

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Laclede Gas Company	)	
Concerning a Natural Gas Incident at	)	
7527 Michigan Street, St. Louis,	)	Case No. GS-2009-0270
Missouri.	)	

**STAFF'S REPLY TO LACLEDE GAS COMPANY'S RESPONSE**

COMES NOW the Staff of the Missouri Public Service Commission (Staff), by and through counsel, and for its *Reply to Laclede Gas Company's Response to Staff's Final Status Report*, respectfully states as follows:

1. On January 20, 2009, Staff requested the Missouri Public Service Commission (Commission) *Establish A Case For Investigation of Gas Safety Incident* involving an incident that occurred on December 30, 2008 at 7527 Michigan Street, St. Louis, Missouri and for receiving the response of Laclede Gas Company (Laclede or Company).

2. On January 27, 2009 the Commission granted Staff's request and established Case No. GS-2009-0270.

3. On July 15, 2009, Staff filed its *Final Status Report* providing its recommendation from the investigation of the events at 7527 Michigan Avenue, St. Louis, Missouri.

4. On July 16, 2009, the Commission ordered Laclede to respond to Staff's Gas Incident Report no later than September 14, 2009.

5. On September 14, 2009, Laclede filed its response to Staff's Gas Incident Report. In its response, Laclede addressed each one of Staff's recommendations.

6. Attached hereto as Exhibit 1, Staff submits its reply to Laclede's response to Staff recommendations made in its July 15, 2009 *Final Status Report* with its comments and recommends that the Commission close the case.

**WHEREFORE**, Staff respectfully requests the Commission accept this Reply, and close this case.

Respectfully submitted,

/s/ Jaime N. Ott

Jaime N. Ott  
Assistant General Counsel  
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#### **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 20<sup>th</sup> day of October, 2009.

/s/ Jaime N. Ott

## MEMORANDUM

TO: Missouri Public Service Commission  
Case File No. GS-2009-0270, Laclede Gas Company

FROM: Kathleen McNelis, Energy Department - Safety / Engineering  
Greg Williams, Energy Department - Safety / Engineering

/s/Robert Leonberger 10/20/2009  
Project Coordinator/Date

/s/Jaime Ott 10/20/2009  
Staff Counsel's Office/Date

SUBJECT: Staff Reply to *Response of Laclede Gas Company* (file date September 14, 2009)  
to the recommendations in *Staff's Final Status Report* (file date July 15, 2009)

DATE: October 20, 2009

### **BACKGROUND**

On January 20, 2009, Staff requested the Missouri Public Service Commission (Commission) *Establish a Case for Investigation of a Gas Safety Incident* involving an incident that occurred on December 30, 2008 at 7527 Michigan Avenue, St. Louis, Missouri and for the purpose of receiving the response of Laclede Gas Company (Laclede or Company).

On January 27, 2009 the Commission granted Staff's request and established Case No. GS-2009-0270. The Commission also ordered Staff to file either its final incident report or an interim incident report no later than May 28, 2009.

On May 27, 2009, Staff filed an *Interim Status Report* notifying the Commission that Staff was still in the process of investigating the incident and needed until July 15, 2009, to complete Staff's Final Status Report.

Staff then filed Staff's *Final Status Report* on July 15, 2009. In its report, Staff discussed twelve recommendations it believes Laclede should follow. Laclede responded on September 14, 2009. Per Commission Rule 4 CSR 240-2.080(15), Staff had 10 days, or until September 24, 2009, to reply.

On September 24, 2009, Staff filed a motion explaining that it needed until October 20, 2009 to address Laclede's response.

On September 29, 2009, the Commission granted Staff's request to file a response on, or before, October 20, 2009.

## **SUMMARY OF STAFF'S REPLY TO LACLEDE'S RESPONSE**

The Staff has reviewed Laclede's September 14, 2009 response to the Staff Recommendations presented in the July 15, 2009 Final Status Report. The following paragraphs summarize Staff's reply to each response. A complete listing of each Staff Recommendation, Laclede's Response and a detailed Staff's Reply follows this Summary and Conclusion.

Regarding Laclede's response to Staff Recommendations A-E, G, J and L, the response is considered satisfactory as written with the consideration that the proposed actions are completed as scheduled and the proposed procedures are implemented.

Regarding Laclede's response to Staff Recommendations F and K, Staff is currently reviewing Laclede's 2010 Excavation Safety brochure concerning excavations near cast iron mains. Staff routinely reviews excavator education materials and programs as part of its annual inspection of each operator. Any additional Staff recommendations related to this brochure will be addressed as part of Staff's routine annual inspection of Laclede.

Regarding Laclede's response to Staff Recommendation H, Staff will address any additional comments related to this issue as part of its evaluation of Laclede's compliance with the DIMP rule, after such rule is finalized.

