BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

The Staff of the Missouri Public Service Commission,	)	
Complainant,	)	
vs.	)	Case No. GC-2014-0216
Laclede Gas Company, doing business as Missouri Gas Energy,	)	
and	)	
Southern Union Company, formerly doing business as Missouri Gas Energy	)	
Respondents.	)	

STIPULATION AND AGREEMENT

COME NOW the Staff of the Missouri Public Service Commission ("Staff"), Laclede Gas Company, doing business as Missouri Gas Energy ("MGE"), Panhandle Eastern Pipe Line Company, LP, successor in interest to Southern Union Company ("SUG/Panhandle"), collectively referred to herein as the "Parties," and submit this Stipulation and Agreement ("Agreement") for approval by the Commission.

BACKGROUND

1. On February 19, 2013, an explosion and subsequent fire damaged JJ's Restaurant, located in Kansas City, Missouri, and resulted in the death of one person, destroyed the restaurant and some of its contents, damaged nearby buildings and injured other people. At the time of this incident MGE was owned and operated by Southern Union Company. In September 2013, subsequent to the incident, Laclede

Gas Company became the owner and operator of MGE. On February 6, 2014, the Staff filed a two-count complaint against both MGE and Southern Union Company (the "Complaint"). In Count I of the Complaint, Staff contended that the Respondents violated certain of the Commission's Gas Safety Rules with respect to the events of February 19. Staff continues to believe that rule violations occurred, and Respondents continue to deny that rule violations occurred. This Agreement does not make a factual determination as to this dispute, but in light of the following provisions the Parties agree that Count I should be dismissed, with prejudice.

2. Count II consisted of several recommendations that Staff has requested the Commission order MGE to implement. Beginning in June 2014, the Parties have met and discussed the allegations in the Complaint and the Staff's recommendations. The following agreements address Count II of Staff's Complaint.

3. As a result of these discussions, the Parties have entered into the Agreement to resolve Count I and Count II of Staff's Complaint and hereby present the Agreement for the Commission's approval. The Parties believe that the Agreement addresses the matters raised in the Complaint in a manner that advances public safety for Missouri citizens in the future.

RESOLUTION OF ISSUES

4. Listed below are each of Staff's recommendations, and the resolutions to which the Parties have agreed.

1. **Staff recommends that MGE review and revise as necessary its procedures to make certain fire department, police department or any other entities with authority to evacuate individuals from buildings remain on the scene or are present during an emergency situation which may require evacuation of buildings. In addition, Staff recommends that MGE review and revise as necessary its liaison program with the KCFD for identifying**

the various situations that may constitute a hazardous situation involving natural gas, the various actions that should be taken before MGE personnel arrive when a hazardous situation is identified and when KCFD assistance may be needed.

Resolution:

MGE LIAISON PROGRAM. MGE works with fire and police departments in its service area in the following manner:

- MGE annually distributes to every fire and police department in its service territory MGE's Natural Gas Hazards and the First Responder handbook, attached here as Appendix A and incorporated by reference. The handbook outlines the general procedures for emergency responders during a natural gas emergency.

- MGE offers to fire departments special natural gas training free of charge and at the emergency responder's convenience, including evenings and weekends if necessary.

- In response to Staff's recommendation, MGE has added Section 3.1.7 to its Emergency Plan regarding notifications to Police and Fire Departments. This section now provides that once Fire and Police Departments are on site, MGE personnel will request that they stay on site until the area is made safe. MGE has also expanded Section 4.1.3.2 of the Emergency Plan to provide more detail for coordinating with emergency responders in situations in which gas readings inside a structure equal or exceed 1% gas-in-air. MGE's updated Emergency Plan is attached here as Appendix B and incorporated by reference.

KCFD.

• The KCFD issued a new General Operating Guideline in 2013, applicable to all fire department personnel, establishing special KCFD procedures for responding to and mitigating a variety of natural gas emergency situations. A copy of this new General Operating Guideline is attached here as Appendix C and incorporated by reference. It adopts many of the terms contained in MGE's handbook, including the evacuation of a building at levels even lower than where MGE calls for evacuation. In addition, the new guideline states that, at the site of a gas leak, the KCFD's 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."

• The KCFD now dispatches a special HAZMAT team and a battalion commander to the scene of each natural gas emergency involving a damaged MGE gas line.

ALL FIRE DEPARTMENTS

MGE believes that it has a good natural gas emergency training program, but also recognizes that not enough fire departments take advantage of MGE's offer of free training. MGE and Staff agree as follows:

(a) MGE will review its training program for fire departments on a regular basis, update as necessary, and submit any such update for Staff's review;

(b) MGE will work to enhance its current outreach program in order to attract more fire departments to its training program or to make its training program an integral part of existing fire department training programs. MGE will provide Staff regular updates on any such developments regarding its fire department training program.

