



Tennessee Gas Pipeline
Company, L.L.C.
a Kinder Morgan company

August 31, 2012

Mr. R.M. Seeley Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration
Office of Pipeline Safety
28701 S. Gessner Ste 1110
Houston, TX 77074

Reference: CPF 4-2012-1006M
Response to Notice of Amendment (NOA)

Dear Mr. Seeley,

Kinder Morgan and Tennessee Gas Pipeline Company, L.L.C. (TGP) have reviewed and analyzed the Notice of Amendment referenced above in which PHMSA requests certain amendments to procedures and provides the following response.

As you know, in May 2012, Kinder Morgan (KM) purchased the El Paso companies, including TGP, and has been working to transition the EP operations into KM Operations and Maintenance (O&M) Manual and other procedures. Kinder Morgan and TGP do not agree with all of the points in the NOA, nor do we admit that prior TGP procedures were inadequate or non-compliant with the regulations. Nevertheless, Kinder Morgan has already begun the process of incorporating the legacy El Paso companies and assets, including TGP, into the KM O&M Procedures by the end of 2012 so there does not appear to be any reason for the parties to spend time debating outdated procedures that will no longer apply in a matter of months. As you are undoubtedly aware, the KM O&M Manual has been inspected through regular PHMSA Team Audits including the most recent audit in April 2010 and accordingly, we believe that implementation of the KM O&M Manual will assure compliance with the pipeline safety regulations. Additionally, as described below, where necessary we have implemented changes to existing TGP documents to address PHMSA's concern.

For the purposes of clarity, the issues presented by your office will be restated with TGP's response immediately following in bold font.

1. §192.225 Welding Procedures.

(a) **Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see §192.7) or section IX of the ASME Boiler and Pressure Vessel Code "Welding and Brazing Qualifications" (incorporated by reference, see §192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).**

(b) **Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.**

TGPL Welding Manual and the Welding Procedure Specifications are found inadequate.

A. TGPL Welding Manual, General Welding Requirements. Section WM020, Sub Section 2.d. states "Proficiency welds made using low hydrogen electrodes will also extend the welder's qualifications for cellulosic electrodes, if any."

API 1104 (19th Edition), Section 6.2.2C states: a welder who has successfully completed the qualification test described in 6.2.1 shall be qualified within the limits of the essential variables described below. If any of the following essential variables are changed, the welder using the new procedure shall be requalified:

- c. A change of filler-metal classification from Group 1 or 2 to Group 3, or from Group 3 to Group 1 or 2 (see Table 1).

TGPL must amend its Welding Manual to ensure it address the requirement of essential variables

TGP's Response to ITEM 1.A:

TGPL has adopted the KM welding procedures, which have been previously reviewed by PHMSA. The KM welding procedures have supporting Welding Procedure Specifications.

B. TGPL Welding Manual, Welding Procedure Specification (API 1104 19th Edition) numbers A221A and A221A-F indicate number of beads will vary with wall thickness.

API 1104 (19th Edition), Section 5.3.2.5 states "the sizes and classification number of the filler metal and the minimum number and sequence of beads shall be designated."

TGPL must amend its Welding Procedure Specification to ensure that procedure addresses the requirement of essential minimum number of beads.

TGP's Response to ITEM 1.B:

TGPL has adopted the KM welding procedures, which have been previously reviewed by PHMSA. The KM welding procedures have supporting Welding Procedure Specifications. Additionally, welders currently qualified under the El Paso Welder Qualification program will continue to be qualified during the transition. These same welders will perform the annual Destructive Test in conformance with Kinder Morgan Welding Procedures.

C. TGPL Welding Manual, Welding Procedure Specification (API 1104 19th Edition) numbers A221A and A221A-F covers material grade (yield in psi) 42,000 and less, Over 42,000 to 60,000, 65,000 and 70,000.

API 1104 (19th Edition), Section 5.4.2.2 states:

A change in base material constitutes an essential variable. When welding materials of two separate material groups, the procedure for the higher strength group shall be used. For the purposes of this standard, all materials shall be grouped as follows:

- a. Specified minimum yield strength less than or equal to 42,000 psi (290 MPa).
- h. Specified minimum yield strength greater than 42,000 psi (290 MPa) but less than 65,001 psi (448 MPa).
- c. For materials with specified minimum yield strength greater than or equal to 65,000 psi (448 MPa), each grade shall receive a separate qualification test.

At the time of the inspection, TGPL failed to provide a separate Welding Procedure Specification for the aforementioned material group. TGPL must revise their specification for each group listed above.

TGP's Response to ITEM 1.C:

TGPL has adopted the KM welding procedures, which have been previously reviewed by PHMSA. The KM welding procedures properly document different Welding Procedure Specifications for each of the four material grade ranges.

§192.605 Procedural manual for operations, maintenance, and emergencies

(b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.

(6) Maintaining compressor stations, including provisions for isolating units or sections of pipe and for purging before returning to service.

TGPL Compressor Operation and Procedure (COPP) Manual was found outdated as it cross-referenced another technical reference which no longer exists.

TGPL COPP Manual Section 304.1: Protective Device Checks — Electric Motor Drivers references O&M Procedure 302: Pressure Control and Overpressure Protection and COPP 801: Long Term Equipment Preservation. The technical reference COPP 801 was removed on May 12, 2010.

TGP's Response to ITEM 2:

Pursuant to the language of Item 2 and the last paragraph of the NOA, no further response to Item 2 is required.

3. §192.615 Emergency plans.

