

# **Pipeline Safety**

## ***Topics of Discussion***

### **2015**

*Leo Haynos, Chief of Gas Operations & Pipeline Safety*



**[www.kcc.ks.gov](http://www.kcc.ks.gov)**

- **2011-2014 Presentations also available.**
- **Other presentations available from past years, but not on website.**

# Discussion of Current Topics Related to Pipeline Safety Regulations

## GOALS

- *Discuss questions derived from Staff field observations related to regulation.*
- *Receive input from operators.*
- *Official interpretations will be issued in writing.*
- *Vetted through operators and PHMSA.*

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# PHMSA Explanation of Concepts: Staff Manuals and Instructions Enforcement Guidance

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- <http://phmsa.dot.gov/foia/e-reading-room>
  - [O-M Enforcement Guidance Part 192 \(12 1 2014\)](#)
  - [Corrosion Enforcement Guidance Part 192 \(12 9 2014\)](#)
  - [Public Awareness Enforcement Guidance Part 195 \(11 29 2013\)](#)
  - [Gas IMP Protocols with Guidance](#)
  - [OQ Enforcement Guidance \(6 24 2014\)](#)
  - And more....



# PHMSA Explanation of Concepts: Policy Statements Pipeline Interpretations

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- <http://phmsa.dot.gov/foia/e-reading-room> or
- <http://phmsa.dot.gov/pipeline/regs/interps>
- Allows searching by topic or by year (but not by both)
- All interpretations prior to September 2015
  - Gas gathering 843 related searches
  - Wide variations; odorization (192.625(e))

# PHMSA Online Data Entry

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- <http://phmsa.dot.gov/resources/e-forms>
  - And follow links
  - Any questions or problems, call KCC staff and we can help you get proper contacts.

# American Public Gas Assn. Security & Integrity Foundation APGA-SIF

- [www.apgasif.org](http://www.apgasif.org)
  - SHRIMP Program for Distribution Integrity Management
  - Drug and Alcohol Program
  - Operations and Maintenance Procedures
  - Operator Qualification Training and Evaluations

# 2015 Inspection Results to Date

Count	Reg Number	Reg Short Description
12	192.615	Emergency Plans (liaison with public officials)
9	192.625	Odorization of Gas (monthly records)
9	192.703	General Maintenance Requirements (Leak Classification)
8	192.465	External Corrosion Control Monitoring (corrective action in 30 days)
7	192.459	Examination of Pipe when Exposed
5	192.475	Internal Corrosion Control
5	192.605	Procedural Manual for O&M (periodic reviews; incomplete procedures.)

# Liaison with public officials

192.615(c) Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to:

- (1) **Learn** the responsibility and resources of each government organization that may respond to a gas pipeline emergency;
- (2) **Acquaint** the official with the operator's ability in responding to a gas pipeline emergency;
- (3) **Identify** the types of gas pipeline emergencies of which the operator notifies the officials; and
- (4) **Plan** how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

# Bell Hole and Internal Corrosion

- If Steel pipe is exposed:
  - §192.459: Whenever an operator has knowledge that any portion of a buried pipeline is exposed, the exposed portion must be examined for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated.
  - 192.475: (b) Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion.
  
- If Plastic Pipe is exposed:
  - 192.1007: Knowledge. An operator must demonstrate an understanding of its gas distribution system developed from reasonably available information.
    - (2) Consider the information gained from past design, operations, and maintenance.
    - (3) Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline

# Questions from Inspections

- **§192.605 Procedural manual for operations, maintenance, and emergencies**
  - b) ...The manual required by paragraph (a) of this section must include procedures for the following...
  - (8) Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation and maintenance and modifying the procedures when deficiencies are found.
- **How often is periodic?**

# Questions from Inspections

- **§192.605 Procedural manual for operations, maintenance, and emergencies**
- **How often is periodic?**
  - **Once per year unless you find a problem earlier.**
  - Need a procedure (a step-by-step plan) on reviewing the effectiveness of your other procedures.
  - 192.605(a) Kansas rule requires annual review of O&M.



# Questions from Inspections

- **192.707 Line markers for mains and transmission lines.**
  - (a) Buried pipelines. ...a line marker must be placed and maintained as close as practical over each buried main and transmission line:
  - (2) Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.
  - (c) Pipelines aboveground. Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public.
- **How far to space line markers especially above ground mains? (Example Some rural piping installed before 1989; gathering lines)**

# Questions from Inspections

- **192.707 Line markers for mains and transmission lines.**
- **How far to space line markers especially above ground mains? (Example Some rural piping installed before 1989; gathering lines)**
  - ***Pipeline*** means all parts of those physical facilities through which gas moves in transportation...
  - Signs in general are required to be in line-of-sight from one sign to the next per PHMSA interpretation.
  - To reduce possibility of damage consider signs particularly at erosion cuts where a mower might catch the line.
  - Check with Hwy dept if pipeline is in their ROW.
  - Don't forget other aboveground pipe (valves, regulator stations) meet the definition of pipeline as well.