(c) Within 60 days after Commission approval of this Agreement, representatives of MGE, Laclede Gas, and Staff, as well as any other interested parties that desire to participate, will begin meeting to develop a statewide policy and apparatus for communication and coordination between gas utilities, fire departments and other emergency responders. The purpose of such a group would be to enhance the effectiveness of efforts to respond to instances where a gas leak has occurred as well as the effectiveness of efforts to prevent third party damage to gas facilities. It is understood that the statewide policy may affect or supersede the obligations in (a) and (b) above. A combination of representatives of MANGO, Pipeline Association of Missouri, the PSC Gas Safety Staff, state and local fire departments and associations, other emergency responders, Missouri One-Call and the Missouri Common Ground Alliance are all potential members of such a statewide group.

2. **Staff recommends that MGE review and revise as necessary its procedures and employee training to ensure that when situations occur, such as when a gas-in-air reading above 1% is obtained in a structure, MGE personnel clearly, quickly, and forcefully communicate to building occupants the eminent danger of the situation and the urgency to immediately evacuate, regardless of the presence of fire, police or other public officials with authority to evacuate buildings. If these situations are encountered and fire, police or other public officials are not at the scene, they should be contacted immediately to respond and assist with evacuations and other**

emergency actions. MGE should not wait for them to arrive before beginning the evacuation.

Resolution:

MGE is voluntarily taking the following measures to further enhance the effectiveness of evacuation efforts:

(a) MGE has expanded Section 4.1.3.2 of its Emergency Plan (Appendix B) to provide more detailed direction for employees to warn and instruct building occupants in situations in which gas readings inside that building equal or exceed 1% gas-in-air. MGE has also developed and provided a checklist of "action items" to field personnel for quick reference during emergency response.

(b) As part of its outreach and statewide communication and coordination efforts described in 1(b) and 1(c) above, MGE and Laclede Gas will work with fire departments throughout their respective territories to encourage the adoption of General Operating Guidelines similar to those recently adopted by the KCFD. MGE believes that these guidelines should, at a minimum, seek to have fire department personnel who are responding to a gas leak exercise and enforce control over the site, including any restricted zones that may be established, and play a major role in the evacuation of people located in buildings at or adjacent to the site. If fire department personnel do not take such initiative at the site of a gas leak, MGE personnel will take the initiative to enforce control over the site, including establishing any restricted zones, and conducting evacuations consistent with the Emergency Plan, to the extent MGE personnel have the legal authority to do so.

(c) MGE and Laclede will also explore the potential use of technology for facilitating evacuations.

3. **Staff recommends that MGE designate a person or persons that will be responsible when at the scene of an event where hazardous situations are identified, that are responsible for making certain that all procedures contained in MGE's Emergency Plan are followed and executed properly and adequately. This person or persons should ensure, coordinate and evaluate what actions have been taken and what actions need to be taken. Such actions can include, but are not limited to, leak surveys, leak investigations, evacuations, response to odor calls, conversations with individuals, closing valves, shutting off gas, making repairs/ replacements to MGE facilities and removing lids to manholes, valves, etc. to allow natural gas to vent to the atmosphere.**

Resolution:

(a) MGE updated its Emergency Plan Section 3.1.3 (Appendix B) to require the first responding employee at the scene of an emergency to be responsible for coordinating the efforts of all Company personnel responding to the situation and have authority for all decisions in handling the emergency, until relieved by a higher ranking Field Operations employee. As part of its outreach and statewide communication and coordination efforts described in 1(b) and 1(c) above, MGE and Laclede Gas will work with fire departments throughout their respective territories to encourage the adoption of operating guidelines similar to those recently adopted by the KCFD.

(b) In addition, as part of an effort to bring greater consistency between the operating procedures of the newly-acquired MGE operating unit and the Laclede Gas operating unit, MGE and Laclede Gas have implemented a standard procedure for both operating units that they believe appropriately satisfies Staff's recommendation. With respect to MGE, this procedure involved

revisions to Sections 3.1.3 and 3.1.4 of its Emergency Plan (Appendix B) to memorialize its current practices regarding notification and coordination of personnel in emergency situations.

4. **Staff recommends that MGE include provisions in its emergency response procedures that, where possible, require emergency response efforts to be conducted at a safe distance from a potentially hazardous site. Staff recommends MGE's procedures identify parameters for determining when a "safe zone" should be established during hazardous situations, such as gas-in-air readings above 1% detected in structures or significant concentrations of natural gas detected in sewers. The provisions should include the dangers of working in close proximity to potentially hazardous locations when sources of ignition have not been eliminated. Procedures and training should be explicit enough, and should detail a sequence of actions to be taken, that would allow field personnel to take the actions necessary to promptly avert safety hazards and to protect life and property. The boundaries of the "safe zone" should allow MGE personnel and emergency personnel to work at a safe distance from the hazard. In addition, MGE should consider eliminating sources of ignition, such as electric and gas service, in the "safe zone." All individuals, including MGE personnel, must stay out of the "safe zone" until identified hazards to property and life have been mitigated. The circumstances of this incident should be incorporated into the training process.**

   Resolution:

   As part of an effort to bring greater consistency between the operating procedures of the newly-acquired MGE operating unit and the Laclede Gas operating unit, MGE and Laclede Gas have revised the Emergency Plans for both operating units as necessary to satisfy Staff's recommendation. With respect to MGE, this procedure is memorialized in Section 4.1.3.2 of its Emergency Plan (Appendix B), pertaining to restricted zones.

