BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of a Workshop Docket to Enhance)	
Public Safety Responses to Gas Leaks and to)	File No. GW-2016-0013
Prevent Third-Party Damage to Gas Facilities)	

STATUS REPORT

COME NOW the Staff of the Missouri Public Service Commission ("Staff") and Laclede Gas Company ("Laclede"), on behalf of its operating units, Missouri Gas Energy ("MGE") and Laclede Gas, and submit this Status Report in response to the Commission's July 2015 order.

BACKGROUND

On July 13, 2015, the Staff filed a motion asking the Commission to open a proceeding to facilitate discussions to develop a state-wide policy and apparatus for communications and coordination between gas utilities, fire departments, and other emergency responders. Staff's Motion stemmed from commitments MGE made to undertake such an effort in the Stipulation and Agreement approved by the Commission to resolve File No. GC-2014-0216. To that end, the primary goal of the instant proceeding is to solicit and discuss measures that could further enhance the effectiveness of efforts to prevent third-party damage to natural gas facilities and to refine and better coordinate how gas operators and emergency personnel respond to natural gas incidents when they occur.

On July 22, 2015, the Commission issued its Order opening this working file to facilitate the process of obtaining input from interested stakeholders regarding those efforts to develop the state-wide policy as ordered in File No. GC-2014-0216.

Among other measures for preventing damage and better coordination between emergency personnel, the Commission directed that this proceeding be used as a repository for receiving information and comments from interested stakeholders and suggested the possible establishment of a workshop to gather additional ideas and input. The Commission also directed the Staff to submit a report within 6 months detailing its findings and observations.

This report is to update the Commission on the status of reviewing recommendations and measures that the stakeholders involved in this proceeding believe would contribute to public safety and should be pursued on an expeditious basis.

ACTIONS TAKEN TO DATE

A gas safety workshop was conducted on October 20, 2015 at the Commission's offices in Jefferson City. The workshop was attended by a wide variety of stakeholders. These included, among others, representatives from the Staff, various natural gas operators, including Laclede, Ameren Missouri, Summit Natural Gas, Empire District Gas Company, City Utilities of Springfield, City of Perryville, along with fire department personnel, the Missouri Attorney General's Office, the Office of the Public Counsel, and representatives of organizations that work to promote public safety in the natural gas industry, including the Missouri Association of Natural Gas Operators, Missouri One Call Systems, Missouri Common Ground, and the Pipeline Association of Missouri.

As shown by the agenda for the workshop, which is attached to this report as Appendix A, Laclede made presentations on a variety of subjects, including how to better prevent and respond to natural gas incidents through enhanced education, training, enforcement and cooperation. Laclede sponsored a demonstration of the web-based Responding to Utility Emergencies ("RTUE") training program, developed to assist first responders and other emergency personnel in responding to emergencies involving natural gas or electric facilities. The participants discussed circulating a Perryville ordinance to provide an example of what localities can do to prevent damage and enforce protective measures. Finally, Laclede proposed other measures that could be taken to enhance public safety in the interim. All of these measures are identified and discussed below.

STATUS UPDATE

Following the gas safety workshop, a draft of this Status Report was circulated to the stakeholders who were invited to and/or attended the workshop to ensure they had an opportunity to review and comment on the proposed measures. Although further workshops and discussions are necessary, no additional comments, suggestions or concerns regarding the draft Status Report or the measures identified herein were submitted by other stakeholders. Accordingly, Laclede and Staff present for the Commission's consideration the following measures that they believe could make a positive contribution to public safety:

(a) Provide emergency responders throughout the state with access to the web-based RTUE emergency responder program

As previously noted, RTUE is an on-line, web-based training program designed to educate emergency personnel on the operational and safety aspects of both natural gas and electric facilities and to train such personnel on how best to respond most effectively and safely to incidents involving such facilities. Developed

by Michael Callan, a former firefighter with extensive experience in responding to such emergencies, RTUE has separate interactive training tracks for various kinds of responders, including firefighters, EMS personnel and law enforcement. It also has monitoring capabilities that permit tracking of participation and use of the system so that operators can assess how widely and effectively the training is being undertaken by emergency responders in a particular state or location. Additional information on the program can be accessed at the on-line gateway for the RTUE at https://www.rtueonline.com/.

While RTUE is not designed to replace existing training programs and outreach efforts provided by operators or emergency personnel, it is intended to supplement such efforts. Because it is primarily online, it is more widely available to emergency personnel who might otherwise have a difficult time accessing such training. Reserve or volunteer firefighters who have irregular schedules and cannot always be available for normal training sessions are one example of the kind of emergency personnel who could be better reached with an on-line program.

The goal of this initiative will be to make the program freely available (through multiple touchpoints) to all emergency responders in the State of Missouri.

(b) Distribute emergency reminder cards to pipeline operator personnel

One of the concepts suggested by the Commission Staff and agreed to by MGE in Case No. GC-2014-0216 was to develop and use a simple checklist or reminder card identifying the operational steps that should be taken by gas utility personnel when responding to a natural gas incident. A copy of the checklist is attached to this report as *Appendix B*. The goal of this initiative will be to distribute or

otherwise make available to other Missouri operators a checklist template that, at their discretion and with any modifications they believe might be appropriate, could be used for their personnel.

(c) Create and distribute emergency reminder cards for various other kinds of emergency responders

Consistent with the rationale for employing emergency checklists or reminder cards for natural gas operators, the stakeholder groups also believe that it would be potentially useful to develop and make available a similar checklist for emergency responders. Since responsibilities and procedures for emergency responders will vary depending on whether they are firefighters, law enforcement or EMS personnel, such checklists would need to be developed in close consultation with each group. Once developed, it is contemplated that they would then be distributed to the appropriate emergency responder groups for their potential use.

(d) Circulate model local ordinance for damage prevention

The City of Perryville Missouri has adopted an ordinance aimed at preventing third party damage to natural gas facilities. A copy of the ordinance is attached to this report as *Appendix C*. In addition to incorporating the various safe-digging requirements of the Missouri One-Call statute, the ordinance also seeks to more closely involve local law enforcement in identifying and addressing situations where third party excavators may be working in a manner that is inconsistent with those requirements. Because this approach has the potential to get local law enforcement officials more involved in preventing damages to underground facilities — which is by far the largest contributor to natural gas incidents in Missouri, with over 2,000 damage incidents to natural gas lines reported by regulated Missouri natural gas

facility owners in 2014 — Laclede and Staff believe that circulating the ordinance to municipal and county officials for their consideration would be appropriate. It should be noted that this action item is subject to receiving any legal guidance on the powers of local jurisdictions to conduct such enforcement work that the representatives from the AG's office who attended the workshop may wish to provide.

(e) Circulate operating procedure enhancements made by Laclede and the KCMO Fire department to better coordinate responses to incidents.

As part of resolving Case No. GC-2014-0216, MGE made a number of changes to its emergency operating procedures. Many of these revisions focused on bringing greater consistency between the procedures previously adopted by the Laclede Gas operating unit and MGE's operating unit as to further advance public safety in the wake of the JJ's incident. During the pendency of that proceeding, the KCMO Fire Department also made certain changes to its operating procedures in an effort to enhance and better coordinate responses to natural gas incidents. Copies of both are attached to this report as *Appendix D*. Consistent with making any lessons learned from this incident as widely available as possible, Laclede and Staff believe that it would be appropriate to share these revised operating procedures with other operators and fire departments for their consideration and possible use.