# Questions from Inspections

- **§192.241 Inspection and test of welds.**
- (a) Visual inspection of welding must be conducted by an individual qualified by appropriate training and experience to ensure that:
  - (1) The welding is performed in accordance with the welding procedure; and
  - (2) The weld is acceptable under paragraph (c) of this section.
- **What is appropriate training?**
- **What documentation do operators need?**

# Questions from Inspections

- **§192.241 Inspection and test of welds.**
- **What is appropriate training? What documentation do operators need?**
  - Know your welding procedure; document how you will inspect a welder.
  - Your welding procedures set out the parameters that you need to verify during the welding process:
    - volts, amps, run-out-ratios, verify electrode, verify weld bevel.
    - Document those parameters
  - **API 1104 data on visual inspections.**

# Questions from Inspections

- **§192.751 Prevention of accidental ignition.**
- Each operator shall take steps to minimize the danger of accidental ignition of gas in any structure or area where the presence of gas constitutes a hazard of fire or explosion, including the following:
  - (c) Post warning signs, where appropriate.

**Are warning signs needed on District Regulator Stations?  
What should they state Flammable, No Smoking?**

# Questions from Inspections

- **§192.751 Prevention of accidental ignition.**  
**Are warning signs needed on District Regulator Stations?**  
**What should they state Flammable, No Smoking?**
- Can gas concentration be expected to build to above the LEL?
  - Meter building?
- May depend on the size of the station.

# Questions from Inspections

## **§192.805 Qualification program.**

- **Each operator's written qualification program shall include provisions to:**
  - (i) Notify the KCC if the operator significantly modifies the program after the KCC has verified that it complies with this section.

**What is a significant change?**

# Questions from Inspections

- **What is a significant change?**
- Plan includes provisions – you decide what is significant and note it in your plan.
- Examples...
  - New evaluation method(s)
  - New vendor providing plan and testing
  - Mergers, system expansion



# Questions from Inspections

- **Kansas One-Call**
- Each tier 2 member shall maintain for at least two years all information provided by the excavator.
- **How long should Tier 1 members (gas, electric) keep information provided by the contractor?**

# Questions from Inspections

- **How long should Tier 1 members (gas, electric) keep information provided by the contractor?**
- Notification Center keeps ticket information for you.
- Should keep information locate performed in order to demonstrate locate was completed.
  - Small operators usually write notes regarding locate performed on back of ticket.

# Questions from Inspections

## **§192.465 External corrosion control: Monitoring.**

(d) Each operator shall begin corrective measures within 30 days, or more promptly if necessary, on any deficiencies indicated by the monitoring.

- **How can you be expected to correct CP deficiencies within 30 days?**

# Questions from Inspections

- **How can you be expected to correct CP deficiencies within 30 days?**
- Rule says you need to ***begin*** correcting deficiencies within 30 days or more promptly if necessary.
  - Develop a plan with an end date to complete corrections.
  - Send out requests for bids to contractors.
  - Conduct special surveys to better define the problem at hand.

# Questions from Inspections

## **§192.615 Emergency plans. Emergency training provided**

(b) Each operator shall... Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.

- **Small operators, have a hard time with the emergency training. Do they need to go get training? Can they train themselves to meet this question?**

# Questions from Inspections

**Small operators, have a hard time with the emergency training. Do they need to go get training? Can they train themselves to meet this question?**

- Outside training is advisable.
  - KCC putting on 1 day training seminars around state.
    - Sawyer; Moundridge; Chanute; NE Kansas.
    - Anyone can attend – not just munis.
  - KMU also offers training.
  - Larger gas companies may allow you to train with them.
  - Train with fire departments– they are the backup for one man operations.
  - Know your procedure. If you don't understand it, seek outside help.

# Questions from Inspections

**Currently we require our techs to gain entry into a dwelling when responding to a leak investigation call. If gas is found at the foundation (class 1) and the customer is not home, we require them to call 911 and get assistance to gain entry and perform free air readings.**

**Is this required or referenced? If no gas is found at the foundation, could a person simply shut off the gas and perform an inside leak investigation when the customer returns home?**

# Questions from Inspections

**It's your procedure, so you get to decide what is the best way to protect your customer, the public, and your company.**

## **§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 (i) Gas detected inside or near a building.**



# Questions from Inspections

**(3) Prompt and effective response to a notice of each type of emergency, including (i) Gas detected inside or near a building.**