5. **Staff recommends that MGE review and revise as necessary its procedures and employee training for responding to and taking appropriate actions for natural gas leaks that are considered as emergency gas leaks, identifying the various actions that should be taken when a hazardous situation is identified. Specifically, MGE procedures and employee training should include instruction on prompt and thorough leak investigations for early**

recognition of the existing hazards, including the magnitude and extent of migration of escaping natural gas and on appropriate actions contained in the Emergency Plan to protect life and property. The circumstances of this incident should be incorporated into this training process.

Resolution:

While MGE believes that its current procedures and employee training programs provide instruction to its personnel regarding response to emergency gas leaks, leak investigations and the recognition of hazards, including the potential for migration of escaping natural gas, MGE has incorporated the circumstances of this incident into the training of all of its emergency response personnel. In addition, as part of an effort to bring greater consistency between the operating procedures of the newly-acquired MGE operating unit and the Laclede Gas operating unit, MGE and Laclede Gas have implemented consistent Emergency Plan standards for both operating units that they believe appropriately satisfies Staff's recommendation. MGE and Laclede Gas shall make available to the Gas Safety Staff copies of the final training materials used in connection with such revised operating procedures and shall provide copies thereafter of any material changes made in such training materials

6. **Staff recommends that MGE review and revise its procedures as necessary to determine if/when MGE personnel should perform construction inspections when MGE is aware contractors are using the horizontal directional drilling method near MGE's underground facilities in areas with pavement contiguous to buildings. MGE may want to consider expanding the definition of areas designated as "High Profile Areas."**

Resolution:

MGE has established a procedure for construction inspections with respect to excavation activities in the vicinity of certain types of MGE facilities,

primarily defined by type, size, and pressure of the MGE facilities involved. It is practical and feasible for MGE to implement this procedure because it has information about the nature of its facilities in the area of a proposed excavation.

In addition, as a pilot program, MGE has previously established two “High Profile Areas” with defined boundaries (regardless of the type, size, or pressure of the MGE facilities in these two areas), concerning construction inspections with respect to certain types of excavation activities in the vicinity of all MGE facilities. Again, it is practical and feasible for MGE to implement this procedure because the boundaries of the “High Profile Areas” are known and defined. MGE will consider whether to change the boundary areas of the current “High Profile Areas,” based on additional data it accumulates and reviews. Within six months of the Commission’s approval of this Stipulation and Agreement, MGE shall submit to Staff a Status Report addressing the results of its analysis and any changes made to the scope or term of the program based on such analysis. If MGE or Staff believes additional analysis is still required at the time such Status Report is submitted, MGE agrees to submit, in consultation with Staff, an additional Status Report addressing the same matters six months thereafter and as needed. If Staff and MGE do not agree on whether to change the boundary of the current “High Profile Areas,” MGE and Staff shall present the issue to the Commission for decision.

5. Ratemaking Treatment:

(a) All incremental costs to implement the terms of this Agreement that MGE incurs between now and the effective date of rates in its next general rate case will be borne by MGE. MGE will not seek to defer such incremental costs for future recovery. Such incremental costs include, but are not limited to, costs incurred: (i) to organize and attend meetings to develop statewide emergency coordination policies; (ii) to develop and distribute informational materials associated with such efforts; (iii) to meet with individual fire departments and other first responders; (iv) to review, revise and implement training materials; (v) to implement restricted zone shut-off procedures, and (vi) to initially purchase any communications equipment in connection with 3(2)(C). Such incremental costs shall not be included with any costs deferred and recorded in FERC Account No. 182 by MGE pursuant to Paragraph 17 of the Stipulation and Agreement in GR-2014-0007. Such incremental costs shall not be included in any cost of service used for ratemaking that is filed or submitted by the Company prior to the effective date of rates in its next general rate case.

(b) MGE may include any ongoing costs related to this Agreement in any cost of service used for ratemaking that is filed or submitted by the Company after the effective date of rates in its next general rate case, and any party may take any position on the appropriate ratemaking treatment for those costs at that time.

(c) MGE shall fully track the incremental costs it incurs to undertake these activities, and provide such information to Staff upon request. MGE shall meet with Staff upon request and report on the progress of its commitments under this Agreement.