PROPOSED FUTURE ACTIONS

Laclede plans to continue its outreach efforts with local emergency responders and others involved in preventing and responding to natural gas emergencies. These efforts will include: (a) holding additional meetings in Kansas City, St. Louis, and a location in outstate Missouri to further discuss and socialize

these recommendations and solicit ideas for other process improvement; (b) seeking to have natural gas incident and response training measures incorporated in training programs routinely used by emergency responders; and (c) enlisting support of organizations and associations that support emergency responders to promote such training.

Laclede plans on scheduling the additional meetings referenced above by the end of January, 2016. Laclede also plans to conduct and complete these additional meetings by no later than July 31, 2016. In scheduling such meetings, Laclede intends to collaborate with associations and other organizations that serve emergency responders in order to ensure select the most effective times and locations for these meetings and maximize attendance by such personnel.

Laclede will file status reports in this case by the end of each month, beginning in February, 2016, to keep the Commission, Staff and other interested stakeholders apprised of the progress being made in connection with each of the items described above.

Staff will file a final recommendation no later August 15, 2016 based on the outcome of Laclede's future planned meetings and status reports. All other interested stakeholders may also file a final recommendation at this time.

WHEREFORE, for the foregoing reasons, the Staff and Laclede Gas respectfully request that the Commission accept this status report in response to the Commission's July 2015 order.

Respectfully Submitted,

STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that copies of the above and foregoing document were sent by electronic mail on this 19th day of January, 2016 to all counsel of record.

/s/ Nicole Mers

Gas Safety Workshop Agenda October 20, 2015

- 1. Introductions (10:00 to 10:30)
 - Laclede Group Company
 - Missouri Public Service Commission Staff
 - MANGO (Missouri Association of Natural Gas Operators)
 - Missouri Common Ground
 - PAM Pipeline Association of Missouri
 - MOCS (Missouri One Call Systems)
 - Fire Department Personnel
 - Law Enforcement Personnel
 - Others
- 2. Purpose and Goals of Meeting(s) (10:30 to 11:30)
 - Background
 - Measures for preventing incidents **presentation and discussion**

Education

Training

Enforcement

Cooperation (shared responsibility)

- Measures for responding more effectively – **presentation and discussion**

Education

Training

- 3. Timelines for Preparing and Submitting Recommendations (11:30 to 12:00)
 - Final Report (January 16, 2016)
 - Interim Reports and Recommendation
- 4. Lunch (12:00 to 1:00)
- 5. Potential Interim Recommendations (1:00 to 2:30)
 - Make RTUE available statewide **presentation and discussion**
 - Circulation of standard operating procedures for utilities, fire and police departments and other emergency responders
 - Circulation of emergency checklist for operators
 - Development of an emergency checklist for other first responders
 - Research into leading practices in other states (Georgia)
- 6. Next Steps/Future Meetings/Invitees (2:30 to 3:00)

(!)

Gas Emergency Action Items

When responding to a gas emergency, always follow your training. Each situation is different; however, below are some key points to consider and implement if appropriate to the situation.

- Stay in touch with dispatching
- Coordinate with emergency responders until the area is made safe
- Ask for additional personnel
- Promptly check adjacent/area buildings for gas
- If free air readings of 20% LEL (1% gas-in-air) or more inside, take immediate action:
 - > Evacuate the building, DO NOT DELAY
 - > Establish a restricted zone—expand if appropriate
 - > Eliminate sources of ignition:
 - Turn off gas meters if it is safe to do so
 - Consider requesting other utilities to shut down their service in the area
- Gas migration—
 - > Check available openings—sewers, manholes and other
 - > Check company facilities and around adjacent buildings
 - > Look for gas to take the path of least resistance
 - Buried piping damaged by boring equipment can result in significant gas migration
 - > Piping hit or pulled by excavation equipment can also be damaged remote from the point of contact





EXCAVATION ORDINANCE - CITY OF PERRYVILLE, MO

13.02.010 - Excavations notification required.

- A. Except as otherwise provided by the laws of the state of Missouri, it shall be unlawful for any person to begin any excavation in or on any privately held property within the limits of the city, any public or private street, road or alley, right-of-way dedicated to the public use, utility easement of record or prescriptive easement without first giving notice of intent to excavate. An excavator shall serve notice of intent to excavate in the manner and form required by Section 319.026, RSMo, and any amendment thereto.
- B. For the purpose of this chapter, excavation shall mean any operation in which earth, rock or other material in or on the ground is moved, removed or otherwise displaced by means of any tools, equipment or explosives and includes, without being limited to, backfilling, grading, scraping, cable or pipe plowing, plowing-in; pulling-in, ripping, driving and demolition of structures, except that the use of mechanized tools and equipment to break and remove pavement and masonry down only to the depth of such pavement or masonry, the use of high-velocity air to disintegrate and suction to remove earth, rock and other materials and the tilling of soil for agricultural or seeding purposes shall not be deemed excavation. Backfilling or moving earth on the ground in connection with other excavation operations at the same site shall not be deemed separate instances of excavation.
- C. Any violation of this section is unlawful and shall be punished under Chapter 1.16 of this code.
- D. In addition to any criminal penalty, any individual, firm, corporation or entity that violates the provisions of this section shall be liable to the owners of any underground facility damaged by the unlawful excavation for the fair and reasonable expenses incurred in repairing or replacing the damaged facilities. In addition, they shall be liable to the owners of any other underground facilities for the costs incurred incidentally due to repair of the damaged facilities including, without limitation and by way of example only, emergency locates, overtime compensation and excavation. An action for damages under this section may be filed in any court of competent jurisdiction.

(Ord. No. 5145, § 1, 9-7-10)



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1.0 APPLICABLE CODES AND REGULATIONS

1.1 This Standard meets the requirements of the Federal Pipeline Safety Regulations Section 192.615 and Missouri - 4 CSR 240-40.030(12)(J)(K).

2.0 GENERAL

- 2.1 An emergency is defined as any situation involving Company facilities or operations which may endanger human life or property, or which may have an unplanned effect on normal service to customers. This situation may also be referred to as a Hazardous Condition. (See exhibits 1 and 2 for criteria identifying incidents that are Reportable to Federal and State Agencies.)
- 2.2 An emergency includes, but is not limited to, the following:
 - 2.2.1 Excessively low or high pressures;
 - 2.2.2 Loss of service to customers due to an unplanned outage which presents a threat to their safety or health;
 - 2.2.3 Major gas leaks, flashes, fires, or explosions; or
 - 2.2.4 Uncontrolled release of gas.
- 2.3 The cause of an emergency may be, but is not limited to, the following:
 - 2.3.1 Failure of gas facilities;
 - 2.3.2 Third party disturbances, such as contractor excavation;
 - 2.3.3 Natural disasters, such as floods, tornadoes, earthquakes, or hurricanes, etc. When a natural disaster occurs special reporting to the Missouri Public Service Commission (MPSC) is required. Contact the Pipeline Safety Compliance Department;
 - 2.3.4 Vandalism or enemy or terrorist attack; or
 - 2.3.5 Operator error.
- 2.4 All levels of supervision shall have access to this Plan and shall be familiar with its contents.
 - 2.4.1 All supervisors who are responsible for emergency action shall have a copy of the latest edition of the local Operating Area Emergency Plan. All other supervisory personnel shall have access to a copy of the local Operating Area Emergency Plan.

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- 2.5 Levels of personnel referenced throughout these procedures are as follows:
 - 2.5.1 Level I: Hourly and/or the first responder.
 - 2.5.2 Level II: First-line supervisor (hourly personnel report directly to this person).
 - 2.5.3 Level III: Director, Manager or designated supervisor.
 - 2.5.4 Level IV: Vice President of Field Operations and Incident Notification Personnel.
- 2.6 Each local Operating Area shall review and update their Local Operating Area Emergency Plan as necessary. Such review shall be made a minimum of once each calendar year but at intervals not exceeding 15 months.

