

In The Field

PSC Natural Gas Safety Staff Working To Ensure Systems Meet Safety Standards

By Bob Leonberger

While our offices are located in the Governor Office Building in Jefferson City, you probably won't see us there during most weeks. We are out in the field inspecting the state's natural gas pipeline systems, working to ensure those systems meet federal and Public Service Commission safety rules.

Like emergency responders, members of the Public Service Commission's Safety Engineering Unit in the Operational Analysis Department (Staff) are "on-call" 24 hours a day/7 days a week should a natural gas incident occur in Missouri.

We contract with an answering service to take after-hour calls and to have information from those calls forwarded to Staff members at any time, day or night.

Investigating incidents

Investigation of natural gas incidents is one of the many tasks we perform and is undoubtedly our most visible function.

Natural gas operators are required to call Staff within one hour of determining a natural gas incident (defined as a release of gas that involves a death, injury requiring hospitalization, or over \$10,000 in damage) has occurred. Staff will then determine if an on-site investigation is necessary. Staff often responds when a call is received and conducts an on-site investigation even if it is after normal work hours, on weekends or holidays.

If an on-site investigation is conducted, Staff will also gather detailed information through data requests and witness interviews; compiling a formal Incident Report (Report) that is filed with the Public Service Commission. That Report will describe the facts surrounding the incident. It will also include an analysis, conclusions

and recommendations. Conducting such an investigation is necessary to determine if the operator (company or municipal) was in compliance with Missouri Public Service Commission regulations which are often more stringent than federal regulations. In almost all cases, the Staff Incident



Excavation and installation of a gas line in southwest Missouri.

Report is the only comprehensive report detailing the natural gas incident.

The Safety Engineering Unit is comprised of eight inspectors and a supervisor. Our primary role is an on-going operator inspection program of all the intrastate (within Missouri) investor-owned and municipal-owned natural gas utility systems in the state. This activity takes up a majority of the Staff's time. We are in the field a total of over 600 days a year.

The Commission has pipeline safety jurisdiction over nine investor-owned and 41 municipally operated natural gas systems that comprise approximately 80 separate "inspection units". There are approximately 30,000 miles of main, approximately 1,000 miles of transmission line, and about 1.6 million service lines under the pipeline safety authority of the Public Service Commission.

The goal of our unit is to conduct detailed reviews on all inspection units each year. Circumstances may cause the inspection intervals to exceed 12 months, but not longer than 18 months.

Inspecting systems in the state

These inspections vary in length and consist of an office record search/review and field facilities inspection. For example, MGE has seven inspection units. We will have three to four Unit Staff spend three to four days conducting a detailed inspection on each of the units each year. For smaller municipal systems, an annual inspection could take one person from the Unit a day or two to conduct. Following each inspection, Staff prepares an inspection summary that is sent to the operator detailing any regulation violations and/or areas of concern.



PSC Safety Engineering Staff member Greg Williams, left, inspects a gas line and meter installation.

During an inspection, Staff checks for operator compliance in numerous areas:

- Prompt response to leak calls.
- Proper leak investigations and classification of leaks.
- Timely rechecks and repair of existing leaks.
- Leak surveys conducted at required intervals.
- Inspection and proper operation of regulator stations.
- Proper location of emergency valves.
- Proper levels of corrosion control protection measures.
- The natural gas contains sufficient odor levels.
- A public education program is being conducted.
- Proper qualification of operations personnel is maintained.

- Proper qualification of personnel welding steel pipe and joining plastic pipe is maintained.
- Piping in new installations has been installed correctly and tested to the correct pressure.
- Ensure liaison is maintained with fire/police/public officials, and other areas.

Following the records review, Staff goes into the field to verify the information contained in the records.

This includes checking:

- ✓ Regulator stations.
- ✓ Location of emergency valves.
- ✓ Measuring the level of corrosion protection.
- ✓ Measuring the odorization level in the natural gas and other areas that are identified during the records review that needs to be addressed.

Staff also conducts construction inspections and operations-related inspections.

All state and federal natural gas pipeline inspectors are required to pass a series of seven, one-week pipeline safety courses at the United States Department of Transportation (DOT) training center in Oklahoma City, Oklahoma. Additional DOT training courses are required for more advanced or specialized inspections.

— **Bob Leonberger**,
PSC Staff Safety Engineering Unit



Call Before You Dig

811 OR
800-DIG-RITE
(344-7483)

As part of its work, Staff also reviews operators' responses to excavator notifications and the operators' proper response to mark lines as part of our comprehensive inspections. Also, the Staff is involved with Missouri One Call to further excavation damage prevention.

Outreach efforts by the Unit Staff to address third-party damage to underground facilities includes an annual excavation damage prevention summit with over 1,000 participants involved in excavation work. We are also involved in efforts to educate the public on calling before doing any excavation work in their yard or at a business. All educational materials contain the number to call before you dig: **811** or **800-DIG-RITE**.

**For more information,
see page 14 or visit
www.psc.mo.gov.**

What you should know ... about Natural Gas

Natural gas is a non-renewable resource that does not have an odor. An odorant is added so gas can be detected if a leak occurs. The odor is similar to the smell of 'rotten eggs' (for odor, scratch 'n sniff).



If you smell natural gas ...

- **Evacuate** the building immediately.
- **Do not** operate electrical switches.
- **Do not** smoke, use lighters, matches or any other item with an open flame.
- **Do not** start your vehicle if it is in a garage attached to the building.
- **Go** to a building next door or a neighbor's house and call your local natural gas company to report the odor and its approximate location.
- **Do not** call from inside the building as the phone could create a spark that could cause an explosion.



Before you dig ...

- **Call** the Missouri One Call System at **811** or **800-DIG-RITE (344-7483)** three to 10 working days before any digging starts, except in an emergency.
- **Missouri law** requires that any person excavating or digging must notify all underground facility owners that may be affected. The Missouri One Call System will notify the facility owners who will determine if the planned dig is near any underground facilities.
- **The facility owner** will mark the site using paint, stakes or flags, according to specific guidelines and color codes.
- **Do not begin digging** until all of the utilities in the area have been located and marked.
- **Carefully avoid digging** near any of the flags or marks placed by the facility owner. If underground facilities are damaged, you could create a dangerous situation and you may be required to pay for the damage you cause.