6. The incremental costs incurred, but not recovered, by MGE to undertake these activities will exceed the maximum penalty amount that could be imposed on MGE for each of the violations alleged by Staff in Count I of its Complaint, were such violations to be sustained by the Commission and the Courts. Appendix D, attached here and incorporated by reference, provides a preliminary estimate of such costs. Accordingly, while the Staff and the Company continue to disagree regarding the rule violations alleged in Count I, the Parties believe that in light of the foregoing resolutions, that Counts I and II of the Complaint should be dismissed. This Agreement, and the agreed Resolutions of Staff's recommendations in Count II, will promote the public interest in the safe operation of MGE's gas system.

GENERAL PROVISIONS

7. This Agreement does not constitute an admission of any legal or factual allegation made in the Complaint or in the Answers thereto. Except as provided herein, none of the signatories to this Agreement shall be deemed to have approved or acquiesced in any ratemaking or procedural principle. Except as provided herein, none of the signatories to this Agreement shall be prejudiced or bound in any manner by the terms of this Agreement in any other proceeding. Nothing in this Agreement shall preclude the Staff in future proceedings from providing recommendations as requested by the Commission.

8. This Agreement has resulted from extensive negotiations among the signatories and the terms hereof are interdependent. In the event the Commission approves this Agreement with modifications or conditions that a Party to this proceeding

objects to, then this Agreement shall be void and no signatory shall be bound by any of the agreements or provisions hereof.

9. In the event the Commission accepts the specific terms of this Agreement, the Parties waive, with respect to the issues resolved herein: their respective rights pursuant to Section 536.080.1 (RSMo. 2000) to present testimony, to cross-examine witnesses, and to present oral argument and written briefs; their respective rights to the reading of the transcript by the Commission pursuant to Section 536.080.2 (RSMo. 2000); and their respective rights to judicial review of the Commission's Report and Order in these cases pursuant to Section 386.510 (RSMo. 2000).

10. The Staff shall have the right to provide, at any agenda meeting at which this Agreement is noticed to be considered by the Commission, whatever oral explanation the Commission requests, provided that Staff shall, to the extent reasonably practicable, provide the other Parties with advance notice of when the Staff shall respond to the Commission's request for such explanation once such explanation is requested from Staff. Staff's oral explanation shall be subject to public disclosure, except to the extent it refers to matters that are privileged or protected from disclosure pursuant to the Commission's rules on confidential information.

WHEREFORE, for the foregoing reasons, the undersigned Parties respectfully request that the Commission issue its Order: approving this Agreement in its entirety in full and complete resolution of Counts I and II of Staff's Complaint, directing the Parties to take the actions set forth in the Agreement, dismissing Counts I and II of the Complaint with prejudice, and closing this case.

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 11th day of February, 2015, to counsel of record.

/s/ John D. Borgmeyer

Appendix A

DO NOT DISCARD.
KEEP FOR FUTURE
REFERENCE.

NATURAL GAS HAZARDS

AND THE FIRST RESPONDER

A Handbook For Recognizing And Handling Natural Gas Hazards In An Emergency

MGE MISSOURI GAS ENERGY
A Division of Southern Union Company

MGE MISSOURI GAS ENERGY
A Division of Southern Union Company

EMERGENCY CONTROL OF NATURAL GAS
FOR PUBLIC SAFETY OFFICIALS

Missouri Gas Energy is proud to serve its customers with safe, clean and reliable natural gas service.

At MGE, safety is our top priority. That's why we want public safety officials like you to understand that if a natural gas leak occurs, it could be very dangerous. Gas leaks must be handled properly to prevent danger of a fire, explosion or asphyxiation. Natural gas can ignite when the mixture of gas and air is between approximately 4.5 and 14.5 percent gas. In other words, it does not take much gas for an explosive mixture to exist.

This brochure supplies general instructions about what public safety officials should do during a natural gas emergency. Along with this brochure for public safety officials, MGE has also included a copy of its Natural Gas Safety Brochure that it provides to its customers. Please read both brochures and share them with your fellow emergency responders to help keep everyone safe and to reduce the risk of serious and potentially fatal injuries, fires, and explosions. Also, please remember – this brochure provides some basic guidelines on responding to natural gas emergencies, but does not cover every possible situation and should not replace professional training.

MGE assumes no liability for any damage or injuries caused as a result of the application or misapplication of any emergency response techniques described in this handbook.

There are three ways you can detect a natural gas leak.

- **Smell:**

  In nature, natural gas is odorless. However, for your safety, MGE mixes a chemical odorant called mercaptan into its natural gas. This gives natural gas a foul odor, similar to rotten eggs or a skunk, so that you will recognize a gas leak quickly.

- **Sight:**

  Natural gas is colorless. However, blowing dirt, bubbling water, dry spots in moist areas and dead plants surrounded by live plants near buried gas lines are all signs of a possible gas leak.

- **Sound:**

  Natural gas sometimes makes a hissing, blowing or whistling sound near the area of a leak.

If you suspect a natural gas leak, play it safe and act immediately.

Please help MGE remind its customers and the public of this important safety message.

*If you suspect a natural gas leak inside or outside, you **MUST** take immediate action by doing the following:*

- **DO NOT CREATE ANY FLAMES OR SPARKS!**

  > ANY FLAME OR SPARK COULD IGNITE LEAKING GAS AND CAUSE A FIRE OR EXPLOSION.