Regarding Laclede's response to Staff Recommendation I, Staff anticipates meeting with Laclede personnel to discuss the design of the new leak control system on or before January 2010. Staff routinely reviews leak detection and monitoring procedures as part of its annual inspection of each operator. Any additional Staff recommendations related to this new leak control system will be addressed as part of the Staff's routine annual inspection of Laclede.

## **CONCLUSIONS**

The Staff appreciates Laclede's efforts in implementing these recommendations and recommends that this case be closed.

### **Staff Recommendations**

- A. Laclede continue its recently implemented practice of reviewing gas system maps in conjunction with Missouri One-Call locate tickets to determine if its CI mains may be adversely affected by third party excavations.

#### **Laclede's Response**

The Company will continue its practice of reviewing gas system maps in conjunction with Missouri One-Call locate tickets to assist in determining if its cast iron mains may be adversely affected by third party excavations.

#### **Staff's Reply**

Staff appreciates Laclede's efforts to implement this practice and concurs with their response. No further Company response for this recommendation is required.

- B. For situations where one or more CI main may potentially be located near or within a proposed excavation, that Laclede contact each excavator and/or visit each excavation site to further determine what portion of the pipeline may require protection or replacement due to its lying within an area of affected soil or by having the support beneath the pipe removed for a length of more than ten (10) times the nominal pipe diameter not to exceed six (6) feet.

#### **Laclede's Response**

The Company agrees with this recommendation subject to the clarification below. For situations where one or more CI mains have been determined by the Company to be potentially located near or within a proposed excavation, the Company's current practice is to contact each excavator and/or visit each excavation site to further determine what portion of the pipeline may require protection or replacement due to its lying within an area of affected soil or by having the support beneath the pipe removed for a length of more than ten (10) times the nominal pipe diameter not to exceed six (6) feet. However, the Company cannot agree to take this action for situations in which Company personnel have not determined that one or more CI mains may potentially be located near or within a proposed excavation.

It should be noted that Missouri One Call locate requests are designed only to provide information about the site where underground facilities need to be located. When determining if a CI main may potentially be located near or within a proposed excavation, the Company must make judgments based on its experience with the type of work, excavator practices and equipment to be used as noted by the excavator. Any detail about proposed excavations is provided by excavators voluntarily. Verifying or obtaining additional information from every excavator is not possible or practical for each locate request because contact cannot be made with excavators in a reliable, consistent and timely manner.

**Staff's Reply**

Staff would like to clarify Recommendation B. above so it applies only when Laclede has made a determination that one or more CI mains may be located near or within a proposed excavation, that Laclede make an attempt to contact each excavator and/or visit each excavation site to further determine what portion of the pipeline may require protection or replacement due to its lying within an area of affected soil or by having the support beneath the pipe removed for a length of more than ten (10) times the nominal pipe diameter or six (6) feet.

Staff is in agreement with Laclede's response as long as an effort has been made to contact the excavator either by phone and/or during onsite visits to discuss the details of a proposed excavation.

- C. In conjunction with the Staff's Recommendation B above, that when the excavation work near its CI mains is associated with installing new water service lines and taps to City water mains, Laclede obtain a set of drawings showing water line locations from the City and/or contact the City regarding each new installation.

**Laclede's Response**

Drawings showing new water service line or tap locations are not available from the City for services smaller than six-inches in diameter. Service line installations six-inches and larger in diameter have drawings submitted to the City in the permitting process, however, they contain only general excavation location information. Water service lines are not owned by the City and drawings of these lines are not maintained by the City or any other entity that the Company is aware of. The City also lacks specific information on the schedule of this work. The Company believes that the City generally has no useful information that would assist in making a determination that a proposed excavation will be near a cast iron gas main. Therefore, attempting to obtain a set of drawings showing water line locations or contacting the City regarding each new installation would not be a fruitful endeavor. It would also be an extremely burdensome exercise to attempt to create such an information database. Consequently, such an endeavor would detract from, rather than further, the Company's goal in identifying excavations near cast iron gas mains.

The Company has and will continue, however, to use the City as a potential resource when appropriate for requesting general information when attempting to contact an excavator to obtain additional information.

**Staff's Reply**

Based upon Staff's discussion with Laclede on September 28, 2009, regarding the types of maps and other resources that are available from the St. Louis Water Division, Staff agrees that the most reliable resource for learning the details of an excavation project would involve contacting the excavator directly. No further Company response for this recommendation is required.

- D. In conjunction with the Staff's Recommendation B above, that in the event that Laclede speaks with an excavator, Laclede should determine the dimensions and locations of each proposed excavation relative to each Laclede CI main.

**Laclede's Response**

Staff's Recommendation D. reflects a routine practice that is already used by Company personnel for determining if a cast iron main may potentially be located near or within a proposed excavation. Company personnel will continue to determine the dimensions and locations of each proposed excavation relative to each Laclede cast iron main in those instances when they have the opportunity to speak with the excavator.