- **The procedure will need to address how you provide prompt and effective response to gas detected inside or near a building.**
  - **If gas is against the foundation, then you have to assume it may be inside as well.**
  - **Entry would be required even if you shut the meter off.**
  - **If you used a purger to pull the gas back from the foundation, I think entry would still be required because you don't know if the house is clear.**
- **If the leak zeroes out well before the foundation, the house is probably clear and entry may not be necessary. If you shut off the gas, relights may be necessary though.**

# Question and Answer Initiative

- Accept questions anonymously over the website.
- Discuss with KCC Staff and provide our opinion through email to Gas Operator service list. Once per month?
- Compile comments and discuss feedback through emails.
- Goal is to initiate discussion.
- **Any official question/response will be provided in writing.**

# New Regulations Highlights

## Expanding Use of Excess Flow Valves

- Multi-family residences and single, small commercial customer with known customer loads not exceeding 1,000 SCFH per service, at time of service installation.
- Must install a manual service line shut-off valve for any new or replaced service line, with installed meter capacity exceeding 1,000 SCFH in such a way to allow accessibility during emergencies.
- each operator must provide written notification to the customer of their right to request the installation of an EFV within 90 days of the customer first receiving gas at a particular location.

# New Regulations Highlights

- Miscellaneous Rulemaking: Effective 10-1-2015
  - **Some** of the Proposals Addressed in this Final Rule
  - Leak Surveys for Gathering Lines;
  - Qualifying Plastic Pipe Joiners;
  - National Pipeline Mapping System;
  - Welders vs. Welding Operators;
  - Components Fabricated by Welding; and
  - Editorial Amendments.

# New Regulations Highlights

- Miscellaneous Rulemaking: Effective 10-1-2015
  - Leak Surveys for Gathering Lines as per 703(c);
    - KS more stringent than PHMSA for 703(c).
  - Qualifying Plastic Pipe Joiners;
    - Qualify once per year or if fusion fails-192.285
  - National Pipeline Mapping System;
    - Must provide Geospatial data appropriate for NPMS as per the NPMS Operator Standards Manual.
  - Welders vs. Welding Operators;
  - Components Fabricated by Welding; and
  - Editorial Amendments.

# New Regulations Highlights

- Miscellaneous Rulemaking: Effective 10-1-2015
  - Welder Qualifications
    - Added ability to qualify under section 12 or Appendix A of API Std 1104.
  - Revise § 192.305 to specify that a transmission pipeline or main cannot be inspected by someone who participated in its construction. **EFFECTIVE DATE DELAYED INDEFINITELY 9-30-15.**

# New Regulations Highlights

- Revise § 192.305 to specify that a transmission pipeline or main cannot be inspected by someone who participated in its construction. **EFFECTIVE DATE DELAYED INDEFINITELY 9-30-15.**
- Operator personnel shall not perform a required inspection if that person performed the construction task requiring inspection but another person working for the operator may perform the task.
- NAPSRS and APGA asked for reconsideration

# 192.305 amendment postponed

- Operator personnel shall not perform a required inspection if that person performed the construction task requiring inspection but another person working for the operator may perform the task.
- NAPSRS and APGA asked for reconsideration
- NAPSRS: allowing contractor personnel to inspect the work performed by their own company does not remove the inherent conflict of interest... NAPSRS stated that its original resolution would have prohibited contractors from self-inspecting their own work.
- APGA: May impose significant costs on municipal systems with little corresponding safety benefit. If a utility has only one qualified crew that works together to construct distribution mains, there would not be anyone working for the utility available and qualified to perform the inspection.



# New Regulations Highlights

- Miscellaneous Proposed Rulemaking
  - OQ for construction, OQ effectiveness, qualified evaluators.
  - OQ for Gathering Lines.
  - Exclude farm taps from DIMP.
  - Require testing of farm tap pressure regulators
  - Modify Drug Testing Requirements.
  - Reference Appendix B for API 1104.
  - CRM: The roles, responsibilities and qualifications of others with the authority to direct or supersede the specific technical actions of a controller.

# Farm Tap Pressure Regulators

- **All farm taps excluded from DIMP Requirements**
- Each pressure regulating/limiting device, relief device, automatic shutoff device, and associated equipment must be inspected and tested at least once every 3 calendar years, not exceeding 39 months.
  - In good mechanical condition; Adequate capacity and reliability for the service in which it is employed; Set to control or relieve at the correct pressure; and to limit the pressure on the inlet of the service regulator to 60 psi
- ***Excludes distribution lines only serving irrigation load.***
  - ***No mention in regulation as to why irrigation is singled out.***

# Type B Gas Gathering Lines

- Establish and implement an operator qualification program; (Proposed)
- Conduct leakage surveys using leak detection equipment and promptly repair hazardous leaks that are discovered.
  - Effective 10-1-2015.

Leo Haynos  
Chief of Gas Operations &  
Pipeline Safety

[l.haynos@kcc.ks.gov](mailto:l.haynos@kcc.ks.gov)

785-271-3278