  > DO NOT use any type of phone in the area where a gas leak is suspected.

  > DO NOT operate any light switches, door bells, or any electrical devices.

  > DO NOT use an electric garage door opener to evacuate the premises.

  > DO NOT smoke or create any flames, including lighting any pilot lights.

- **EVACUATE** the premises or area immediately!

- **CALL MGE** at our toll-free emergency number **1-800-582-0000 or call 9-1-1.** MGE will respond immediately to investigate, 24 hours per day, 365 days per year.

- **DO NOT RETURN** or allow others to return to the premises or area until MGE or an emergency responder determines that it is safe to do so.

For general information about MGE, please visit our website at **www.missourigasenergy.com** and for additional information about natural gas safety, visit **www.mosafegas.com**.

If you have any questions that are not answered in this brochure, please see page 21 of this brochure to get the phone number to call MGE's Pipeline Safety Department.

FAST FACTS
ABOUT NATURAL GAS

Asphyxiation – Natural gas is non-toxic and non-poisonous. However, if natural gas displaces the air in an enclosed space, asphyxiation can occur because of the lack of oxygen.

Combustible Gas Indicator (CGI) – Do not rely entirely on your sense of smell to determine if gas is present. Use a combustible gas indicator (CGI). For fire department personnel and other public safety officers who respond to a natural gas emergency and arrive before the MGE personnel, it is important to remember to use a CGI to check for gas accumulation in nearby buildings (especially basements), sewers, and other confined areas.

Flammable – The limits of flammability for natural gas are approximately 4.5 percent and 14.5 percent gas-in-air mixture. This means there must be at least 4.5 percent, but not more than 14.5 percent, natural gas present in air to support a combustion process. In other words, it does not take much gas for an explosive mixture to exist. Burning natural gas produces little smoke but does produce a very high radiant heat.

Ignition Temperature – The ignition point of natural gas is quite high — about 1,100 – 1,200 degrees Fahrenheit. This temperature may be reached by ignition sources such as pilot lights, flint sparks and matches, or sparks from electrical switches, thermostats, static electricity, motors (including automobile engines), electrically operated camera equipment, and any type of telephone.

Lighter Than Air – Natural gas is only about 60 percent as heavy as air. This means that it will rise and diffuse rapidly when it escapes into an open area. When confined, natural gas tends to rise, displacing the air from the top downward. Remember this if you ventilate a room: open windows from the top. If you are using a CGI in a confined area, put the sensing device at the highest point in the area because that is where the lighter-than-air natural gas will tend to concentrate. Also, use the CGI around openings in the floor when the leak may be below the floor.

Odorant – Natural gas is odorless in its natural state. An odorant is added that often is described as smelling like rotten eggs, sulfur or a skunk. The odorant — commonly known as mercaptan — gives natural gas a foul odor so that everyone will recognize a gas leak quickly.

PROCEDURES
DURING EMERGENCIES

MGE and public safety officials have the same goals when they respond to a natural gas emergency. Public safety officials, by supplementing their overall knowledge of protective measures with helpful information provided by MGE personnel, can more effectively protect the public.

GENERAL PROCEDURES FOR EMERGENCY RESPONDERS DURING A NATURAL GAS EMERGENCY

Order may vary depending on the situation and may be occurring simultaneously.

If natural gas is escaping and/or burning inside (e.g., in a home or building) or outside (e.g., from the ground (including a manhole, vault, or sewer), a gas meter, an excavation, or an open pipeline), then:

- **Call MGE immediately at 1-800-582-0000.** MGE personnel will report their presence to the public safety officer in charge upon arrival.
- **Immediately evacuate** the building or affected area in an upwind direction and barricade or rope it off. Barricading or roping off the area will also help prevent any tripping or falling hazards around manholes, etc. It may be necessary to restrict or reroute traffic until the flow of gas is brought under control by MGE personnel.

- **If a CGI is available, use it to check for gas accumulation** in the area. This may include checking nearby buildings (especially basements), sewers, and other confined areas.

  - MGE personnel are also equipped with CGIs and will assist upon arrival and take the appropriate corrective action.
  - If the CGI shows any measurable quantities of natural gas are present, evacuate the area.
  - If a CGI is not available but you suspect a natural gas leak, use the most cautious choice available to you, assume there is an ignitable mixture present, and evacuate the area.

- **Entry into an area of potential gas concentration** (including entry into buildings, manholes, vaults, and sewers) should be made ONLY when absolutely necessary to ensure public safety. Special equipment such as a self-contained breathing apparatus (SCBA) and flame-proof clothing must be used when such entry is required.

- **Eliminate all potential ignition sources** in the area which may produce a spark that could ignite any leaking gas and cause a fire or explosion:

- **Do NOT** allow anyone to light a match, smoke a cigarette, start an engine, use a telephone of any type, or turn on/off any electrical switches or appliances, including an electric garage door opener, door bell or light switches.