3.0 NOTIFICATION

- 3.1 Each local Operating Area shall establish and maintain a method of receiving and documenting emergency situations keeping a log of emergency situations and notifications in accordance with regulatory requirements.
 - 3.1.1 Each local Operating Area shall designate a telephone number for reporting emergency situations. The number must be operational and staffed at all times and available to the general public.
 - 3.1.2 Personnel who receive emergency calls must obtain all necessary information to assess the emergency and determine the appropriate action. If the person reporting the emergency does not have or refuses to provide the appropriate information, this should be recorded in the log.
 - 3.1.3 Until relieved by a higher ranking Field Operations employee, the first responding employee at the scene of an emergency shall be responsible for coordinating the efforts of all Company personnel responding to the situation and have authority for all decisions in handling the emergency.
 - 3.1.4 **Field Notification** Each local Operating Area shall receive and handle emergency calls and notifications in accordance with the following guidelines:
 - After receiving an emergency call and obtaining the necessary information, the person receiving the call shall dispatch an appropriate qualified employee to the scene of the possible emergency to investigate and confirm the emergency.
 - The appropriate Level II personnel shall also be notified of the potential emergency situation including third party damages.

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- If an actual emergency situation is confirmed, other local Operating Area personnel shall be notified.
- 3.1.5 **Corporate Notification** Appropriate Corporate personnel shall be notified of all emergencies in accordance with the following guidelines:
 - Level II or III personnel or appropriate supervisor in charge shall be responsible for ensuring that the Vice President of Field Operations and the Incident Notification Personnel are notified of all emergencies, in particular any emergency which requires filing a report with Federal or State regulatory agencies. See Exhibits 1 and 2 for criteria identifying incidents that are reportable to Federal and/or State Agencies.
 - Incident Notification Personnel shall be responsible for notifying the appropriate corporate departments and personnel in accordance with the Emergency Notification List found on the MGE Intranet.
- 3.1.6 **Customer Notification** Notification of customers whose service may be affected by an emergency shall be made by the local Operating Area personnel when time allows.
- 3.1.7 **Police and Fire Departments Notification** Notify Dispatching of the scope of the emergency. If it is determined that assistance will be required from various departments or the Fire and Police Departments are needed to assist in evacuations of and maintaining the security of the restricted zone, Dispatching will assist in making the arrangements. Once Fire and Police Departments are on site, request that they stay on site until area is made safe.

4.0 EMERGENCY RESPONSE

4.1 Employees responding to a potential emergency situation shall consider during the initial response, the following steps:

4.1.1 Determine if a Hazard exists.

- 4.1.1.1 Quickly assess available information to determine if a hazard exists. If so, immediately take steps to protect all Company employees' lives and physical safety as well as the lives and physical safety of the public by, among other things, the establishment of a restricted zone.
- 4.1.1.2 If the emergency situation warrants, request additional MGE personnel and Emergency Services assistance through the Dispatcher. Once on-site, the employee(s) shall identify themselves to the responding Emergency Services agencies.

4.1.1.3 Inform the Dispatcher or Duty Supervisor of the situation as soon as possible, who will notify local Operating Area Level III personnel. Level III personnel should inform the

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Incident Notification person and the Vice President of Field Operations or his/her designee as appropriate and keep them apprised of developments as they occur.

4.1.2 **Determine the Extent.**

4.1.2.1 If there is reason to suspect gas may be escaping and/or accumulating inside of a structure, the atmosphere shall be tested at the building's entrance with a combustible Gas indicator on the L.E.L. or Lower Explosive Limit scale. Further interior investigation may proceed only if gas readings are found to be less than 20 percent L.E.L. (1 percent gas) in free air. For gas readings inside of a structure at or in excess of 20 percent L.E.L. (1 percent gas) in free air or if CGI checks are unable to be taken because there is no entry and there is reason to suspect gas may be migrating into the building, follow the procedures outlined in section 4.1.3.2 of this Standard.

- A member of the public reporting a gas odor inside of, or gas found adjacent to a structure is sufficient "reason to suspect".
- 4.1.2.2 If the building is involved in a fire, gas service to the premises will be turned off, if it is possible to do so without risk to the employee's safety.

4.1.3 **Protect Life.**

- 4.1.3.1 The protection of human life and physical safety is ALWAYS our highest priority in any emergency situation. Under no circumstance shall an employee enter an excavation to stop the flow of gas without the proper equipment, including appropriate personal protective equipment and another responsible person, such as another employee or fire fighter present.
- 4.1.3.2 Gas readings found inside of a structure at, or in excess of 20 percent L.E.L. (1 percent gas) in free air shall require the employee to take the following actions:
 - Initiate an evacuation by advising all occupants including employees within the sound of your voice that a dangerous situation exists and they need to evacuate immediately and move away from the building and outside of any established restricted zone.
 - Instruct occupants that they should leave immediately and should not smoke, operate light switches or use the telephone while inside the building.
 - If you are in the process of investigating indoors and the meter is in the immediate area, or it is outdoors and accessible as you are exiting the area, turn it off. Do not

delay your evacuation of the affected area by pursuing the shut off of a meter in an area where levels of natural gas exist that would require an evacuation.

• As you are exiting the building, leave all doors open and open any readily accessible windows on your way out. Open the windows from the top, if possible.

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If you are in a multiple story structure, only consider opening readily accessible windows at the level you are on and below as you exit. Do not go to other levels within the building.

- Establish a restricted zone where all customers, public, and MGE employees are kept
 out of the affected area by way of barricades (safety cones and/or warning tape
 and/or use of vehicles). Notify Dispatching of the scope of the emergency. Request
 that the Fire and Police Departments be on scene to assist in evacuations of and
 maintaining the security of the restricted zone. If it is determined that assistance
 will be required by various departments, Dispatching will assist in making these
 arrangements.
- Once Fire and Police Departments are on site, request that they stay on site until the area is made safe.
- In situations where stopping the flow of gas will take a prolonged period of time, or where the migration of gas cannot be mitigated, consider having Dispatching request that the Fire Department contact the appropriate utilities to order that all electric and telephone services within the affected area be shut off, in order to eliminate them as possible sources of ignition within the affected area. If this request is made, it must be stressed to the utilities that their work must be conducted outside of the restricted zone. Dispatching shall also notify the appropriate Supervisor when such requests have been made.
- All employees whose job duties include responding to emergencies will be issued a
 laminated card containing a checklist of key action items to be taken or considered
 both when arriving at the scene of a gas leak and when gas readings are found inside
 a structure at or in excess of 20% LEL (1% gas/air). Such employees will be
 instructed that this card shall be kept in a location that is readily available for their
 reference in emergency situations.
- All buildings in the adjoining area, outside the restricted zone, should, as
 appropriate, be checked with a CGI. Sufficient personnel should be provided to do
 this. The check should include the following as conditions allow:

Interior:

- The entrance to the building
- Underground utility services entering the building (gas, water, oil, conduits, etc.).
- Drains and sewers (sanitary and storm).
- At the top of exterior and/or basement walls.
- At cracks in the floor or exterior basement walls.
- For buildings without basements: check crawl spaces, or openings below the floor level.

Exterior:

- Where the gas line enters the building and around Company facilities.
- Over the service line and around the building walls, to within at least one foot of the building wall, if possible.
- Any ditch lines or where excavations have taken place.
- All down spouts that are connected to a sewer system.