(a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

(3) Prompt and effective response to a notice of each type of emergency, including the following:

(i) Gas detected inside or near a building.

TGPL Emergency Operating Procedure was found inadequate because it did not provide instructions on emergency response for compressor station with gas detectors and no automatic shutdown.

While reviewing Gas Detected Inside or Near a Building or a Pipeline Leak section listed in TGPL's Emergency Operating Procedure, it was found that this section provides instruction on emergency response for station without gas detectors and automatic shutdown as well as for station with gas detectors and automatic shutdown systems.

During the field audit, the PHMSA inspector learned Compressor station 40, building "A" located in Natchitoches, Louisiana is equipped with gas detectors. "A" Building provides 2 intermittent horn blasts at 20% and three at 40% of the lower explosive limit and warn persons about to enter the building and persons inside the building of the danger. Gas detection inside the "A" building will not cause an automatic shutdown.

TGPL must amend its Emergency Operating Procedure regarding Gas detected inside or near a building or a pipeline leak section to ensure that procedure adequately document the requirements for station with gas detectors and without automatic shutdown.

TGP's Response to ITEM 3:

TGP has amended the emergency response plan to identify the items missing in the Natchitoches, Louisiana inspection. A copy of the revised plan is attached. Refer to Attachment A: Emergency Operating Procedures Manual, Section 3 – Emergency Operating Procedure.

4. §192.615 Emergency plans.

(a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

(4) The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.

TGPL Emergency Operating procedure was found inadequate because it failed to provide instruction and training requirements for the contract operators to respond to an emergency.

During the field portion of the audit of Natchitoches unit area, the PHMSA inspector learned compressor station 40 "A" building has been operated by the contract operator. When documentation on training records for contract operator were requested. TGPL provided covered tasks qualification for the two operators. TGPL did not provide records indicating these two employees were trained on company's emergency plan. Instead, TGPL provided directive on response to 40"A" Building Gas Detection which states:

- 1) At 20% LEL Alarm, identify area of building indicating alarm and investigate.
- 2) At 40% LEL Alarm, leave compressor building/DO NOT ENTER and initiate a station ESD.
- 3) Immediately notify supervisor of an ESD activation, and began the investigation, solution, and the reversal procedures found in the EOP.

Based on directive, it appears that contract operators are responding to an emergency. TGPL informed PHMSA, all plant personal and contract operators are trained on emergencies.

However, the company could not produce training documentation for the contract operators at the time of the inspection. While the audit was in-progress, TGPL area manager revised the directive to contract operators which now states:

"At 20% and 40% LEL Alarm, do not attempt to reenter the building **until** cleared by Company personnel who will perform a planned investigation."

TGPL must amend its Emergency Operating Procedure to ensure that procedure adequately address the role of contract operator and their training requirement.

TGP's Response to ITEM 4:

As noted above, TGP has amended the emergency response plan to identify the items missing in the Natchitoches, Louisiana inspection and a copy of that revised plan is attached. Refer to Attachment A: Emergency Operating Procedures Manual, Section 3 – Emergency Operating Procedure and Attachment B: O&M Procedure 1970, EPPG Section 603 - Emergency Plan / Notification and Investigation. As documented in the NOA, the TGP area manager amended the site-specific procedure during the PHMSA audit. Additionally, the contractors in question at the Natchitoches facility received training in November 2011 and documentation of that training is attached. Refer to Attachment C: Training Documentation.

Thank you for your consideration of this information as a resolution to the NOA. Please Dwayne Burton at 713-369-9356 or me at 713-369-9232 should you wish to discuss the information provided above.

Sincerely,

for

Jorge Torres,
Vice President, Engineering
Kinder Morgan Natural Gas Division
(713) 369-9232

cc: M. Dwayne Burton, Vice President, Operations and Engineering
Gary Buchler, Vice President, Operations
Michael Catt, Vice President, Operations

**Attachment A: Emergency Operating Procedures Manual,
Section 3 – Emergency Operating Procedures**

Section 3 – Emergency Operating Procedures

Introduction

This section contains a listing of information and guidelines you should use when dealing with emergencies. These actions are those required by, but not limited to, the pipeline safety regulations 49 CFR192.615 and .617 and are directed at protecting people first, then property. All incident sites should be secured and preserved for post-incident investigations. Reference the Incident Classification tables (Section 5-2) as a guideline for classifying and communicating incidents or events requiring emergency response actions. Incident Command System (ICS) staffing charts immediately follow the tables in Section 5. These charts should be used as a guideline to determine staffing needs for handling emergencies. In addition to the actions warranted by the emergency, should the incident cause media interest, remember media training.

The types of emergencies covered in this section include:

To find procedures for:	Station	Pipeline	Storage Well
Reported leak or fire inside or near a residence or third-party property	3 – 2	3 – 2	3 – 2
Explosion or fire occurring near or directly involving a company facility	3 – 3	3 – 4	3 – 5
Gas detected inside or near a building or a pipeline leak	3 – 7	3 – 7	3 – 8
Natural disasters	3 – 9	3 – 9	3 – 9
Operations with loss of communications	3 – 10	3 – 10	3 – 10
Spills	3 – 11	3 – 11	3 – 11
Threats of violence:			
Arson or bomb	3 – 12	3 – 12	3 – 12
Extortion/Terrorism	3 – 14	3 – 14	3 – 14
Uncontrolled flow from a storage well	N/A	N/A	3 – 15

Note: Each procedure for a specific emergency ends with the ♦ symbol.

