

# **Gulf Coast Mineral, LLC**

## **Gas Pipeline Safety Emergency Procedures**

**2014**

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**Purpose:** The primary purpose of this Emergency Procedures Plan is to share basic information with emergency responders. Gulf Coast Mineral, LLC (GCM) employees may use this information while responding to a natural gas emergency. The plan provides general guidance to emergency responders and typical actions that GCM employees use for mobilization of personnel and resources.

**Emergency Responders - General Guidance:** Emergency responders such as police, fire department, sheriff, state patrol and others are often the first to learn of an incident involving GCM's facilities. The following actions are offered as a guide:

1. Notify the appropriate pipeline company. For a GCM gas facility use the following emergency contact list:
 

Gary Billingsley	251-948-9681
Karl Bingert	251-424-8287
Larry Wattles	251-424-0240
GCM Office	251-948-9681
2. Secure the area and control access to the site. Traffic barricades or re-routing may be required.
3. If natural gas is leaking but not burning, avoid doing anything that may ignite it. Eliminate ignition sources such as vehicles, cell phones, pagers, two-way radios, electrical equipment, switches, door bells, flashlights, static electricity, cigarettes, etc.
4. Evacuations or sheltering in place may be necessary.
5. Be aware of weather conditions such as lightning storms and stay upwind.
6. If the natural gas is burning, control secondary fires but **DO NOT ATTEMPT TO PUT OUT PIPELINE FIRES.**
7. **DO NOT OPERATE PIPELINE VALVES.**
8. Provide medical assistance if safe to do so.

**Pipeline System Basics:**

- Natural gas is the only product transported in pipelines operated by GCM.
- Pipeline sizes range from \_\_\_ inches to \_\_\_ inches in diameter
- Pressures can exceed \_\_\_\_\_ pounds per square inch.
- The maximum potential impact radius (PIR) is \_\_\_\_\_ feet.
- Well locations include:

Well Name	BH Location	Lat/Lon	Sec Twnshp Rng
Gulf State Park 7-13	990 FSL & 364 FWL	30.27106/-87.61396	S7 T9S R5E
Dora Hand et al 32 #1	1691 FNL & 1135 FEL	30.378902/-87.808182	S32 T8S R3E
Smith et al 38 #1	2062 FNL & 2350 FEL	30.31148/-87.711006	S38 T8S R4E
Burnett 37 #1	1665 FSL & 3778 FEL	30.316192/-87.703493	S37 T8S R4E
Magnolia Land Co 35-02 #1	800 FNL & 1700 FEL	30.39705/-87.73944	S35 T7S R3E
Chason	2300 FSL & 2000 FEL	30.40557/-87.74036	S26 T7S R3E

**Emergency Definition:** An emergency is any situation demanding immediate corrective action involving GCM's facilities or operations which may endanger human life, cause environmental damage, involve significant property damage or which may affect normal service to customers. Emergencies may result from various events, including but not limited to the following:

- Leaking or blowing gas involving (or near) a pipeline or pipeline facility
- Gas detected inside or near a building.
- Fire or rupture located near, or directly involving, a pipeline or pipeline facility.
- A weather related incident such as: Tornadoes, Wind Storms, Hail, Flooding, Earthquakes and Hurricanes

## **Types of Emergencies**

1. **Leaks:** Since the uncontrolled and unwanted release of natural gas could result in situations hazardous to life and property, the following emergency procedures are established to bring the emergency under control in the shortest possible time.

Natural gas escaping from an underground pipeline follows the path of least resistance and can travel a considerable distance under certain conditions. Natural gas escaping under areas are covered with paving materials may follow utility ditches or conduits into buildings and create hazardous situations.

When investigating hazardous situations where it is imperative that adjoining buildings or structures also be checked for the presence of natural gas. This situation requires complete cooperation between GCM representatives and emergency units to prevent personal injuries or fatalities and to minimize property damage.

The Supervisor shall be notified immediately of a fire, leak, or blow out that occurs at or is related to the operation of any well, production, processing, storage, Class II injection facility, underground storage facility, plant, or gathering line or flowline, used in operations including but not limited to drilling, completing, testing, recompletion or reworking, producing, processing, storing, injecting, gathering, transporting or metering.

When a leak is called in the below procedure is to be followed:

1. The first employee to have knowledge of emergency will contact the manager. Such notification shall include information pertaining to a description of the incident; location by County, section, township, and range; extent of damage to life and environment; and corrective action taken.

GCM Employee Emergency Contacts:

Gary Billingsley	251-948-9681
Karl Bingert	251-424-8287
Larry Wattles	251-424-0240
GCM Office	251-948-9681

2. The manager will send a lead field man to verify the emergency and determine the extent and type of assistance needed. Investigative procedures:

- Evaluate the situation
- Protect life and property
- Secure the area
- Conduct a leak survey
- Conduct pressure tests of piping
- Conduct meter and regulator checks
- Questioning persons on the scene
- Recording meter reading
- Recording weather conditions

3. After situation has been examined and the damage evaluated the operator shall immediately take the appropriate action to clean up spills, repair leaks, extinguish fires, and bring blow outs under control. Additionally, the operator shall notify other appropriate governmental agencies of the incident.

