

**STATE OF MISSOURI  
PUBLIC SERVICE COMMISSION**

At a session of the Public Service  
Commission held at its office in  
Jefferson City on the 22<sup>nd</sup> day  
of February, 2017.

In the Matter of Laclede Gas Company Concerning    )  
A Natural Gas Incident at 5730 Mango Drive            )  
In Oakville, Missouri                                        )

**File No. GS-2016-0160**

**ORDER ACCEPTING STAFF'S REPORT AND CLOSING CASE**

Issue Date: February 22, 2017

Effective Date: March 24, 2017

On December 14, 2015, a natural gas explosion and fire occurred at a residential home at 5730 Mango Drive in Oakville, Missouri. The pipeline providing service to that property is owned and operated by Laclede Gas Company ("Laclede"). The Staff of the Missouri Public Service Commission ("Staff") has been actively investigating the incident since its occurrence. On October 21, 2016, Staff filed a Gas Incident Report ("Report") describing the incident and Laclede's installation, testing, and maintenance activities. After analyzing the effectiveness of Laclede's pipeline management program and potential threats to the distribution pipelines, the Report makes specific recommendations for Laclede action.

The Commission directed Laclede to respond to Staff's recommendations, and on January 26, 2017, Laclede filed a response to the Report proposing minor edits to the Staff recommendations and stating that Laclede agrees to comply with each of Staff's recommendations, as amended. Staff filed a reply agreeing to the amended recommendations proposed by Laclede, which state as follows:

1. Staff recommends that Laclede gather and provide to Staff the following information that will serve as a baseline to assess these threats going forward:

A. Review its historical PE heat-fusion procedures to determine when the Company first required its PE joiners to be qualified to make heat-fusion joints in accordance with a procedure that produced joints stronger than the pipe. If this date cannot be determined, a default of July 1, 1981, should be used.

B. Review its past leak history on the PE pipe installed using heat fusion joining methods prior to and including the date determined in part A above (or July 1, 1981 if date cannot be determined) for a period covering the past five years of data and determine:

- i. Number of leaks attributed to joint failure per year;
- ii. Number of leaks with contributing factors of roots indicated per year; and
- iii. Number of leaks where the cause was not determined per year.

C. Review its past leak history on the PE pipe installed using heat fusion joining methods installed after the date determined in part A above (or July 1, 1981 if date cannot be determined) for a period covering the past five years of data and determine:

- i. Number of leaks attributed to joint failure per year;
- ii. Number of leaks with contributing factors of roots indicated per year; and
- iii. Number of leaks where the cause was not determined per year.

2. Staff recommends that going forward, the Company should:

A. Revise its applicable procedures to require field personnel to remove and retain each PE pipe segment where a leak was exposed in the normal course of operations (the “exposed leak”), and tree roots could have contributed to the leak;

B. Have knowledgeable personnel examine the exposed segments in the field to determine and document if the tree roots contributed to the leak by exertion of force or were simply present in the excavation and did not contribute to the leak;

C. For each instance where tree roots contributed to an exposed leak, record where the leak occurred (e.g. body of pipe, heat-fusion joint);

D. For each instance where tree roots contributed to an exposed leak, determine and record the installation date of the pipe; and

E. Compile the data on an on-going basis and evaluate annually to determine if there are any ascertainable trends in damages done by tree-roots.

Staff further recommends that this additional monitoring be incorporated into the Company's DIMP, and that the results be reviewed annually to evaluate the relative risk ranking and determine if additional corrective measures or accelerated actions are warranted.

3. Staff recommends that going forward, the Company should:

A. Add a sub-threat of PE heat-fusion joints installed on or before July 1, 1981 (or other date as determined in recommendation 1 by review of procedures), under the Material/Weld/Joint category of its DIMP plan;

B. Revise its applicable procedures to require field personnel to remove and retain each PE heat-fusion joint that appears to have failed resulting in an exposed leak;

C. Have knowledgeable personnel examine each retained PE heat-fusion joint to determine and document whether the failure occurred in the joint or in the body of the pipe;

D. For each instance where a failure occurred in a heat-fusion joint with an exposed leak, record additional contributing factors (e.g., tree root, past excavation damage);

E. For each instance where a failure occurred in a heat-fusion joint with an exposed leak, determine and record the installation date of the pipe; and

F. Compile the data on an on-going basis and evaluate annually to determine if there are any ascertainable trends in PE heat-fusion joint failures.

Staff further recommends that this additional monitoring be incorporated into the Company's DIMP, and that the results be reviewed annually to evaluate the relative risk ranking and determine if additional corrective measures or accelerated actions are warranted.

The Commission will adopt the recommendations agreed to by Staff and Laclede.

**THE COMMISSION ORDERS THAT:**

1. The Gas Incident Report filed by Staff is accepted.
2. Laclede Gas Company shall comply with all the Staff recommendations listed in the body of this order and continue to cooperate with Staff and provide information concerning Laclede's compliance.
3. This order shall become effective on March 24, 2017.
4. This file may be closed on March 25, 2017.



**BY THE COMMISSION**

*Morris L. Woodruff*

Morris L. Woodruff  
Secretary

Hall, Chm., Stoll, Kenney,  
Rupp, and Coleman, CC., concur.

Bushmann, Senior Regulatory Law Judge

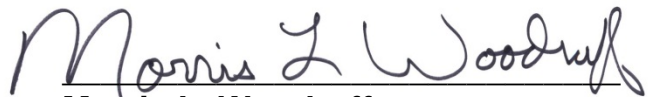
**STATE OF MISSOURI**

**OFFICE OF THE PUBLIC SERVICE COMMISSION**

**I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.**

**WITNESS my hand and seal of the Public Service Commission, at Jefferson City, Missouri, this 22<sup>nd</sup> day of February 2017.**



  
**Morris L. Woodruff**  
**Secretary**

**MISSOURI PUBLIC SERVICE COMMISSION**

**February 22, 2017**

**File/Case No. GS-2016-0160**

**Missouri Public Service  
Commission**

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**Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).**

**Sincerely,**



**Morris L. Woodruff  
Secretary**

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