Reported Leak or Fire Inside or Near a Residence or Third-party Property**Station, Pipeline, and Storage**

While receiving a call reporting a leak or fire, complete the Incoming Emergency Calls form (go to Incoming Emergency Calls tab – Section 2).

1. Determine if the caller and others in the vicinity are safe. If not, ask if the caller is calling from a cell phone. If so, tell the caller to move to a safe location. If the caller is on a land line, tell the caller to set the phone down without hanging up and move to a safe location, then call from the new location.
2. Gather all critical information using the *Incoming Emergency Calls* form (go to *Incoming Emergency Calls* tab – Section 2).
3. If a fire has occurred and local responders have not been notified, call 911 or the applicable local emergency response group and relay information related to the incident.
4. Dispatch personnel to the scene to determine the location of the gas leak or fire. The Incident Commander should organize and/or dispatch personnel to the key points of isolation unless the facts related to the incident can be validated and determined not to be significant in nature.
5. If it is determined that the leak affects El Paso facilities, refer to the *Emergency Procedures* (Page 3-1) to determine the appropriate response based on the observations at the scene.
6. If it is determined that the leak or fire does not involve El Paso facilities, ensure that either the gas distribution company, the responsible party, or the fire department is responding to the incident. Document organization name, contact name, title, phone number, and time of discussion in the section marked *Company Response* at the bottom of the *Incoming Emergency Calls* form (reference Page 2-3).
7. Make notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity. ♦

Explosion or Fire Occurring Near or Directly Involving a Company Facility

Station and Station Yard Piping

For stations without fire or smoke detection and automatic shutdown systems:

1. Sound the alarm.
2. Evacuate the building.
3. Activate the Emergency Shutdown System (ESD) for building, as appropriate – **DO NOT reenter facilities until they have been secured and a safe environment is verified.**
4. Assemble at a predetermined location for a head count and to determine course of action.
5. Call local fire department and Emergency Medical Services (EMS), if necessary.
6. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
7. Ensure that the ESD system functioned properly.
8. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
9. If applicable, contact Aviation and have them contact the closest FAA office to advise of any restrictions that need to be placed on airspace.

For stations with fire or smoke detection and automatic shutdown systems:

1. The alarm system automatically sounds.
2. Evacuate the area – **DO NOT reenter facilities until they have been secured and a safe environment is verified.**
3. Assemble at a predetermined location for a head count and to determine course of action.
4. Call local fire department and EMS, if necessary.
5. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
6. Ensure that the ESD system functioned properly.

7. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to classify and communicate the incident severity effectively.
8. If applicable, contact Aviation and have them contact the closest FAA office to advise of any restrictions that need to be placed on airspace.

For stations (or with individual compressor buildings within a station) with gas detectors containing audible and or visual alarms, but not automated for automatic shutdown of the compressor equipment and high pressure and fuel gas venting from within that building:

Response to a Lower Explosive Level (LEL) Audible and/or Visual Alarm

Expected Response of Personnel-

1. If in addition to the LEL alarm, there exist any sounds or sights of uncontrolled gas escaping into the building, immediately evacuate the affected building and initiate a station emergency shutdown.
 - Relocated to a pre-selected safe assembly point.
2. If there is no indications of loud sounds or sights of uncontrolled gas escaping into the building,
 - Determine source of gas leak, isolate it and vent remaining contained volume to the outside of the building.
 - Shut down, isolate and blow down affected engines.
 - Manually initiate a fuel emergency shutdown (FGESD) of building and if available the building emergency shutdown, if gas leak cannot be quickly isolated and blown down.
 - Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
 - If facilities are affected—DO NOT reenter facilities until they have been secured and a safe environment is verified.

Response to a High Level LEL (H-LEL aka UEL) Audible and/or Visual Alarm

Expected Response of Personnel-

1. Initiate a building or station emergency shutdown
2. Relocated to a pre-selected safe assembly point.

3. Contact the facility person in charge
4. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the incident Classification tables (5-2) to effectively classify and communicate the incident severity.
5. If facilities are affected – DO NOT reenter facilities until they have been secured and a safe environment is verified.

Explosion or Fire Occurring Near or Directly Involving a Company Facility

Pipeline

If notified by phone (otherwise proceed to Step 2 below):

1. Gather all critical information using the Incoming Emergency Calls form (go to Incoming Emergency Calls tab – Section 2).
2. Investigate pressure on system to determine whether any major changes indicate a rupture.

If pressure indicates a rupture:

- a. Determine whether the pressure drop is on the suction or discharge side of the station and be prepared to describe the current pipeline flow conditions.
- b. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
- c. Dispatch personnel to locate the scene of the incident and act as the On-Scene Coordinator (secure the site, determine injuries, render EMS help, survey and report damage at scene, preserve the scene, etc).
- d. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
- e. The Incident Commander should organize and/or dispatch personnel to appropriate valve locations to isolate and bypass the rupture, if necessary (go to *Isolation of Facilities* tab – Section 9).
- f. If the situation does not pose an immediate threat to human life, health, property, or the environment and pressure reduction is an element of the response to the incident, consult the appropriate Operations, Operations Services, or other appropriate technical support for guidance.

- g. Ensure notification of the applicable purchase and sales stations. Gas Control and the appropriate field personnel will be available to help in this notification, as well as the shut in of the affected facilities.
- h. Collect incident status update from the On-Scene Coordinator (repeat as needed to stay current with changing events).
- i. Report all injuries, property damage, and relevant information to the Division Director.
- j. If applicable, contact Aviation and have them contact the closest FAA office to advise of any restrictions that need to be placed on airspace.
- k. If emergency repairs are required, notify the Area/Division office of the materials and equipment needed.
- l. The Area office will notify Gas Control and the Division Director with an estimate of the time required to repair and put the line back into service.
- m. Request any additional resources and support necessary for response from the Division office.