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- All street openings such as boxes, sewers, drains, vaults, manholes, lamp post, traffic signals, control boxes, etc.
- All street openings such as boxes, sewers, drains, vaults, manholes, lamp post, traffic signals, control boxes, etc.
- CGI monitoring of adjoining area, outside the affected area, should be conducted until situation is under control.
- All corrective actions should be performed outside of the restricted zone until all
 probable ignition sources are eliminated and it is determined that it is safe to reenter
 the restricted zone. If the corrective actions being taken do not have the desired
 effect, other actions must be taken in a prompt, effective manner to make the area
 safe, if such action can be performed in a safe manner outside the restricted zone.
- To mitigate underground lateral migration of gas, dig vent holes and/or open manhole covers whenever possible to deter gas from entering buildings. This should be done outside of the restricted zone if one has been established. Special attention should be given to those circumstances where gas can more easily migrate, such as damages caused by boring, or a service pulled out of a main, etc.
- Check for gas outages in the immediate area. Do not close main valves or shutdown a main unless permission is obtained from Engineering and the Pressure and Measurement Departments.
- The first responder reaching the location of the emergency will determine if additional assistance is needed. As damage and emergency situations warrant, the first responder is responsible for notification of Dispatching. Dispatching shall notify any other departments involved.
- Re-route vehicular traffic, if necessary.
- 4.1.3.3 Access to the structure(s) or room(s) shall not be permitted until concentrations have been reduced to a level below that identified in 4.1.3.2.
- 4.1.3.4 Consideration should be given to reducing gas system pressures or even turning the gas supply completely off during repair activities, if determined to be necessary in the judgment of Company personnel.

4.1.4 **Protect Property.**

4.1.4.1 Take all practical measures outside any established restricted zone to protect Company and public property from damage as long as it can be done without unnecessary

risk to any employee's physical safety or life.

4.1.4.2 Stop the flow of gas by closing a valve, squeezing off the line, or using a stopper fitting.

4.1.4.3 If the leakage is creating a hazardous situation and cannot be located and/or immediately brought under control, the section of piping involved shall be removed from service.

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4.1.4.4 If information discovered during the initial response indicates that the situation does not meet the definition of an emergency, as set forth in this Standard, the investigation shall be made in accordance with **Standard 3320- Leak Investigation**, and any leakage detected shall be classified and repaired in accordance with **Standard 3530- Leak Detection and Classification**.

4.1.4.5 Refer to **Standard 3150- Investigation of Incidents,** for post incident investigation procedures.

5.0 EMERGENCY RESPONSE TEAM (E R T)

- 5.1 An Emergency Response Team (E R T) may be mobilized by any one, or combination of, the following:
 - 5.1.1 Local Operating Area management;
 - 5.1.2 The Vice President of Field Operations or designee;
 - 5.1.3 Incident Notification Personnel; or
 - 5.1.4 Any Officer of the Company.
- 5.2 The E R T shall consist of personnel from local operations and, depending on the severity of the incident, a representative from at least one or more of the following to be selected in the order shown:
 - 5.2.1 Incident Notification Personnel,
 - 5.2.2 Engineering,
 - 5.2.3 Corporate Communications, and
 - 5.2.4 Legal and others as deemed necessary to assist in the response.
- 5.3 The E R T shall assist Local Area Operations Management in:

- 5.3.1 Response to the immediate needs of the public affected by the incident;
- 5.3.2 Media relations and communications;
- 5.3.3 Initiating the investigation process which may include, but is not limited to:
 - Interviewing witnesses;
 - Photographing incident site and/or equipment;

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- Collecting, tagging, transporting and securing of evidence;
- Assisting regulatory agency and/or emergency management representatives in their investigation efforts;
- If necessary, establish contact with outside experts for assistance in the investigation; (requires authorization by the Legal Department or the Vice President of Field Operations);
- Create diagrams of the incident site;
- Document post incident events as they occur; and
- Attempt to determine probable cause.
- 5.4 The E R T shall be directed by the Incident Notification Personnel, Legal Department, or the Vice President of Field Operations, or their designee.

6.0 REPORTING

- 6.1 Level II Personnel shall inform local management of any major incident as soon as possible. Local management shall make every effort to notify the Incident Notification Personnel or, if unable to do so, the Vice President of Field Operations prior to notifying any regulatory agency. However, notification of appropriate regulatory agencies must be made within two hours. If local management is unable to contact the Incident Notification Personnel or the Vice President of Field Operations within the two-hour period, local management shall call the appropriate regulatory agencies themselves in order to comply with the two-hour deadline for notification.
 - 6.1.1 **Federal** Department of Transportation Office of Pipeline Safety Operations (Washington,

D.C.)

Reporting Criteria Exhibit 1

• Telephone Numbers Emergency Notification List found on the MGE Intranet

6.1.2 **Missouri** Public Service Commission (Jefferson City, MO)

• Reporting Criteria Exhibit 2

• Telephone Numbers Emergency Notification List found on the MGE Intranet

6.1.3 Each local Operating Area shall establish and maintain open lines of communication between all levels of supervision to achieve prompt reporting.

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Incidents requiring a telephone report to State or Federal agencies also require a **notification** within 24 hours and a written report within ten (10) days, to be submitted to the Manager, Pipeline Safety Compliance following the incident. Level III Personnel shall ensure the following forms are completed and forwarded, as appropriate:

• Forms: STATE 318-8

FEDERAL Distribution F 7100.1

Transmission F 7100.2

- 6.3 Level II or III Personnel or appropriate supervisor in charge shall notify the Incident Notification Personnel immediately of each incident that is reportable to Federal DOT, OSHA or State agencies.
 - 6.3.1 In the event subsequent investigation indicates an incident is not an emergency situation but is a newsworthy occurrence or may infer liability, Level III Personnel shall notify the Incident Notification Personnel as soon as possible.
 - If there is ever a doubt about the need to report an incident, contact the Incident Notification Personnel or Vice President of Field Operations for assistance and further instruction.

7.0 POST-INCIDENT REVIEW

- 7.1 Following each reportable incident requiring a written report, a Post-Incident Review shall be conducted as soon as possible. This review must be within one week of the reportable incident. Such Review shall be conducted in accordance with, but not be limited to, the following guidelines:
 - 7.1.1 The Review Meeting shall be conducted by the Pipeline Safety Compliance Department in

conjunction with the local Operating Area office supervision to review the response to the reportable incident, including the steps taken, and to identify actions, if any, that could have been taken to improve the response.

- The review shall be conducted for the purpose of determining the causes and minimizing the possibility of reoccurrence.
- During the meeting, the local Operating Area supervision shall verify that this Standard
 was properly complied with. In the event it is determined some portions of this
 Standard were not properly complied with, the local Operating Area supervision shall
 initiate further training of employees concerning the provisions of this Standard or any
 other action required to ensure full compliance in future emergency situations.

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- 7.1.2 The Pipeline Safety Compliance Department shall document the meeting according to the following guidelines:
 - Record the time and date of the review meeting.
 - Record the names of Level II and Level III personnel in attendance.
 - Document the discussion and a recap of the meeting, including what conclusions were reached and what actions, if any, will be taken to improve response to emergencies.
 - The report shall be maintained in the local Operating Area office.
 - Any training of employees related to emergency response shall be documented and kept by the Operations Training Department.

8.0 LEVEL III RESPONSIBILITIES

- 8.1 Level III Personnel, or appropriate supervisor in charge, shall be responsible for general supervision and coordination during all field operations of an emergency situation including, but not limited to, the following:
 - 8.1.1 Assignments and duties for all Level II Personnel or appropriate supervisor in charge.
 - 8.1.2 Final decisions on curtailment, essential valve operation and regulator control.
 - 8.1.3 Notifying Fire and Police Departments provided notification was not initiated by

Dispatching.