4. Necessary wells are to be shut off to prevent any further gas leak.

5. Appropriate authorities will be contacted, i.e. if leak takes place near residential or commercial locations in which people may need to be evacuated.

6. Necessary vendors will be contacted to arrange needed crew and supplies to remedy the situation as soon as possible.

7. If deemed necessary by the agent of the Board, Form OGB-27, Notification of Fire, Spill, Leak or Blow Out Incident Report, shall be submitted to the Board within ten (10) days of the incident; however, when a spill or leak leaves the location Form OGB-27, Notification of Fire, Spill, Leak or Blow Out Incident Report, shall be submitted to the Board within ten (10) days.

8. The DOT will be notified within 2 hours of the incident.

2. **Fires:** Non-planned fires fueled by natural gas should be responded to based on the situation.

**Situation 1:** Fires directly involving pipelines or pipeline facilities: If the burning gas does not threaten injury or further property damage, either to the general public or our employees, it will be allowed to burn until a safe shutdown of the damage pipeline or facility can be accomplished. If the fire does threaten injury or further property damage and cannot be immediately extinguished by shutting off a valve, or by squeezing, it will be extinguished by use of dry chemicals only after the following steps have been taken:

1. The fire department has been notified and they have men and equipment on the scene.
2. A coordinated plan has been worked out between the Fire and/or Police Departments and our supervisors as to how the fire shall be extinguished and how the resulting blowing or leaking gas shall be contained.
3. Back-up extinguishing equipment is on hand, all necessary tools, materials and equipment to safely and quickly contain the gas is available.
4. We have available a flame suit that can be supplied quickly by Fire Department upon notification.
5. Each employee thoroughly understand his role in securing the emergency and all pertinent safety rules have been observed.

Fire unrelated to leaking natural gas which jeopardizes a gas pipeline or facilities would normally be beyond the limited capabilities of GCM to extinguish, and would be the responsibility of the Fire Department. Any employee called to the scene of such a condition should inform the Fire Chief of the inherent danger of allowing the fire to get to, or burn for long around the exposed gas facility, and remove that facility from service if possible.

**Situation 2:** Fires caused or fed by natural gas on the customer's premises will be handles as follows:

1. If the employee called to the scene can safely turn off and remove the meter, he will do so after reporting to the fire or police authority on the scene.
2. If a serve valve or tap tee exists, he will immediately turn off the valve. He will complete all necessary field orders as required by his actions and render whatever other assistance is required of him.
3. If the fire is being gas-fed and the employee on scene is unable to stop the flow by one of the means as outlined above, he will notify the dispatcher that the he needs to cut off or squeeze off the line at a safe point away from the fire.

4. After the fire has been extinguished, he should determine, if possible, whether the escaping gas was the cause or a result of the fire. If he suspects that the start of the fire was gas related, whether at a gas burning appliance, house piping, or meter installation, he should notify the supervisor, who will be responsible, to conduct a thorough investigation and submit an immediate report to the main office.
3. **Explosions:** Explosions involving natural gas may be classified as either one that was the result of leaking natural gas, or was caused by other explosives ignited in close proximity to a pipeline or related facility.

**Situation 1:** Explosions caused by leaking natural gas: It must be kept in mind that natural gas has a low flammability limit. A given volume of air containing less than 5% natural gas will not ignite. A mixture of that same volume of air containing more than 15% natural gas will burn, but has gone beyond the range of instantaneous combustion, or an explosion. Therefore, to have a natural gas explosion three conditions need to be present:

1. A mixture of natural gas in the air that is the range of at least 5% but no greater than 15% gas. This range is indicated on a natural gas explosive meter as from 80% on the L.E. L. scale to 22% on the percent (%) gas scale. The dial of the meter in this range is always painted red and reading in this range is extremely dangerous under the following conditions.
2. The second condition is volume. As long as such a mixture has no confined space in which to collect, and is vented to the atmosphere, it is harmlessly dissipated. However, when such a mixture collects in a building, sewer, culvert, or any confining space it has become a potential disaster.
3. The third condition that goes into making a natural gas explosion is, of course, a source of ignition. Any instantaneous flame or spark in excess of 1100 degrees Fahrenheit (F) such as wall switches, pilot lights, matches, cigarettes, automotive starters, engine exhaust, etc. will accomplish that end.

The removal of any of these conditions will prevent an explosion. However, given a building, room, manhole, or any confined space containing this mixture, the first duty of our employees is to evacuate all but authorized personnel from the danger area. His second duty is to remove all apparent ignition sources. This should be accomplished in a building by cutting off the gas meter. He should then, in the case of a structure, ventilate by opening windows and doors. Under no circumstances should he allow open

flames, matches, the operation of electrical switches, or any type motor or engine to be started in the area where the gas is present.