If the pressure does not indicate a rupture:

- a. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
- b. Dispatch personnel to investigate reported incident. The Incident Commander should organize and/or dispatch personnel to the key points of isolation unless the facts related to the incident can be validated and determined not to be significant in nature.
- c. If the incident is determined to involve El Paso facilities, go to Step 2d above.
- d. If it is determined that El Paso facilities are not involved, make notifications to the responsible parties. If the owners of the facilities cannot be notified, contact the local authorities regarding nature of problem. Ensure that either the responsible party or the fire department is dealing with the incident. Document organization name, contact name, title, phone number, and time of discussion in the section marked *Company Response* at the bottom of the *Incoming Emergency Calls* form (refer to Page 2-3).
- e. Through consultation with Gas Control and utilization of the emergency procedures (refer to Page 3-1), be prepared to isolate facilities if the incident escalates to the point that it affects company facilities.

Storage

If notified by phone (otherwise proceed to Step 2 below):

1. Gather all critical information using the Incoming Emergency Calls form (go to Incoming Emergency Calls tab – Section 2).
2. Investigate pressure and flow on system to determine whether any major changes indicate a well blowout or uncontrolled flow from a well.

If the pressures and flows indicate a well blowout or uncontrolled flow from a well:

- a. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
- b. Dispatch personnel to investigate reported incident. The Incident Commander should organize and/or dispatch personnel to the key points of isolation unless the facts related to the incident can be validated and determined not to be significant in nature.
- c. Make necessary notifications (go to Notifications tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
- d. If the incident is determined to involve El Paso storage facilities, go to the *Special Needs* tab – Section 16 and implement the *Storage Well Blowout Contingency Plan*.
- e. If the incident is determined to involve station or pipeline facilities, go to the appropriate procedures by referencing the procedures matrix on Page 3-1.

If the pressures and flows do not indicate a well blowout or uncontrolled flow from a well:

- a. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
- b. Dispatch personnel to investigate reported incident. The Incident Commander should organize and/or dispatch personnel to the key points of isolation unless the facts related to the incident can be validated and determined not to be significant in nature.
- c. If the incident is determined to involve El Paso facilities, go to Step 2c above.
- d. If it is determined that El Paso facilities are not involved, make notifications to the responsible parties. If the owners of the facilities cannot be notified, contact the local authorities regarding nature of problem. Ensure that either the responsible party or the fire department is dealing with the incident. Document organization name, contact name, title, phone number, and time of discussion in the section

marked Company Response at the bottom of the Incoming Emergency Calls form (refer to Page 2-3).

- e. Through consultation with Gas Control and utilization of the Emergency Procedures (refer to Page 3-1), be prepared to isolate facilities if the incident escalates to the point that it affects company facilities. ♦

Gas Detected Inside or Near a Building or a Pipeline Leak

Station and Station Yard Piping

For stations without gas detectors and automatic shutdown systems:

1. Determine source of gas leak.
2. Shut down affected engines.
3. Perform emergency shutdown (ESD) of building, if appropriate.
4. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
5. If facilities are affected – **DO NOT reenter facilities until they have been secured and a safe environment is verified.**

For stations with gas detectors and automatic shutdown systems:

1. Gas detectors automatically cause building to shut down. Refer to station-specific ESD information to verify levels of building and station isolation.
2. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
3. If facilities are affected – **DO NOT reenter facilities until they have been secured and a safe environment is verified.**

Pipeline

If notified by phone (otherwise, proceed to Step 2 below):

1. Determine if the caller and others in the vicinity are safe. If not, ask if the caller is calling from a cell phone. If so, tell the caller to move to a safe location. If the caller is on a land line, tell the caller to set the phone down without hanging up and move to a safe location, then call from the new location.

2. Gather all critical information using the *Incoming Emergency Calls* form (go to *Incoming Emergency Calls* tab – Section 2).
3. Determine location of the gas leak.

If the location of the gas leak is near the pipeline:

Dispatch personnel to investigate reported incident. The Incident Commander should organize and/or dispatch personnel to the key points of isolation if the facts related to the incident can be validated and determined to be significant in nature. Refer to the *Emergency Procedures* (Page 3- 1) to determine the appropriate response based on the observations at the scene.

If the gas leak does not involve El Paso facilities:

- a. Ensure that either the gas distribution company responsible for the pipeline or the fire department is dealing with the leak. Document organization name, contact name, title, phone number, and time of discussion in the section marked *Company Response* at the bottom of the *Incoming Emergency Calls* form (refer to Page 2-3).
- b. If company facilities are involved, make primary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.

Storage

If notified by phone (otherwise, proceed to Step 2 below):

1. Determine if the caller and others in the vicinity are safe. If not, ask if the caller is calling from a cell phone. If so, tell the caller to move to a safe location. If the caller is on a land line, tell the caller to set the phone down without hanging up and move to a safe location, then call from the new location.
2. Gather all critical information using the *Incoming Emergency Calls* form (go to *Incoming Emergency Calls* tab – Section 2).
3. Determine location of the gas leak.

If the location of the gas leak is near the storage facilities:

- a. Dispatch personnel to investigate reported incident. The Incident Commander should organize and/or dispatch personnel to the key points of isolation unless the facts related to the incident can be validated and determined not to be significant in nature.
- b. Refer to the *Emergency Procedures* (Page 3-1) to determine the appropriate response based on the observations at the scene.