- 8.1.4 Reporting incidents to the Incident Notification Personnel as soon as possible in accordance with provisions of this Plan.
- 8.1.5 Reporting incidents to the next higher level of management as soon as practical.
- 8.1.6 Contacting local public officials when necessary.
- 8.1.7 The release of information to the news media in accordance with Section 10.0 of this Plan.
- 8.1.8 Making arrangements through appropriate management for assistance from other local Operating Areas for manpower and equipment, when necessary.
- 8.1.9 The Emergency Response, in accordance with Section 4.0 of this plan.

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the plan in accordance with the following:

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- Level III Personnel, or appropriate supervisor in charge, shall also be responsible for reviewing and updating the local Operating Area Emergency Plan, as appropriate, and providing training on
- 8.2.1 All supervisors who are responsible for emergency action shall have a copy of the latest edition of the local Operating Area Emergency Plan. All other supervisory personnel shall have access to a copy of the local Operating Area Emergency Plan.
- 8.2.2 Each local Operating Area shall conduct meetings with supervisory personnel to discuss and update their Emergency Plan at least once each calendar year at intervals not exceeding fifteen (15) months.
- 8.2.3 Training shall be provided to all operating personnel to ensure they are familiar with operating procedures dealing with responding, investigating and handling gas emergencies.
- 8.3 Level III Personnel, or appropriate supervisory in charge, shall be responsible for ensuring lists of emergency personnel, including addresses and telephone numbers, are maintained and kept current at each local Operating Area.

9.0 FUNCTIONAL RESPONSIBILITIES

9.1 <u>Construction and Maintenance</u> - Department personnel shall be responsible for determining the

personnel needed to handle emergencies related to construction and maintenance activity. If additional assistance is needed, Level III personnel shall be informed and shall make appropriate arrangements for additional assistance.

- 9.1.1 The Construction and Maintenance Department may perform investigative functions as well as performing repairs, system shutdown, etc. As a result, all personnel within the department shall be familiar with requirements of this standard relating to the emergency response and the notification requirements.
- 9.1.2 The Construction and Maintenance Department shall maintain sufficient vehicles, personnel, equipment, tools, and materials to adequately respond to an emergency situation. Each item shall be identified, and a record of each maintained, including the type, Company number, and radio number, as appropriate.
 - Each item identified shall be properly maintained and in working condition at all times. Any items used during normal work situations shall be returned to their place of storage in proper working condition.
- 9.1.3 During emergency situations, Dispatching shall be responsible for furnishing main and service locations and the Construction and Maintenance Department shall be responsible for purging operations.

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- 9.2 <u>Installation and Service</u> This department shall determine the personnel required to handle leak response, and turn-on/turn-off procedures during an emergency situation. If additional personnel are required from other departments or other local Operating Areas, Level III supervisor shall be so informed and shall make arrangements for additional assistance as necessary.
 - 9.2.1 In many cases, Installation and Service Department personnel will be the first Company employees to arrive on the scene of an emergency and therefore all departmental personnel shall be familiar with the emergency investigation and the notification requirements.
 - 9.2.2 The Installation and Service Department shall maintain sufficient vehicles, personnel, equipment, tools, and materials to respond to an emergency situation. Each item shall be identified, and a record of each maintained, including the type, Company number, and radio number, as appropriate.
 - Each item identified shall be properly maintained and in working condition at all times. Any items used during normal work situations shall be returned to their place of storage in proper working condition.
- 9.3 <u>Engineering, Pressure and Measurement</u> These departments will coordinate with other departments to determine what valves and regulators need to be operated when reducing, isolating, shutting off, or turning on the pressure in a system.

- 9.3.1 Engineering, Pressure and Measurement, Gas Supply and Sales departments shall determine what companies and industries should be curtailed in an emergency situation, and shall be responsible for notifying these customers. An appropriate marketing representative may assist in notification of customers.
- 9.3.2 Engineering, Pressure and Measurement and/or Construction Maintenance departments shall be responsible for locating essential valves.
- 9.3.3 Engineering, Pressure and Measurement and/or Construction Maintenance departments shall be responsible for determining the resources required to operate valves and regulators. If additional assistance is required to operate valves and regulators, Level III personnel shall be notified and shall make arrangements for assistance as appropriate.
 - Lists of essential valves and system maps and records shall be maintained in a file at each local Operating Area office and will be available for use during emergency situations. The location of the file shall be stated within the local Operating Area Emergency Plan.
- 9.4 <u>Customer Service</u> The Customer Service staff will be responsible for providing clerical support as needed for the turn-on/turn-off process. The staff may also be required to assist with other support. (e.g. OUT/B printouts or Address Scans)



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- 9.5 <u>Legal Department and Incident Notification Personnel-</u> Shall be responsible for handling injury or damage claims resulting from emergency-type conditions and shall be contacted any time such situations occur. This group shall also be responsible for coordinating the investigation of reportable incidents and notifying appropriate corporate personnel.
- 9.6 **Other Personnel** Other personnel may be called to assist in an emergency.

10.0 MEDIA COMMUNICATIONS

10.1 All contacts with the news media and all media inquiries must be directed through our Corporate Communications Department.

11.0 LIAISON WITH AGENCIES AND EMERGENCY NUMBERS

11.1 Each local Operating Area shall develop and maintain a good working relationship and open communications with appropriate fire, police, and other public officials in their area in preparation for situations which may develop during which it may be necessary to request their help. Elements to consider in developing such a relationship include, but are not limited to, the following:

- 11.1.1 Identify the agencies and how to contact them in an emergency.
- 11.1.2 Inform each agency of the Company's abilities and resources in handling gas emergencies, and discuss with them under what conditions the Company may request their assistance.
- 11.1.3 Have them describe their responsibilities, resources available, and how they believe they could best assist the Company during an emergency.
- 11.1.4 Distribute to each agency educational material relating to emergency control of natural gas and provide other educational assistance.
- 11.1.5 Provide accurate information to each agency on how to contact the Company to request help or report a problem involving natural gas or suspected gas leakage.
- Each local Operating Area shall document dates of meetings held with such agencies, including the names of people involved and shall retain such lists locally for a period of two (2) years.
- 11.3 Each local Operating Area shall contact all fire departments within their operating territory annually. The contact may be accomplished either by a personal visit or by written correspondence.

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- 11.3.1 Each fire department shall be provided copies of educational material and information on how to contact the Company in case of an emergency (an emergency call list).
- 11.3.2 Through the annual contact, the local Operating Area shall provide information about the Company's facilities and operations within the area, including, but not limited to, the following:
 - The types of gas services likely to be encountered in the area, how each type of service can be shut off, the purpose of pressure-reducing facilities and regulator vent stacks.
 - Information about what to do when the presence of escaping gas is encountered or suspected in buildings, sewers, manholes, or vaults.
 - Information about what to do when gas is burning in buildings, sewers, manholes, or vaults, or when escaping gas is burning out of doors.
- 11.3.3 Each fire department contacted shall be instructed not to operate any line valves, regulator station valves, or pit valves, and to not reopen any curb valves or meter valves which have been closed.
- 11.3.4 During each contact with fire departments, emphasis shall be placed on the necessity of

notifying the Company regarding:

- All fires where gas or gas facilities are involved;
- **All** explosions and/or fires involving death or injury where the gas company has the potential for involvement;
- All gas leaks or suspected gas leaks, and all instances when combustible vapors of unknown origin are found in sewers or buildings.
- 11.4 Each local Operating Area shall contact all police departments, sheriff's offices, and other law enforcement agencies within their operating territory annually to familiarize these agencies with our facilities and emergency operating procedures. The contact may be accomplished either by a personal visit or by written correspondence.
 - 11.4.1 During the contact, each agency shall be provided information about proper steps to take when relief valves vent, or vandalism or accidents occurs affecting gas facilities.
 - 11.4.2 During the contact, each agency shall be provided with copies of the <u>Natural Gas Hazards</u> and the First Responder Handbook.
- 11.5 Each local Operating Area shall establish and maintain sufficient rapport with all other agencies as necessary to ensure efficient and effective operations during incidents, civil disturbances, interruptions of natural gas service, or other similar emergency situations.

