of our never-ending pursuit to become the safest provider of natural gas services, employees in the field start each day with a safety meeting. As a company, we held over 91,000 hours of safety training in fiscal 2019.

In order to enhance our robust training curriculum and for our highly trained and qualified gas professionals and our operation leaders, Atmos:

- Developed and delivered an online leak survey refresher training for all employees with specified leak survey Operator Qualification (OQ) requirements.
- Developed and delivered a one-week leak survey refresher training class in the first half of 2019 to all employees whose primary job responsibilities are leak surveying. The training consisted of classroom instruction, a review of procedures, hands-on training by equipment vendors, discussion of weather-related conditions, and industry case studies.
- Implemented an Operations Supervisor Boot Camp at our Charles K. Vaughan training facility that allows operations supervisors to gain a better understanding of our technical training courses, processes and equipment through a one-week hands-on experience class. Every operations supervisor at Atmos has now completed the training, and all new supervisors will be required to attend future classes.

## **5. Leak Survey**

Leak survey and detection is an important part of our safety efforts. Atmos regularly performs leak surveys at more frequent intervals than required by federal regulation. In order to enhance our leak survey program, Atmos:

- Created a dedicated work group within the Mid-Tex division to support and monitor leak survey activity.
- In 2019, completed a one week refresher training class for all employees who perform leak surveys as their primary job.
- Continues to closely monitor our system in the Dallas-Fort Worth area through more frequent leak surveys and has employed additional third-party resources to support these efforts.
- Is conducting additional leak surveys across a broad area of the Mid-Tex system at more frequent intervals than required by federal and state regulations.
- Has purchased additional advanced mobile leak detection units within our Texas operations. These units are equipped with sensors that are 1,000 times more sensitive than traditional technologies. We plan to add additional units over time.
- Continues to implement GPS tracking functionality on leak survey equipment.

## **6. Risk Factors**

In order to better understand and address geological and climatological threats to our operating system, Atmos retained a geotechnical engineering firm which has resulted in:

- The development and implementation of a geological risk factor that was included in the 2019 Mid-Tex division risk analysis.

- The development of a geological risk factor across the state of Texas.
- Ongoing review across all states where we operate.

## **7. Research and Development**

We are always working with industry and technology partners to develop and evaluate new technologies to enhance safety. For years we have partnered with the Gas Technology Institute's Operations Technology Development (OTD) collaborative, which develops technology-based solutions for the natural gas industry. Among the efforts that Atmos supports to enhance safety through our involvement in OTD are:

- Residential methane detectors
- Leak survey/investigation sensors and technology
- Damage prevention tools and practices

## **8. System Modernization**

Over the last 10 years, we have invested \$10 billion company-wide to modernize our pipeline infrastructure, over 80% of which was allocated to safety. Over the next five years we have committed to spend \$10 to \$11 billion and replace approximately 5,000 – 6,000 miles of distribution and transmission pipe. We are committed to replacement of all remaining cast iron by the end of 2021. Other highlights for fiscal year 2019 (10/1/18 – 9/30/19) include:

- 890 miles of distribution and transmission pipelines replaced.
- 53,000 service lines replaced.
- 288,000 hours of safety, technical, and other training delivered

## **9. Quality Management**

- Deployed iAuditor, an electronic inspection application, to our internal and third-party inspectors to drive consistency in inspection and quality management processes through performance reports, trend spotting, and the identification of actionable items.
- Implemented an automated interface between our Operator Qualification (OQ) program and our work management system that cross-references an employee's operator qualifications with the OQ tasks prior to assigning a work order. This new capability replaces previous manual processes.

## **10. Data Analysis**

- Implemented advanced data analytics tools which can transform, merge and analyze data sets using automated and repeatable workflows that provide faster and more precise results than manual processes.
- Implemented visualization technology tools that can provide near real-time graphical representation (dashboards, etc.) of data to assist operations and compliance leaders in their decision making.