If the gas leak does not involve El Paso facilities:

- a. Ensure that either the gas distribution company responsible for the pipeline or the fire department is dealing with the leak. Document organization name, contact name, title, phone number, and time of discussion in the section marked *Company Response* at the bottom of the *Incoming Emergency Calls* form (refer to Page 2-3).
- b. If storage facilities are involved, make primary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity. Ensure that the appropriate Reservoir Services staff is notified. ♦

Natural Disasters

Station, Pipeline, and Storage

If a disaster occurs without warning (such as an earthquake, flash flood, severe thunderstorm, tornado, etc.), proceed to Step 4.

If disaster is one for which warning can be given (such as hurricanes, blizzards, electrical storm, or flooding), begin with Step 1 below; otherwise, proceed from Step 4 below:

1. Receive warning of impending disaster.
2. Secure facilities and evacuate personnel, as appropriate (go to *Natural Disasters* tab – Section 6).
3. Notify Gas Control of impending disaster and of the actions you have taken.

If, and when, disaster strikes:

4. Assess damage.

If disaster results in ...	Go to page ...
Explosion or fire	3-3 or 3-4
Gas detected inside or near a building/pipeline leak	3-6
Uncontrolled flow from a storage well	3-16

5. Secure unsafe situations immediately.
6. Make necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.

7. If facilities are affected—DO NOT reenter facilities until they have been secured and a safe environment is verified.
8. Return undamaged facilities back to service.
9. Repair damages. ♦

Operations with Loss of Communications

Station, Pipeline, and Storage

In the event that an operating facility loses communication with Gas Control or other necessary authority, that operating facility will:

1. Determine if any methods of alternate communications are functional (go to *Alternate Communications* tab – Section 15). If no other means of communications are functional, proceed to Step 2.
2. Attempt to hold the last given operation order until such time as temporary or normal communication can be established.
3. Under no circumstances should this operating facility exceed or allow to be exceeded the maximum operating limits (i.e., MAOP) of the facility or adjoining pipelines.
4. Ensure that Area supervision, Division, and Gas Control are notified. If the situation escalates beyond a loss of communications, make additional notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity. ♦

Spills

Station, Pipeline, and Storage

1. Contain spill on company property using locally available equipment such as backhoe, bulldozer, absorbents, and shovels.
2. Notify the local Environmental staff. If unavailable, notify the Division Director. If the Division Director is unavailable, notify the Houston Environmental staff.
3. Make other necessary notifications (go to *Notifications* tab – Section 4). Reference the Incident Classification tables (Page 5-2) to classify and communicate the incident severity effectively.
 - If the spill was generated due to problems with storage facilities, ensure that the appropriate Reservoir Services staff is notified.

- If the spill cannot be contained due to uncontrolled flow from a well, go to the *Special Needs* tab – Section 16 and implement the *Storage Well Blowout Contingency Plan*.
- 4. If spill enters a body of water (ditch or larger), immediately take samples upstream and downstream from the spill's point of entry.
 - Refrigerate samples and advise Division office that samples have been taken.
- 5. Use the Division's emergency spill response contractor(s), if necessary.
- 6. Use the local Spill Prevention, Control, and Countermeasures (SPCC) plan (go to *Spills* tab – Section 14) or applicable offshore spill response plan. ♦

Threats of Violence – Arson or Bomb Threats

Station, Pipeline, and Storage

While receiving an arson or bomb threat, complete the Arson or Bomb Threat Call Checklist (go to Incoming Emergency Calls tab – Section 2).

1. Using the *Arson or Bomb Threat Call Checklist* as a guide, try to keep the caller on the phone as long as possible.
2. Make notifications (go to *Notifications* tab – Section 4 and then go to the *Notifications* heading). Ensure that Corporate Security has been notified. For threats involving storage facilities, ensure that the appropriate Reservoir Services staff is notified.
3. Inform on-duty employees of the situation and give them instructions.

Does the information received over the phone (such as a detonation time) warrant immediate attention? If yes, follow Steps 4 through 7; if no, proceed to Step 8.

4. Shut down facilities, if appropriate.
5. Evacuate company facilities, as necessary. Employees are to meet at a predetermined location.
6. Notify personnel at the facility's front entrance to stop all voice radio transmissions. Do not use company or citizen band radio units or cellular phones within 500 feet from any plant structure or facility.
7. Notify all appropriate authorities including fire department or police.
8. Install temporary lighting at entrance and in areas containing combustible materials, as appropriate.

9. Organize and conduct a thorough search of the facility, using whatever assistance is available from outside agencies.

Note: Army bomb disposal units normally will not participate in searching for the bomb and will agree only to remove the bomb after the local law enforcement agency verifies that a bomb has been found.

- Use company personnel most familiar with the area and trained bomb search and disposal personnel. Divide and subdivide area for searching.

Note: No radio frequency transmitter (i.e. handheld radios, cellular phones, two-way pagers, etc.) can be used in the search area.

- Suspicious or unfamiliar objects should not be touched or removed by any untrained person.
- If a bomb is found, all non-professional searchers should immediately move to a safe area and stand by for additional instructions.

Note: Do not remove or disarm a bomb. This should be left to bomb disposal professionals.

- Open windows and doors if in a building.
- Remove nearby materials that could cause fragmentation.