**Staff's Reply**

Staff is in agreement with Laclede's response as long as an effort has been made to contact the excavator either by phone and/or during onsite visits to discuss the details of a proposed excavation.

- E. In conjunction with the Staff's Recommendations A.-D. above, that if a determination is made that an excavation will involve the installation of one or more water main taps (for water service line connections) and that Laclede's CI gas main facilities may be adversely affected because of their proximity, an on-site investigation be made by Laclede for each of these types of excavations to determine the area of affected soil.

**Laclede's Response**

When the Company is aware that such a situation exists, it agrees to continue to conduct an on-site investigation for excavations that are determined to involve the installation of one or more water tap(s) and where a cast iron gas main may be adversely affected because of its proximity. Company personnel involved with these investigations have been advised that excavations for water main taps of any size have the potential to adversely affect cast iron gas mains.

**Staff's Reply**

Staff concurs with Laclede's response and no further response to this recommendation is required.

- F. That Laclede follow the guidelines from the "Guide for Gas Transmission and Distribution Piping Systems 2009 Edition" which will be amended in Addendum 1 to include additional information that operators of CI systems should communicate to builders, designers and excavators.

### **Laclede's Response**

It appears that Staff is making a general recommendation for the Company to follow the "Guide for Gas Transmission and Distribution Piping Systems 2009 Edition" in its entirety even though several Missouri Public Service Commission Pipeline Safety Regulations are inconsistent with this guide material. While the Company does not believe it is Staff's intent to recommend that the Company follow this guide in its entirety, and believes it would be helpful for the Staff to clarify such, the Company agrees to include information in its 2010 excavator brochure concerning excavations near cast iron facilities. This information will include the importance of not disturbing cast iron facilities, and safe excavation, support, and backfilling requirements unique to cast iron facilities. Additionally, after October 1, 2009, Company personnel visiting excavators at the job site will advise them of the following.

- Cast iron may fail when subjected to undermining and disturbance.
- How to avoid undermining or disturbing the cast iron facilities.
- To notify the Company immediately if the main is either undermined or disturbed.

The Company will also document known conditions where cast iron facilities have been undermined or disturbed and document responses to excavation notifications.

### **Staff's Reply**

Staff believes that Laclede can enhance their ongoing education program for excavators and wishes to clarify the intent of Staff's initial recommendation F. Staff's intent was to have Laclede adopt a practice where only the portion of the guide material that would relate to educating builders, designers, and excavators about how to safely work near cast iron mains, would be considered for inclusion. If any portion of the guide material that relates to cast iron piping is inconsistent with the Missouri Public Service Commission's Pipeline Safety Regulations, then that practice should not be adopted by Laclede.

Staff is currently in the process of reviewing Laclede's 2010 Excavation Safety brochure concerning excavations near cast iron mains and will address any Staff recommendations related to this brochure as a separate correspondence. Other than the clarification that Staff needed to address, Staff is in agreement with Laclede's response. No further Company response for this recommendation is required.



- G. That Laclede continue to develop and implement a program identifying all CI mains having a nominal pipe diameter of 6-inch and smaller that are in areas having a continuous covering (e.g. pavement, or concrete) from the CI main to building wall. Laclede's schedule for completing this work is August of 2009.

**Laclede's Response**

This identification project has been completed. The attribute information identifying cast iron mains having a diameter of 6-inch and smaller that are in areas having a continuous covering from the CI main to building wall will be integrated into the Company's cast iron main replacement program as set forth in the response to Recommendation H. below.

**Staff's Reply**

Laclede has satisfied this recommendation with their response and no further response is required.

- H. While evaluating facilities in conjunction with the soon to be finalized Integrity Management Program for Gas Distribution Pipelines (DIMP Rule), Laclede:

- i. Consider increasing the total annual amount of CI main replacements; and
- ii. Assign a priority to 6-inch and smaller CI mains having a continuous covering from the CI main to a building wall.

**Laclede's Response**

The Company expects that it will be required to complete and implement its DIMP referenced by Staff within 18 months after a final rule has been issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA). To date, a final DIMP Rule has not yet been issued and the Company has not yet determined how cast iron mains, and more specifically, 6-inch and smaller cast iron mains having continuous covering from main to a building wall, will be treated under the Company's future program. However, the Company does support the principles of identifying and reducing pipeline integrity risks defined in the proposed DIMP Rule and anticipates that its program will include considerations for replacements of main segments identified to have elevated integrity risks. As previously discussed, the Company has completed the identification of 6-inch and smaller cast iron mains having a continuous covering from the cast iron main to a building wall. This will permit the Company to assign additional priority to these main segments in its Cast Iron Main Replacement Program.