  - **CAUTION:** Communication between emergency responders by two-way radio or phone must be done in a safe area away from any gas migration.

- **For manholes/vaults/sewers,** wet the cover and rim **BEFORE** removing the cover to prevent creating a spark which could ignite any leaking gas and cause a fire or explosion.

  - Vent the manhole, vault, or sewer by removing the cover and covers of adjoining manholes until reaching manholes where no gas is detected.

- **Do NOT enter any excavation or confined vault or pit where natural gas is blowing to stop the flow of natural gas.** Natural gas escaping from an opening of an exposed plastic gas pipe has the potential to generate a static electrical charge which may be sufficient to ignite leaking gas.

PROCEDURES

- **In most natural gas emergencies, non-MGE personnel should NOT attempt to close gas valves or shut off the gas supply** because doing so could create an emergency situation in another area and further endanger life and property.

  - o **However, an emergency responder MAY shut off the gas at an outside meter** (see photos of above-ground meter shut-off valves on pgs. 15-16) in the following limited circumstances and only when it is safe to do so.

    1) **If gas is escaping or burning inside a home or building.** However, if shutting the gas off at the meter does not eliminate a gas fire inside, then the source of the gas is probably outside.

    2) **If it appears that inside gas piping, gas appliances, or the gas meter are endangered by a fire in the building (regardless of whether natural gas is involved in the fire).**

  - o If a public safety official does turn gas off at the meter before MGE personnel are on the scene, **LEAVE IT OFF,** and immediately tell the MGE personnel what has been done when they arrive on the scene. **ONLY** MGE personnel should turn the gas supply on again when it has been shut off in an emergency situation. By law, it must be performed by someone with appropriate training.

  - o Exercise care when shutting off gas in a commercial or industrial setting. Shutting off the wrong valve can interrupt costly manufacturing or industrial processes.

- **If natural gas is already burning or if escaping gas becomes ignited,** then:

  - o Do **NOT** attempt to extinguish the gas fire if it is **outside**. Instead, let the natural gas burn until MGE personnel can shut off the gas supply.

    - **If rescue is needed in the outside fire area:**
      - > Use a fog spray to push the fire back until MGE can shut off the natural gas supply; or
      - > The gas fire may be extinguished with dry chemical (ABC or BC).

  - o If the gas fire is **inside**, then an emergency responder may shut off the gas at the meter if it is safe to do so.

    - **CAUTION**: If an **inside** gas fire is extinguished **before** the natural gas is shut off, an explosion may occur as the accumulating natural gas is

PROCEDURES

ignited by nearby ignition sources. If you must extinguish the fire to perform a rescue, do so as part of a coordinated effort of extinguishment and natural gas shutdown. Watch for re-ignition.

- **Do NOT assume that all escaping gas is being consumed by a fire.** Natural gas follows the path of least resistance and can accumulate in confined spaces (e.g., basements, attics) and migrate under pavement, through telephone and electric ducts, or through sewer lines.

- To prevent the fire from spreading, keep nearby buildings and/or combustibles wet until MGE personnel arrive and can control the flow of gas.

- **Do not allow anyone to return** to the premises or area until emergency responders and MGE personnel determine it is safe to do so.

MGE'S PIPELINES

NATIONAL PIPELINE MAPPING SYSTEM – In Platte, Jackson and Cass counties, MGE has approximately 45 miles of transmission pipelines which transport natural gas at higher pressures than MGE's almost 14,000 miles of distribution lines ("mains" under city streets and "service lines" to customer homes and businesses).

At some locations along those transmission lines, there are high consequence areas, which are areas with high concentrations of residents or places that the public may gather. For more information about the approximate location of **transmission** pipelines, you may visit the National Pipeline Mapping System at **www.npms.phmsa.dot.gov** or contact MGE's Pipeline Safety Department. Remember, this website does not show the location of MGE's **distribution** pipelines. ***See page 21 of this booklet for contact information.***

INTEGRITY MANAGEMENT PROGRAM – MGE has a comprehensive Integrity Management Program (IMP) to ensure public safety and safe pipeline operations. To view or request an overview of MGE's IMP, please contact MGE's Pipeline Safety Department.

PIPELINE MARKERS – Pipeline markers are located along the pipeline route, at road/river/railroad crossings, fence lines, property boundaries, and at aboveground facilities. These markers identify the general area but not the exact location or depth of the pipeline. Also, these markers are not present in most areas and the pipeline may **not** always follow a straight line between markers. That's why it is necessary to call **8-1-1** before you dig. The markers also contain information about contacting MGE in the event of an emergency.