10. Contact an ambulance service. ♦

Threats of Violence – Extortion/Terrorism

Station, Pipeline, and Storage

While receiving an extortion or terrorist threat, complete the Extortion/Terrorist Call Checklist (go to Incoming Emergency Calls tab—Section 2).

1. Using the *Extortion/Terrorist Call Checklist* as a guide, try to keep the caller on the phone as long as possible. Complete as much of the checklist as possible.
2. Make notifications (go to *Notifications* tab – Section 4 and then to the *Notifications* heading). Ensure that Corporate Security has been notified. For threats involving storage facilities, ensure that the appropriate Reservoir Services staff is notified.
3. Inform on-duty employees of the situation and give them instructions.
4. Take steps to ensure the safety of personnel at the site.
5. Evacuate company facilities as necessary. Employees are to meet at a predetermined location.

6. Contact local law authorities for assistance.
7. Work in conjunction with Corporate Security and local law authorities to resolve the extortion threat.
8. Where applicable, implement appropriate threat level condition of Site Specific Security Plan or Critical Site Security Plan. ♦

Uncontrolled Flow from a Storage Well

Storage

If notified by phone (otherwise proceed to Step 2 below):

1. Gather all critical information using the *Incoming Emergency Calls* form (go to *Incoming Emergency Calls* tab – Section 2).
2. Investigate pressures and flows on system to determine whether any major changes indicate storage well problems.

If pressures and flows indicate storage well problems:

- a. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
- b. Dispatch personnel to locate the scene of the incident and act as the On-Scene Coordinator (secure the site, determine injuries, render EMS help, survey and report damage at scene, preserve the scene, etc).
- c. Make necessary notifications (go to *Notifications* tab—Section 4). Reference the Incident Classification tables (Page 5-2) to effectively classify and communicate the incident severity.
- d. If the problem is determined to be uncontrolled flow from a storage well, go to the *Special Needs* tab – Section 16 and implement the *Storage Well Blowout Contingency Plan*.
- e. Report all injuries, property damage, and relevant information to the Division Director.
- f. If applicable, contact Aviation and have them contact the closest FAA office to advise of any restrictions that need to be placed on airspace.

If the pressures and flows do not indicate storage well problems:

- a. If the cause of the incident is unknown, proceed with caution until the threat of terrorism can be specifically discounted.
- b. Dispatch personnel to investigate reported incident.
- c. If the incident is determined to involve El Paso facilities, go to Step 2c above.
- d. If it is determined that El Paso facilities are not involved, make notifications to the responsible parties. If the owners of the facilities cannot be notified, contact the local authorities regarding nature of problem. Ensure that either the responsible party or the fire department is dealing with the incident. Document organization name, contact name, title, phone number, and time of discussion in the section marked *Company Response* at the bottom of the *Incoming Emergency Calls* form (refer to Page 2-3).
- e. Through consultation with Gas Control and utilization of the *Emergency Procedures* (refer to Page 3-1), be prepared to isolate facilities if the incident escalates to the point that it affects company facilities. ♦

**Attachment B: O&M Procedure 1970,
EPPG Section 603 - Emergency Plan / Notification and Investigation**

1. Section 603 - Emergency Plan / Notification and Investigation

Scope

These procedures provide requirements for written emergency procedures for pipelines and plants. These procedures also provide requirements to acquaint and instruct operating employees with those emergency procedures. Requirements for liaison activities with emergency officials are contained in the Company's [Public Awareness Plan](#) and are not addressed in this Section.

Definition

An "emergency" is defined as an unforeseen combination of circumstances which call for immediate action to assure the safety of the general public and minimize the time requirements necessary to isolate, blow down, repair, and reactivate affected facilities.

Procedures

1. Emergency operating procedures shall be prepared for facilities maintained and operated by the individual pipeline districts and plants within each location. Specific emergency operating procedures are located in the [Emergency Operating Procedures \(EOP\)](#).
2. A review of each section of the emergency procedures will be made at intervals not to exceed 15 months, but at least each calendar year for the purpose of making corrections, modifications, and additions to the procedures, responsibilities, and notification.
3. A review of the effectiveness of the procedures will be assessed by supervision directly following an emergency or after any failure.
4. Modifications or additions will be sent to the appropriate Codes and Standards representative. Codes and Standards will assist with any revisions and distribution.
5. The location supervisor will be furnished with the latest edition of the pipeline and plant emergency response procedures.
6. The appropriate location employees¹ will be trained once each calendar year in the pipeline or plant emergency operating procedures. The methods of training (instruction, discussion, testing, emergency simulation, review of actual emergency, etc.), the dates of training, the instructors, and the trainees present will be documented. Training should be conducted at least once each calendar year and reviewed with all Area employees. A copy of the documentation will be filed at the designated location.
7. Any deficiencies identified in emergency procedures will be reported immediately to Codes and Standards for modification of the procedures. The location supervisor will identify deficiencies in emergency training and take corrective action as needed. Any deficiencies in the training or performance problems will be the responsibility of local supervision.
8. Emergency operating procedures will be followed for classifying, making notifications, and filing reports of leaks and failures.
9. All leaks and failures reportable telephonically to the National Response Center in accordance with [O&M Procedure 159 – Emergency Reporting and Investigation](#) will be investigated to determine the cause of failure and make recommendations to minimize or eliminate the chance of recurrence. The following procedures will be followed:
 - a) Upon notification by Codes and Standards that an incident must be investigated, the location supervisor will ensure that all physical evidence is preserved intact and secure from tampering or deterioration. Evidence may not be released to state or local governmental agencies without due process of law. The Legal Department should be notified if questions of custody arise.
 - b) The location supervisor will ensure that all pertinent information is recorded and that appropriate corrosion and metallurgical employees are notified and consulted.
 - c) A metallurgist and/or senior corrosion specialist or coordinator should examine the failed specimen as soon as possible, take or arrange for photographs, and determine the requirements for preservation, sectioning, shipping, storage and initial laboratory testing. If a fracture is short, it may be practical to

¹ An employee is an individual that performs work on behalf of the Company either as a direct employee or a contractor.