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- 11.6 Each local Operating Area shall maintain current lists of names, telephone numbers, and responsible parties for the following:
 - 11.6.1 Fire departments.
 - 11.6.2 Police, sheriff, and other law enforcement agencies.
 - 11.6.3 Local elected and public officials.
 - 11.6.4 Hospitals, doctors, and other medical care facilities.
 - 11.6.5 Ambulance and other rescue team services.
 - 11.6.6 Other agencies, organizations and groups or individuals as appropriate.
 - 11.6.7 Media.
 - 11.6.8 Contractors that may provide assistance in an emergency.

- 11.7 Each local Operating Area shall maintain a current list of the nearest offices of other utilities, both gas and electric, that could provide assistance in an emergency.
 - 11.7.1 Each local Operating Area shall maintain a list of emergency numbers for each gas supplier.
- 11.8 Gas Supply shall be kept informed of any actions taken involving pipeline suppliers during emergency situations.
 - See the Emergency Notification List found on the MGE Intranet for related gas suppliers' phone numbers.

12.0 EDUCATIONAL MATERIALS

- 12.1 Each local Operating Area shall utilize appropriate educational materials, including booklets, slide program, VCR tapes, and other information to enhance the working relationship between the Company and outside agencies. Those materials shall meet or exceed the minimum requirements of regulatory agencies and shall be approved by the Legal Department or their designee.
- 12.2 Each local Operating Area shall maintain training and education of employees or the public as required by the appropriate regulatory body.

13.0 RESPONSE TO LARGE INTERRUPTIONS OF SERVICE

13.1 The local Operating Area shall be responsible for coordinating, organizing, and managing all personnel responding to a large interruption of service in their area.



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- 13.1.1 When a large interruption of service occurs, assistance from other Operating Areas or from outside the Company often is required. In such instances, Company personnel or contractor help from outside the area where the work is to be performed shall be accompanied by sufficient supervisory personnel. However, ultimate responsibility for response to the outage shall reside with the local Operating Area in which the emergency or outage occurs.
- 13.2 Large interruptions of service shall be treated as an emergency situation, and the response shall be in accordance with all other provisions of this Standard.
- 13.3 If an interruption of service occurs during normal business hours in a downtown business area and inside meters are involved, a concentrated effort shall be made to shut off these meters first.
 - 13.3.1 If possible, the shut off of these meters shall be accomplished while the business is open, which will allow Company personnel to make arrangements for re-entry when service is to

be restored.

- 13.3.2 If a business is closed and there is a curb valve problem, forced entry by police may be required in order to shut off the meter.
- 13.4 If an interruption of service occurs that involves a large geographic area and/or large numbers of customers, strong consideration shall be given to dispersing and receiving orders from a temporary location in the immediate area.
 - 13.4.1 Such a temporary headquarters may be a vehicle or an available building in the area.
 - 13.4.2 During response to an interruption involving a large geographic area and/or large numbers of customers, personnel responding to the interruption of service shall be provided the same areas to relight as they shut off, when possible.
- During response to a large interruption of service, Level II Personnel shall provide information to employees under their supervision regarding meals including, but not limited to, the following:
 - 13.5.1 Location of the restaurant or other eating facility should be considered in the planning.
 - Arrangements for this facility may be prearranged by local Operating Area management.
- 13.6 Each local Operating Area shall develop and maintain a listing of appropriate radio frequencies for use during a large interruption of service. Level III Personnel shall be responsible for ensuring adequate radio communications are maintained throughout the interruption of service.
 - 13.6.1 During interruptions of service when a limited number of foreign mobile units will be involved, the base and all mobile units shall operate on the emergency frequency for the area involved, if practical.

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- 13.6.2 During interruptions of service when a large number of mobile units will be operating, essential transmissions to and from the base unit may be impaired due to the quantity of transmissions by the mobile units. If adequate transmission becomes a problem for the above or any other reason, the use of alternate frequencies or mobile phones should be considered.
- 13.7 Each employee directed to respond to a large interruption of service shall be responsible for providing the personal equipment necessary for response to the situation, if possible. Such equipment may include but is not limited to: flashlights (extra bulb and batteries); matches; curb keys; "warning tags;" "Not Home" cards; small pipe wrench(s); common hand tools (screwdrivers, pliers, etc.), Combustible Gas Indicator; Flame Ionization Unit; and personal clothing, such as warm coats and boots.

13.7.1 Personnel leaving their own local Operating Area to work an outage in any other local Operating Area shall provide equipment for themselves, to the extent possible.

14.0 TURN-ON/TURN-OFF DURING A MASS OUTAGE

- 14.1 Local Operating Area management shall be responsible for ensuring that all personnel involved in making turn-ons or turn-offs during response to a mass outage are trained and familiar with proper turn-on/turn-off procedures.
 - 14.1.1 At the supervisor's discretion, the emergency mass outage procedure may be initiated if gas service to twenty-five or more customers is affected by a gas outage.
 - 14.1.2 When a mass outage occurs, all such personnel shall follow the Turn-On Procedure for a Mass Outage. (See Exhibit 3.)
- 14.2 All Level I Personnel involved in making turn-ons or turn-offs during response to a mass outage shall be responsible for being aware of and following the procedure outlined on Exhibit 3 Turn-On Procedure Mass Outage.
 - 14.2.1 All personnel involved in response to a mass outage shall be aware that the procedures specified in **Standard 3310 Service Orders** do not apply during a mass outage situation. (See Exhibit 3.)

15. EMERGENCY ODOR INVESTIGATION PROCEDURES

15.1 The purpose of an Emergency Odor Investigation is to abbreviate the inside leak investigation procedures as found in Standard 3320 while providing a safe and thorough investigation of odor complaints. Reducing the investigation time for each odor call will increase the ability to respond sooner to each notification of odor.

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- 15.2 When an operating area begins to receive an abnormal number of inside complaints in a given geographical area, the duty supervisor or his/her designee shall be notified.
 - 15.2.1 If the odor complaints continue, the supervisor shall contact the personnel working the orders to determine the results of the investigations.
 - 15.2.2 If the investigations of the calls being generated are determined to be excessive odor in the system or an odor from an outside source that is not natural gas the EMERGENCY ODOR INVESTIGATION PROCEDURE may be put into effect by the duty supervisor.
- 15.3 Odor complaints shall be dispatched in the order in which they are received unless the person taking the call has reason to assign the order to the next available Level I person.
- 15.4 Consideration shall be given to the following:
 - Rate in which the calls are being received;
 - Available dispatch personnel;
 - Available Level I employees;
 - Other manpower resources, off duty, other reporting locations, phone center etc.;
 - Are the response times within limits;
 - Inside odors 1 hour; and/or
 - Outside odors 2 hours.
- 15.5 If the duty supervisor determines to initiate the EMERGENCY ODOR INVESTIGATION PROCEDURE, he/she shall advise the Level III, Director, Manager or designated supervisor.
- 15.6 The duty Supervisor shall advise the dispatchers to place the EMERGENCY ODOR INVESTIGATION PROCEDURE into effect.
 - 15.6.1 Consideration shall be given to taking odor complaint calls at the phone center and entering the orders in the CSS system and generate service orders for dispatcher dispersal.