HELP MGE PROTECT ITS PIPELINE AND RIGHT OF WAY

The right-of-way is the land over and around the pipeline, typically 25 to 150 feet on either side of the pipeline in which both MGE and the landowner have a legal interest. However, to protect the pipeline from damage, there are restrictions which prohibit certain usage of this area. Unauthorized uses typically include the placement of buildings or structures or the planting of trees and shrubs, which might interfere with the safe operation of the pipeline. Unauthorized uses of the pipeline right-of-way are a serious safety issue, because they can inhibit MGE's ability to (1) respond to pipeline emergencies, (2) reduce or eliminate the chance of third-party damage, (3) provide right-of-way surveillance, (4) perform routine maintenance, and (5) perform required federal and state inspections.

Contact us immediately at 1-800-582-0000 if you notice unauthorized use of a pipeline right-of-way. Also, be observant for any unusual or suspicious situations and unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility.

Additional pipeline safety information is available at: **www.mosafegas.com** and **www.pipeline101.com.**

MGE PIPELINE SAFETY DEPARTMENT

When incidents occur involving natural gas or natural gas appliances, MGE's Pipeline Safety Department would appreciate the opportunity to exchange information with fire departments, police departments, and other public safety officers. MGE is always available to assist public safety officers and to furnish information helpful to their operations.

If a local fire or other public safety department is interested in special natural gas training or other public safety information, please contact the MGE Pipeline Safety Department. **MGE offers this training free of charge**. MGE is also very flexible in scheduling these training sessions when it is convenient for emergency responders, including evenings and weekends when necessary. **See page 21 of this booklet for contact information for the Pipeline Safety Department and other MGE personnel.**

MGE MEDIA RELATIONS

When natural gas emergencies occur, inquiries from news media should be referred to MGE media relations. In most instances, facts about MGE operations and the emergency control of natural

gas will need explanation and clarification by a qualified MGE spokesperson. Incomplete information or misstatements to the media can potentially interfere with the effectiveness of emergency operations. **See page 21 of this booklet for media relations contact information and other MGE personnel.**

METER VALVE LOCATIONS

The following illustrations show typical gas meter installations. The arrows indicate the location of shut-off valves.

EXAMPLE 1

Example 1 *is a typical meter setting used in homes or small commercial buildings. Normally, the meter is located outside or in a basement; however, in some older buildings, the gas meter may also be found in utility rooms, bathrooms, kitchens, pantries, closets or other interior locations.*

EXAMPLE 2

The meter facility shown in ***Example 2*** *is often used on multiple dwelling buildings. There is a master shut-off valve, which shuts off the gas to all the meters in the manifold, and also a separate valve for each individual meter. This makes it possible to shut off gas to an apartment where an emergency situation exists without interrupting service to other apartments in the building. The arrows point to the individual meter shut-off valves.*

EXAMPLE 3

The meter facility in Example 3 is typical of one that is used for large industrial or commercial installations. The meter facility is usually located outside the building, but in some cases, the meter facility may be in a separate room or in its own separate building. Outside shut-off valves may be found at places of public assembly, such as schools, churches, commercial buildings and in business districts.

CARBON MONOXIDE
(CO)

WHAT IS CO? You can't see, taste, or smell CO, but it is a very dangerous gas produced when any fuel burns. CO can come from various sources like gas equipment that is not operating correctly, or from a venting system or chimney that becomes blocked.

CO CAN BE DEADLY! CO can make you dizzy or sick. The symptoms of CO poisoning include: dizziness, nausea, headache, fatigue, shortness of breath. In extreme cases, CO can cause loss of consciousness, brain damage, and death.

Missouri Gas Energy, like many of the local fire departments in its service territory, believes that response to calls from the public concerning the possible presence of carbon monoxide (CO) in a residence or business should be the responsibility of local fire departments, who have the specialized equipment and training necessary to react to CO emergencies.

Here are the guidelines that MGE provides to its customers to follow if they suspect CO is present:

- **If you suspect CO is present, act immediately!**
  - > If you or anyone else shows symptoms of CO poisoning, **immediately** evacuate the premises and call **9-1-1.**
  - > If no one has symptoms of CO poisoning, but you suspect that CO is present, immediately **call 9-1-1**, open doors and windows to allow entry of fresh air, and turn off any equipment you suspect may be releasing CO.
  - > You should call a licensed professional to inspect your natural gas equipment.

CO Poisoning and Specific Dangers to Firefighters – The International Association of Fire Chiefs (IAFC) has joined other organizations to launch "The Silent Killer," an educational campaign aimed at raising awareness of the duty-related dangers of CO poisoning and reducing the known risk factors that unnecessarily kill or injure firefighters each year. This campaign includes a six-minute video that highlights the immediate and long-term health risks associated with CO exposure and the emotional impact these risks can have on firefighters and their families. It also

MONOXIDE

advocates proper prevention strategies. The video can be viewed online at www.thesilentkiller.net and through complimentary DVDs distributed to fire departments.

Upon entry to the structure on CO calls, both CGI and CO checks should be completed to confirm that the atmosphere is safe. The structure should be evacuated upon detection of gas or 35 parts per million (PPM) or more of CO in the open atmosphere. Perform CO instrument tests in the open atmosphere of the rooms that contain natural gas equipment and at the warm air vent nearest the furnace.