O&M PROCEDURE

remove the entire specimen for examination. In the case of a long fracture, at least five (5) feet of pipe on either side of the origin should be sent for initial analysis and the remainder retained in case further examination is warranted. The direction of gas flow, location of the top or bottom of the pipe, and fracture origin (if determinable in the field) should be marked.

- d) Soil samples should be taken from the area of the fracture origin in cases where corrosion, stress corrosion cracking, or hydrogen induced cracking is suspected.
- e) The applicable Vice President, in consultation with the applicable Division Director, will appoint a team to investigate and report in writing on the probable cause of the incident and make recommendations to prevent a recurrence. The team may include metallurgical or corrosion employees, as appropriate, and will be assisted by Codes and Standards. The team report may incorporate any metallurgical or other laboratory reports or analyses, and should include consideration of background or historical material, relevant operational factors, involvement of the gas controllers, and emergency response.

10. When the possibility exists that an individual's performance could have contributed to an incident, the location supervisor shall contact Codes and Standards for assistance in determining if the provisions of the [Operator Qualification Program](#) or the Drug and Alcohol Misuse Prevention Plan are applicable.

Responsibilities

1. Each location supervisor shall be responsible for the following:
 - a) Maintaining copies of the plan in a current status;
 - b) Annually reviewing the plan and submitting any necessary revisions to Codes and Standards;
 - c) Verifying the effectiveness of emergency training;
 - d) Acquainting appropriate operating and maintenance employees with procedures; and
 - e) Ensuring that all physical evidence is preserved intact and secure from tampering or deterioration and that appropriate corrosion and metallurgical employees are notified and consulted immediately following a pipeline accident or failure.
2. Codes and Standards shall be responsible for the following:
 - a) Monitoring Codes and Standards of all aspects of the plan;
 - b) Monitoring annual review of the plan; and
 - c) Revising and distributing the plan.
3. The team established in 9.e. shall provide a copy of all investigation reports to the initial requestor and to the Director of Codes and Standards.

Records

1. Emergency operating procedures will be maintained on file at all affected locations as required in Chapter 1 of the [Emergency Operating Procedures \(EOP\)](#) under "Manual Assignment."
2. Documentation of the review of the effectiveness of the procedures directly following an emergency or after any failure and of the verification of the effectiveness of emergency training will be captured on the [Emergency Response Evaluation](#) form.
3. The Emergency Response Evaluation forms shall be maintained at the location for five (5) years.

References

- 49 CFR §§ 192.615, 192.617, 192.605(e) and 49 CFR Part 191
- API RP 1162
- Emergency Operating Procedures (EOP)

Attachment C: Training Documentation

Preventive Maintenance

Bulletins (0)

Go To

Reports

epReports

Start Center

Profile

Sign Out

Help

40 PMs Find: Select Action Seasonal Dates Job Plan Sequence PM Hierarchy Generated Workorders

PM # 454143 Emergency/Operations Manual (EOP) Training for "A" Building Contractors

Openwo?

Site TGP Status ACTIVE Attachments

Location 40 STA District 40 Station Facilities
Asset
Parent
Route
Geo Loc D40-STA-40 Compressor Station 40
Division GC
Area NATCHITOCHI
Job Plan OM115 EMERGENCY PLAN REVIEW/ AND PROCEDURES

Resource Planning/Responsibility
Ops. Supv. SNR4433
Scheduler SNR4433
Copy Res Hrs & Labor to PM WO?
Justification for Planning Hour Override:

Responsible Person SNR4433
Lead Craft OPERATNS
Work Group
CJP Standard Hrs. 1.00
PM Number of Units 1.00
CJP Unit of Measure
Employee 1.00
Calculated Total Std Hrs.
PM Override Planned Hrs.
Site Specific Crew Size 1
Outage Required?

Job Plan Has Op Qualifications
Use this PM to Trigger PM Hierarchy?
Has Children?
Last Changed SNR4433
Change Date 8/30/12 6:23 AM

Work Order Information
Work Type RE
Work Order Status WSCH
Priority 2

Child Work Orders and Tasks Will Inherit Status Changes?
Generate WO Based on Meter Reading (Do Not Estimate)?
Generate WO When Meter Frequency is Reached?

Compliance
Last Start Date
Set Last Comp Date
NTE Compliance Date 11/1/12
First Start Date
Use Target Start?