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15.7 EMERGENCY ODOR INVESTIGATION PROCEDURES FOR INSIDE ODORS

- 15.7.1 Verify the address.
- 15.7.2 Turn on the combustible gas indicator (CGI), purge, and zero the instrument in a gas-free atmosphere.
- 15.7.3 Set the CGI on the LEL scale in free standing air outside the structure. Upon first entry into the structure, sample the atmosphere with the CGI to determine if a hazard exists. If the CGI indicates the presence of 20% LEL (1 % Gas) or more in free standing air, the situation shall be treated as a hazardous condition, and action taken immediately. (Refer to Standard 3545 Hazardous Atmospheres, for additional information.)
 - The first and foremost concern shall be the safety of employees and the public. Personnel at the site shall determine the best method of ensuring the safety of both the customer and the employee and determining whether the source of the leak can be quickly identified and eliminated, or whether evacuation of the building is necessary.
- 15.7.4 Inquire as to where the person smelled the odor and investigate this area with the CGI.
- 15.7.5 Using the CGI on the LEL scale check the area around gas appliances.
- 15.7.6 Check any basement drains and around any piping that may enter the basement underground.
- 15.8 If any gas indications are found, complete the investigation using procedures found in Standard 3320 Leak Investigation.
- 15.9 If no indications are found, continue by checking outside, using the FI or GCI & bar holes over the service line and along the foundation of the structure facing the gas main to ensure gas is not present.
- 15.10 The Gas Investigation order shall be completed indicating the complaint was investigated using the Emergency Odor Investigation Procedure (EOIP) and that a shut in test was not completed.
- 15.11 If the response time exceeds one hour for an inside odor calls or two hours for outside complaints the reason shall be documented on the leak log or gas service order.

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16.0 EMERGENCY RESPONSE TO FLOODING

- 16.1 When flood conditions disturb service or threaten an area, the following precautions should be followed.
 - 16.1.1 Review the history of high water conditions to identify areas which may be affected.
 - 16.1.2 Locate valving to isolate the systems affected.
 - 16.1.3 Make an effort to shut off each meter in areas where high water is imminent. Document each meter which has been shut off and sealed.
 - 16.1.4 Define the area of concern at maximum flood conditions.
 - 16.1.5 During major flooding, a command post may be established. When practical, this command post should be established jointly with other utilities and local law enforcement, rescue personnel and other public safety organizations to enhance communication between the agencies.
 - Assign Company personnel to areas of responsibility.
 - 16.1.6 As flood waters recede, the following procedures should be considered.
 - Inspect and service district regulators that were under water;
 - Pump drips located in the flood area;
 - Verify system pressures;
 - Restore service to affected customers. Document each turn-on;
 - Leak survey the system defined by the flood area;
 - Observe any surface conditions which may have affected the Company's pipeline and other facilities (uprooted trees, wash outs, cave-ins, etc.) and ensure the piping system was not damaged; and
 - Contact appropriate city departments about street cave-ins, storm sewer washouts and broken water lines.

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17.0 SECTIONAL MAPS

- 17.1 Each local Operating Area shall develop and maintain emergency area maps and records which may include the following information:
 - 17.1.1 The approximate number of customers involved.
 - 17.1.2 The anticipated man-hours required to shut off all customers within the area.
 - 17.1.3 The anticipated man-hours required to turn on all customers within the area.
 - 17.1.4 The estimated purge time and purge locations for the system.
 - Accessibility of meters, travel time, and purge time shall be considered when evaluating man-hours for each area, taking into account specific environments, i.e., rural areas vs. urban areas where the concentration and location of customers may vary significantly.
- 17.2 These maps shall be available in sufficient numbers for assignment to field supervisors responsible for the area involved.

18.0 PREDESIGNATED OPERATIONS CENTERS

- 18.1 Each local Operating Area shall identify predesignated operations centers to be used during emergency situations for each area of operations. The following factors, at a minimum, shall be considered when selecting the centers:
 - 18.1.1 The availability of private telephone facilities, with increased capabilities obtainable.
 - 18.1.2 The availability of adequate rest rooms.
 - 18.1.3 The availability of enough space to adequately accommodate anticipated workforce.
 - 18.1.4 The availability of adequate parking for both Company and private vehicles.
- 18.2 Local Operating Area management shall prepare a list of emergency operations centers for their area, including, as a minimum, the following:
 - 18.2.1 The name and description of the facility.
 - 18.2.2 The address of the facility.

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- 18.2.3 The name, phone number, and address of the person to contact for use of the facility.
- 18.2.4 Phone numbers at the facility, if available.
- 18.2.5 The phone company and name of person to contact for additional phones and lines.
- 18.3 Local Operating Area management shall be aware that immediate availability is critical when selecting the site of an emergency operations center.
 - 18.3.1 Army Reserve and National Guard facilities often meet many of the ideal criteria of such a center. Each local Operating Area shall make and confirm arrangements for emergency operations center on an annual basis. These arrangements should be reconfirmed on a yearly basis.

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FEDERAL REPORTS DOT - PHMSA

- 1. A telephone report is required on any incident that involved the release of gas from a pipeline and meets any of the following criteria:
 - Caused a death or a personal injury requiring in-patient hospitalization.
 - Caused estimated property damage, excluding cost of gas lost, to the operator or others, or both, of **\$50,000** or more.
 - Unintentional estimated gas loss of three million cubic feet or more;
 - Was significant in the judgment of the operator, even though it did not meet the above criteria.
- 2. Information reported shall include at a minimum the following:
 - Names of operators and person making report and their telephone number.
 - Location of the incident (street address, city, county, and state).
 - Time and date of the incident.
 - Fatalities and personal injuries, if any.
 - All other significant facts that are relevant to the cause of the incident or extent of the damages.

3. COMMENTS

- All occurrences which meet any of the above criteria shall immediately be reported to the Incident Notification Personnel, Vice President of Field Operations, or his designee
- All supervisory personnel who are subject to duty or investigative requirements shall be familiar with the above requirements and shall report such occurrences to management as soon as possible after receiving knowledge of them.
- Proper lines of communication shall be established between all levels of supervision so as to accomplish the above reporting.
- For phone numbers see the Emergency Notification List found on the MGE Intranet.

Exhibit 1

Supersedes: 3110R Effective Date of Previous Standard: 10-24-2011 Implementation Period for 3110S:

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STATE REPORTING MISSOURI

- 1. A telephone report is required within two hours of discovery by the operator of any event that involves a release of natural gas involving the Companies actions or facilities, or where there is a suspicion by the operator that the event may involve a release of gas from the operators action or facilities, and involves:
 - (a) A death
 - (b) A personal injury requiring medical care administered in an emergency room or health care facility even though the injury did not result in hospitalization.
 - (c) Estimated damage to the property of the operator, or others, or both (including gas loss), totaling **\$10,000** or more; or
 - (d) An event that is as significant in the judgment of the operator because of location, rerouting of traffic, evacuation of building(s), media interest, etc., even though it does not meet clauses (a), (b) or (c) of this section.
- 2. The telephone notice required by Section 1 shall be made to the Missouri Public Service Commission.

See the Emergency Notification List found on the MGE Intranet.

- (a) Names of operators and person making report and their telephone number;
- (b) Location of leak or incident (including county);
- (c) Time and date of accident/incident;
- (d) Fatalities and/or personal injuries;
- (e) Phone number of operator; and
- (f) Other significant facts relating to the accident or incident.
- 3. Except as provided in Section 4, each gas company shall report, in writing, a summary of each incident or accident under Section 1 (a) through (d) of this exhibit.
 - The report shall be submitted to the MPSC Gas Safety Staff as soon as practical, but not more than 30 days after detection, on forms listed under Section 6.2.

Exhibit 2

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STATE REPORTING MISSOURI

4. The accident or incident report required by Section 3 of this exhibit need not be submitted with respect to master meter systems.