The danger of fire or an explosion will exist, however until the source of the leaking gas has been found and removed. To this end, any employee and available equipment at our disposal will be dedicated to stop quickly but safely the leaking gas.

**Situation 2:** Explosions occurring at or near a pipeline or related facility: Any explosive force detonated at or near a natural gas pipeline or facility with enough power to rupture or destroy that facility or pipeline will either produce a secondary gas-fed explosion, fire, or in some instances, leaking un-ignited gas. As the case with all uncontrolled leaking as the ever present danger is that some ignition source is present and a fire is the result, or if conditions as outlined above are met, a secondary gas-fed explosion will result. Fire fighters, repair crews and investigators should always be alert to this potential danger and take all necessary precautions as outlined in the O&M manual, while quickly and safely cutting of the gas supply to the damaged facility.

When investigating an explosion or fire where leaking natural gas is involved, it should be first established whether the leaking gas was the cause or result of the emergency. This investigation should be made in the company of Fire Department Officials or other authorities and any pictures or physical evidence removed from the scene should be marked for identification, and tagged showing the date, place, and by whom witnessed.

Where leaking natural gas is suspected or proven to be the cause of a fire or explosion and any of the following criteria are met, telephone notice to the OPSO Division of the Alabama Public Service Commission will be made immediately, and be followed by a written report on DOT Form 7100.

1. Causes a fatality
  2. Causes injury requiring hospitalization
  3. Causes property damage in excess of \$5,000
  4. Causes part of the system to be taken out of service
  5. Resulted in unplanned ignition
4. **Natural Disasters:** A natural disaster such as hurricanes, lightening, earthquakes, or tornadoes can cause damage to our gathering system which could be classified as an emergency as defined in part 1 of the O&M manual. Since all the above disasters can cause gas leaks, fires and explosions which have been covered earlier, this section will deal with the threat of rising waters.

**Flooding:** Storm Surge and torrential rains associated with a hurricane cause inland creeks and rivers to flood. District regulators, house meters and regulators installed in flood areas may go under water and could over pressurize customer house piping in a direct ratio to their depth under water.

**Winds:** Sustained high winds can cause structure damage which may cause broken in house piping. Falling trees from high winds are also one of the biggest threats to any gathering system. Falling trees will damage aboveground facilities and damage belowground facilities by uprooting and breaking the piping. In areas where the natural gas system has been turned off, water may enter the broken facilities.

### **Hurricanes & Tornados:**

#### Field Responsibilities (Pre-Storm):

1. Sustained high winds may cause unsecured items to become flying projectiles possibly causing damage. Any loose items around company buildings, pumping stations, pump hoses and any other outbuildings should be secured.
2. Secure and fill extra fuel cans for use in portable equipment and be sure we have adequate supply.
3. Make sure all vehicles (trucks & cars) are fueled.
4. Coordinate with Office Personnel to obtain a supply of spare batteries for lights, meters, and other battery operated equipment.
5. Coordinate with Office Personnel and make sure vehicles are equipped with emergency tags, meter locks, company locks, plugs, caps, and any other items to secure broken lines.
6. Make sure all construction work sites are secured and equipment is returned to warehouse or secured and not susceptible to damage or flooding.

#### Field Responsibilities (Post-Storm)

1. A complete assessment of all pipeline and pipeline facilities must be made to guarantee nothing has been compromised by the storm.
2. If any leaks or fires are discovered the above mentioned procedures are to be followed.

**Education & Training:** Operating personnel must be qualified to ensure understanding of and competency in emergency procedures including:

1. Updates of Emergency Procedure Plan
2. Review of responsibilities in an emergency
3. Review of locations and use of emergency equipment
4. Properties of natural gas
5. Review the locations and use of:
  - System maps
  - Main records
  - Service records
  - Valve records
  - Regulator station schematics
6. Review of hypothetical emergency situations to reinforce the step-by-step actions to be taken in emergency situations, including how to contact public officials, firefighters, police, etc.
7. Recordkeeping requirements
8. Reports

**Public Education:** GCM will implement their Public Awareness Plan that enables the public, emergency response groups, and persons engaged in excavation activities, to recognize and respond to an emergency situation involving Natural Gas Pipelines. This information should include but is not limited to:

- Information about gas properties
- Recognition of gas odors
- Actions to take when a strong gas odor is present
- Notification of the gas company prior to excavation
- Telephone numbers for customers to report gas leaks during both business and non-business hours.

## **Emergency Contact Information**

Local Emergency Services  
911

City of Foley - Riviera Utilities  
251-943-5001

City of Gulf Shores - Utilities  
251-968-6323

City of Orange Beach - Utilities  
251-974-5216

Baldwin County Highway Department  
251-972-6897

Emergency Management Agency  
251-943-1011

Fire Department - Gulf Shores  
251-968-7422

Fire Department - Orange Beach  
251-981-6166

Fire Department - Foley  
251-943-1710

Baldwin County Sheriff  
251-943-4431