Frequency Information
Time Based

Frequency 1
Frequency Units YEARS
Estimated Next Due Date 11/1/12
Fixed Compliance Date
NTE Frequency 13
NTE Frequency Units MONTHS
Lead Time (Days) 30

Meter Based - Meter 1

Meter Name
Frequency
Units to Go 0.00
Current Hours
Average Hours/Day
Reading at Last WO
Date of Last WO

Meter Based - Meter 2

Meter Name
Frequency
Units to Go 0.00
Current Hours
Average Hours/Day
Reading at Last WO
Estimated Next Due Date

Agency Ref PHMSA
Manual Ref
Policy Ref OM603
Sequenced?
Counter 0

Tennessee Gas Pipeline -Station 40, Natchitoches, La

Directive to Contract Building Operators

Applicability-Yearly, each Contract A Building Operators; Scope of Response to A Building Gas Detection Alarms

Information required of understanding-

- **Lower Explosive Limit (LEL):** The lowest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (arc, flame, heat).
 - **The LEL of natural gas in air is approximately 5%**
 - At concentration of natural gas in air below the LEL (5%), there is not enough fuel to continue an explosion.
 - Concentrations lower than the LEL are "too lean" to explode.
- **Upper Explosive Limit (UEL):** Highest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (arc, flame, heat)
 - **The UEL of natural gas in air is approximately 15%.**
 - At a concentration higher than 15% of gas in air above the UEL are "too rich" to burn.
- In that natural gas is lighter than air, any leakage in the gas piping would be expected to rise toward the ceiling of the building.
- The roof is designed for natural ventilation. Any natural gas escaping the piping would rise and exit the building at the vent located at the apex of the roof.

A Building-Gas Detection System

- The gas detection system in A Building will provide 2 intermittent horn blasts when the detected concentration of gas in air is at 20% of the lower explosive limit; approximately 1% gas in the air.
- The gas detection system in A Building will provide 3 intermittent horn blasts when the detected concentration of gas in air is at 40% of the lower explosive limit; approximately 2% gas in the air.
- The detectors are located in the ceiling of the building and are generally located above the compressors.

Response to a 20% LEL Audible Alarm-2 intermittent horn blast-

Expected Response-You are authorized and expected to perform the following-

- If in addition to the 2 intermittent horn blast there exist any sounds of gas escaping, immediately exit "A" Building, and initiate an emergency shutdown at one of the 3 ESD Control Stations located at the Facility.
- If there is no indications of loud sounds of gas escaping, exit the building and initiate the "A" Building Fuel Gas Shutdown.
- Go to the main office conference room and stand by while making contact with the Company PIC.
- Do not attempt to reenter the building until cleared by Company personnel who will perform a planned investigation.

Response to a 40% LEL Audible Alarm-3 intermittent horn blast-

- Initiate an emergency shutdown at one of the 3 ESD Control Stations located at the Facility.
- Go to the main office conference room and stand by while making contact with the Company PIC or exit the plant at the emergency exit gate at the main entrance.
- Do not reenter the building until cleared by Company personnel who will perform a planned investigation.

By signature below; you are stipulating that you are knowledgeable of the location and operation of the A Building Fuel Gas Shutdown control stations and have been trained to operate the mechanism. Also by signature below, you are stipulating that you are knowledgeable of the location and operation of the Stations Emergency Shutdown Control valves.

Date and Sign

11-20-2011 Bobby Jones

Copy placed in file to be maintained by Operations Supervisor.

Tennessee Gas Pipeline -Station 40, Natchitoches, La

Directive to Contract Building Operators

Applicability-Yearly, each Contract A Building Operators; Scope of Response to A Building Gas Detection Alarms

Information required of understanding-

- **Lower Explosive Limit (LEL):** The lowest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (arc, flame, heat).
 - **The LEL of natural gas in air is approximately 5%**
 - At concentration of natural gas in air below the LEL (5%), there is not enough fuel to continue an explosion.
 - Concentrations lower than the LEL are "too lean" to explode.
- **Upper Explosive Limit (UEL):** Highest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (arc, flame, heat)
 - **The UEL of natural gas in air is approximately 15%.**
 - At a concentration higher than 15% of gas in air above the UEL are "too rich" to burn.
- In that natural gas is lighter than air, any leakage in the gas piping would be expected to rise toward the ceiling of the building.
- The roof is designed for natural ventilation. Any natural gas escaping the piping would rise and exit the building at the vent located at the apex of the roof.

A Building-Gas Detection System

- The gas detection system in A Building will provide 2 intermittent horn blasts when the detected concentration of gas in air is at 20% of the lower explosive limit; approximately 1% gas in the air.
- The gas detection system in A Building will provide 3 intermittent horn blasts when the detected concentration of gas in air is at 40% of the lower explosive limit; approximately 2% gas in the air.
- The detectors are located in the ceiling of the building and are generally located above the compressors.

Response to a 20% LEL Audible Alarm-2 intermittent horn blast-

Expected Response-You are authorized and expected to perform the following-

- If in addition to the 2 intermittent horn blast there exist any sounds of gas escaping, immediately exit "A" Building, and initiate an emergency shutdown at one of the 3 ESD Control Stations located at the Facility.
- If there is no indications of loud sounds of gas escaping, exit the building and initiate the "A" Building Fuel Gas Shutdown.
- Go to the main office conference room and stand by while making contact with the Company PIC.
- Do not attempt to reenter the building until cleared by Company personnel who will perform a planned investigation.

Response to a 40% LEL Audible Alarm-3 intermittent horn blast-

- Initiate an emergency shutdown at one of the 3 ESD Control Stations located at the Facility.
- Go to the main office conference room and stand by while making contact with the Company PIC or exit the plant at the emergency exit gate at the main entrance.
- Do not reenter the building until cleared by Company personnel who will perform a planned investigation.

By signature below; you are stipulating that you are knowledgeable of the location and operation of the A Building Fuel Gas Shutdown control stations and have been trained to operate the mechanism. Also by signature below, you are stipulating that you are knowledgeable of the location and operation of the Stations Emergency Shutdown Control valves.

Date and Sign

11/11/2011

Major S. Fisher

Copy placed in file to be maintained by Operations Supervisor.