5. COMMENTS

- All occurrences which meet any of the above criteria shall be immediately reported to the Incident Notification Personnel, Vice President of Field Operations and/or his/her designee.
- All supervisory personnel who are subject to duty or investigative requirements shall be familiar with the above requirements and shall report such occurrences as soon as possible after receiving knowledge of them.
- Proper lines of communication shall be established between levels of supervision so as to accomplish the above reporting.
- In the event the Company's telephone notification to the Commission of a reportable incident exceeds the two-hour notification time period, a written explanation shall be submitted with the written incident report.
- For phone numbers see the Emergency Notification List found on the MGE Intranet.

Exhibit 2

Supersedes: 3110R
Effective Date of Previous
Standard: 10-24-2011

Implementation Period for 3110S:
Standard 3110S: 5tandard 3110S: 10-9-2014



0&M Standard

3110S

SUBJECT: Emergency Plan

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TURN-ON PROCEDURE - MASS OUTAGE

- 1. Verify address.
- 2. Determine location of gas meter.
- 3. Turn on gas and watch test hand for one minute. If one-minute check indicates no leakage, gas will be left on.
- 4. Purge, if necessary. All safety controls must be in proper operating order. Safety controls that have been submerged under floodwaters should be replaced before lighting the appliance. Relight heating system first during winter.
- Light water heater and check for draft on water heater and furnace.
- 6. Light remaining appliances.
- 7. Advise customer of results of light-up.
- 8. Make proper notations on order.
- 9. Remain in close contact with group leader and/or office.

316.29

Exhibit 3

General Operational Guideline

Subject: RESPONSE TO NATURAL GAS EMERGENCIES	Effective Date: 3/1/14	GOG 10-37
Applies to: ALL PERSONNEL	Supersedes: NEW	Pg 1 of 2
Responsible Committee: Operations Committee	New Review Date:	

PURPOSE:

The purpose of this GOG is to establish guidelines for responding to and mitigating a variety of natural gas emergency situations.

SCOPE:

Applies to all KCFD personnel

GUIDELINES:

Properties of Natural Gas- Natural Gas (NG) are colorless and odorless in its natural state however mercaptan is added to give NG a "rotten egg" odor. NG is lighter than air and will usually dissipate in outside environments. Inside of buildings and confined spaces, however, NG will tend to accumulate. The explosive range of NG is approximately 4% to 15% by volume in air, 4% by volume in air being the LEL (lower explosive limit) and 15% by volume in air being the UEL (upper explosive limit). Concentrations that are higher than 15% (UEL) are too rich to ignite and will not explode. NG is non-toxic and is not an asphyxiate unless it is in confined space and displaces oxygen.

KCFD 4-Gas Monitor or Combustible Gas Indicator (CGI)- KCFD CGIs measure concentrations of NG in a range at or below the LEL and are calibrated to read NG concentrations as a percentage of the LEL. For example, if the CGI is reading 100%, the atmosphere WILL ignite or explode if given an ignition source. If the CGI is reading 50% of the LEL, the concentration of NG is at 50% of what is necessary for the atmosphere to ignite or explode if given an ignition source. KCFD CGIs are programmed to alarm at 10% of the LEL, which indicates that the concentration of NG is at10% of what is needed for the atmosphere to ignite or explode if given an ignition source. 10% of the LEL is the Action Level for KCFD, i.e. evacuation, deny entry, and mitigation.

It should be noted that while KCFD CGIs measure NG concentrations up to and including LEL, the gas utility measures NG concentrations as a % by volume in air, This allows the gas utility to determine NG concentration in the explosive range and also above the UEL as a % volume in air.

Comparing KCFD monitor readings with gas utility monitor readings

KCFD in % LEL	Gas Co in % volume in air
10% of the LEL	.4% by volume in air
50% of the LEL	2% by volume in air
75% of the LEL	3% by volume in air
100% of the LEL	4% by volume in air
100 % of the LEL *	above 4% by volume in air*

*Any Gas Company reading above 4% by volume in air will continue to read as 100% of the LEL on a KCFD CGI

General Operational Guideline

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Applies to: ALL PERSONNEL	Supersedes: NEW	Pg 1 of 2
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INCIDENTS INVOLVING A GAS LEAK OUTSIDE - NO FIRE OR EXPLOSION HAS OCCURRED

- Ensure that the gas utility has been notified if you suspect gas is escaping from the ground, excavation site, or broken gas line.
- Extinguish all open flames, remove any possible ignition sources, and restrict the use of electronic devices while in the vicinity of the leak.
- The area surrounding the incident should be evacuated and an isolation perimeter established.
- Obtain a sufficient number of gas concentration readings with a combustible gas indicator (CGI) for Command to evaluate the hazard and take appropriate action.
- Secure a water source, and layout charged 1 \(^3\)4 hose line with two personnel in full PPE and SCBA.
- Surrounding buildings, basements in particular should be checked with a combustible gas indicator (CGI) for the presence of NG.
- If a gas leak is suspected to have been caused by horizontal drilling equipment and the leak is not being vented to open air, particular attention should be given to the possible migration of NG underground into sewers and basements.
- Again, basements in the area should be checked with a CGI to determine if NG is present. If NG is present, follow the guidelines for *INCIDENTS INVOLVING A GAS LEAK INSIDE OF A BUILDING*. Under no circumstances should Fire Department personnel operate underground valves in an attempt to shut off the flow of NG. It could make the situation worse. Operating underground valves should only be performed by gas company personnel. It is the responsibility of the gas utility to locate and eliminate the source of the leak. Incident Command shall have effective communication with the gas utility to stay informed of any safety issues. Fire Department personnel in coordination with the gas utility will provide for life safety until the emergency situation is mitigated.

INCIDENTS INVOLVING A GAS LEAK INSIDE OF A BUILDING

- If a gas leak is suspected inside of building, a CGI must be utilized with full PPE and SCBA. The instrument should be turned on and readings taken as you approach the structure.
- Shut the gas off at the meter if NG is detected. Remember, this may not stop the flow of NG into the building if the gas is actually migrating underground from another source.
- Evacuate occupants if the action level of 10% LEL or above of NG is detected. Ventilate the building by opening doors and windows. Eliminate all possible ignition sources.
- Do not turn on <u>or</u> **off** electrical switches or operate doorbells inside the structure. Electrical power should be shut off from outside of the building if explosive concentrations are present.
- Flashlights should be turned on before entering the building.
- Rubber soled boots should be worn when entering the building, as walking across carpet could result in a static electric charge.
- Continue to monitor with CGI until the leak is mitigated and the presence of NG has returned to safe levels
- Never turn on a valve that was previously shut off. Only gas company personnel should turn on NG valves.

General Operational Guideline

Subject: RESPONSE TO NATURAL GAS EMERGENCIES	Effective Date: 3/1/14	GOG 10-37
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DON'T RELY ON YOUR SENSE OF SMELL. USE A CGI (COMBUSTIBLE GAS INDICATOR) The odorant (mercaptan) can be removed from the NG if it is migrating through soil. Also, If NG is flowing through "new" pipe, the pipe will absorb the mercaptan and remove the odor from the NG until the point when the walls of the pipe become saturated.

INCIDENTS INVOLVING LEAKING GAS AND IS BURNING

Whether it is outside or inside of a building, **don't** attempt to extinguish the flames. Extinguishing the flames turns a danger you see into a danger you cannot see. Burning gas will not explode. Spray surrounding combustibles with water to prevent ignition or control the spread of fire until the gas can be shut off. Clear the area if a pipeline is burning and don't assume that all of the gas is being consumed by the fire. Nearby basements and sewers should be checked with a CGI to ensure that NG is not migrating under ground.