**Staff's Reply**

To Clarify Staff's recommendation, the Staff is requesting that Laclede consider both items i) and ii) respectively when pipeline integrity risks are being identified and evaluated within the scope of the final DIMP rule. The Staff is aware that the DIMP rule has not been finalized, and that assigning an elevated risk factor to a certain category of cast iron main or other types of piping would be premature at this time until the final rule regarding DIMP has been issued and Laclede has finalized their DIMP program.

- I. That Laclede record sufficient additional information when performing leak investigations (currently documented on the "Report of Street Leak F-712" form) to:
  - i. Physically locate each significant reading so that the exact same location can be rechecked in the future; and
  - ii. Determine the extent of gas migration.

Laclede has indicated in past discussions with the Staff that they are developing a new leak management system that will geographically reference leak locations within its GIS mapping system. If Laclede chooses to implement this recommendation by using the "Report of Street Leak F-712" form, then Staff recommends that, at a minimum, the physical location measurements also be recorded for each significant reading to ensure that the same location will be visited during the next re-check of the leak. The extent of the leak should be investigated and documented in a format similar to that used by Laclede titled "Ongoing Leak Survey Information".

**Laclede's Response**

The Company's current Leak Control System (LCS) is designed to record exact location information on the most significant reading associated with a leak investigation that dictates the leak classification. The LCS also records readings in other locations that help define the scope and source of the leak. Company procedures instruct employees investigating leaks to determine the extent of migrating gas for the purpose of properly classifying the leak, however, it is not practical or possible to attempt to document the extent of migration on the current F-712 form. As Staff discussed, the Company is developing a new leak management system. The Company supports the concept of recording detailed locations of multiple leak readings within the leak management system being developed. However, it would be premature at this time to commit to specific system requirements and documentation formatting. The Company will review with Staff the design of the leak management system being developed at the appropriate time.

**Staff's Reply**

Staff anticipates meeting with Laclede personnel to discuss the design of the new leak control system on or before January 2010.

- J. That Laclede inform its personnel who are involved in leak investigations of the circumstances related to this incident, with the intention of raising awareness that gas venting from an area undergoing construction is a special concern. Leak investigation personnel should be made aware of situations such as this one where gas is venting to the atmosphere from a gravel backfill area before a sidewalk is repaired, since repairs may prevent the gas from venting.

**Laclede's Response**

The Company agrees to review the circumstances related to this incident with Company personnel involved with the leak investigation and classification process. The review will be targeted to raise awareness that gas venting from an area undergoing construction is a special concern and will emphasize a situation where gas is venting to the atmosphere from a gravel backfill area before a sidewalk is repaired. The Company will conduct safety meeting reviews for involved personnel by November 1, 2009, and will incorporate this message into its annual review training curriculum by January 1, 2010.

**Staff's Reply**

Laclede has satisfied this recommendation with their response and no further response is required.

- K. Laclede has revised its Excavation Safety brochure to communicate to excavators that precautions should be taken by excavators when the soil beneath a CI main is removed. The Staff approves of this revision, and recommends that Laclede further revise its Excavation Safety brochure to address potential situations where CI pipe lies within the area of affected soil and the soil is not necessarily removed from directly beneath the pipe.

**Laclede's Response**

The Company will incorporate comments in the 2010 version of its Excavation Safety brochure to address potential situations where cast iron mains lie within the area of affected soil where the soil is not necessarily removed from directly beneath the pipe.

**Staff's Reply**

Staff acknowledges that Laclede has been revising its educational information for excavators that may work near natural gas cast iron mains. As previously discussed in Recommendation F., Staff is currently reviewing Laclede's 2010 Excavation Safety brochure concerning excavations near cast iron mains and will address any Staff recommendations related to this brochure as a separate correspondence. No further Company response for this recommendation is required.

- L. That Laclede be directed to file a response regarding these recommendations contained in this Case within 60 days of the filing of this report.

**Laclede's Response**

The Company has satisfied this recommendation with this response.

**Staff's Reply**

Laclede has satisfied this recommendation.

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Laclede Gas Company     )  
concerning a Natural Gas Incident at 7527     )  
Michigan Avenue in Saint Louis,     )  
Missouri.     )

GS-2009-0270

**AFFIDAVIT OF KATHLEEN A. MCNELIS**

**STATE OF MISSOURI     )**  
   **) ss**  
**COUNTY OF COLE     )**


Kathleen McNelis, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that she has participated in the preparation of the accompanying Staff Reply to Response of Laclede Gas Company, and that the facts therein are true and correct to the best of her knowledge and belief.

  
\_\_\_\_\_  
KATHLEEN A. MCNELIS

Subscribed and affirmed before me this 19<sup>th</sup> day of October, 2009.



SUSAN L. SUNDERMEYER  
My Commission Expires  
September 21, 2010  
Callaway County  
Commission #06942086

  
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NOTARY PUBLIC