Once the area is made safe, check for signs of improper appliance operation that can generate dangerous or fatal CO levels:

- A yellow/unsteady burner flame in gas equipment
- An unfamiliar or burning odor
- Black soot deposits on gas equipment and vents
- Increased moisture inside of windows

When requested by fire departments or other public safety agencies, MGE employees will assist in determining the source of CO emissions.

To help reduce the risk of CO poisoning, please help MGE in its efforts to remind the public of these important tips:

- Have your natural gas equipment and related venting systems inspected annually by a licensed professional.
- Regularly check gas equipment exhaust vents for blockage, including snow and ice, which can prevent the equipment from operating properly. Use a broom to sweep snow away from outside vent openings.
- Install, maintain, and use UL-listed CO detectors throughout homes and businesses according to the manufacturer's instructions.
- Never use an oven or range-top burners to heat a home.
- Never use portable heaters or generators indoors unless they are designed and approved for indoor use.
- Never use a grill indoors for cooking or heating.

CARBON MONOXIDE

IMPORTANT CONTACT INFORMATION

Local Fire Department _____
Local Police Department _____
Local Sheriff's Office _____

If You Smell Gas, Suspect a Gas Leak For Any Reason, Or To Report Any Natural Gas Emergency:
1-800-582-0000 or 9-1-1

Before You Dig, call 8-1-1

MGE Contact Center:
816-756-5252 in the Kansas City metropolitan area or
1-800-582-1234 in other parts of Missouri

MGE Pipeline Safety Department
816-360-5585

MGE Media Relations
816-360-5780

Websites
www.MissouriGasEnergy.com
www.mosafegas.com
www.mo1call.com
www.call811.com
www.npms.phmsa.dot.gov

NOTES

MISSOURI GAS ENERGY

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Appendix B

Standard: 10-24-2011		

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.

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.

- 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

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.

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.

- 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.

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;

- 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.

6.2 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.

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.

8.2 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 the plan in accordance with the following:

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 **Construction and Maintenance** - 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.

9.2 **Installation and Service** - 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 **Engineering, Pressure and Measurement** - 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 **Customer Service** - 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)

9.5 **Legal Department and Incident Notification Personnel-** 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.

11.2 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.

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 Natural Gas Hazards 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.

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.

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.

13.5 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.

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.

Supersedes: 3110R Effective Date of Previous Standard: 10-24-2011	Implementation Period for 3110S:	Effective Date of Current Standard 3110S: 10-9-2014

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.

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.

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.

Supersedes: 3110R Effective Date of Previous Standard: 10-24-2011	Implementation Period for 3110S:	Effective Date of Current Standard 3110S: 10-9-2014

MISSOURI GAS ENERGY

O&M Standard

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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

Supersedes: 3110R Effective Date of Previous Standard: 10-24-2011	Implementation Period for 3110S:	Effective Date of Current Standard 3110S: 10-9-2014

MISSOURI GAS ENERGY

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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.

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Exhibit 2

Supersedes: 3110R Effective Date of Previous Standard: 10-24-2011	Implementation Period for 3110S:	Effective Date of Current Standard 3110S: 10-9-2014

MISSOURI GAS ENERGY

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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.
5. 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

Supersedes: 3110R Effective Date of Previous Standard: 10-24-2011	Implementation Period for 3110S:	Effective Date of Current Standard 3110S: 10-9-2014

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Appendix C

General Operational Guideline

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

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

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

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 ¾ 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 or **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.

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.

APPENDIX D: Preliminary Estimate of Compliance Costs

		Hours	Rate ($/hour)	Cost ($)
OPERATIONS TRAINING - MGE				
Labor				
Preparation hours for training		40	$38	$1,520
Estimated additional training hours for First Responders		22	$38	$836
Training hours		16	$38	$608
Other Expense				
Material and printing costs		na	na	$5,356
Travel Expense				$1,000
	Total			**$9,320**
OPERATIONS TRAINING - Laclede				
Labor				
Preparation hours for training		6	$38	$228
Estimated additional training hours for First Responders		22	$38	$836
Training hours		16	$38	$608
Other Expense				
Material and printing costs		na	na	$356
Travel Expense				$0
	Total			**$2,028**
FIELD OPERATIONS & Operations Services - MGE				
Labor				
Training hours		447	$34	$15,091
Other Expense				
Travel Time and Expense				$0
	Total			**$15,091**
FIELD OPERATIONS - LACLEDE				
Labor				
Training hours		950	$38	$36,100
Other Expense				
Travel Time and Expense				$0
	Total			**$36,100**
	Total One-Time Training Expenses			**$62,539**

Missouri Pipeline Association Membership Additional Expense	**$30,000**
One-Time Fightfighter/First Responder Outreach Costs	**$15,000**
Year 1 - Estimated Cost	**$107,539**

Excludes:
Overheads
New technology for assisting with evacuations - pending review