

# Pipeline Safety

## *Topics of Discussion*

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# Discussion of Current Topics Related to Pipeline Safety Regulations

## GOALS

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

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# Definition of a Procedure

- ***192.605(a) Each operator shall prepare and follow a manual of written procedures for conducting operations and maintenance activities and for emergency response.***
- ***192.13(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.***

# Definition of a Procedure

- ***Procedure means:***
  - ***a fixed, step-by-step sequence of activities or course of action.***
  - ***Has definite start and end points.***
  - ***Steps must be followed in the same order to correctly perform a task.***

# Definition of a Procedure

- *Procedures give steps on HOW to do something.*
  - *It's more than just a definition.*
- *Procedures must provide enough detail to be consistently applied by operating personnel.*
- *If there is no consistent application, the procedure may need to be rewritten.*
- *See [www.apgasif.org](http://www.apgasif.org) for O&M procedures*

# Definition of a Procedure

- **Does every task require a written procedure?**
  - *Depends on the complexity of the task.*
- *If the task is not done correctly, probably needs a procedure.*
- *If the task is complex –needs a procedure.*
  - *For example– tie-in and activation of pipelines.*
- **192.605(a) Each operator shall prepare and follow a manual of written procedures for conducting operations and maintenance activities and for emergency response.**



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

- <http://phmsa.dot.gov/foia/e-reading-room>
  - [O-M Enforcement Guidance Part 192 \(12 7 2011\)](#)
  - [Corrosion Enforcement Guidance Part 192 \(12 9 2011\)](#)
  - [Public Awareness Enforcement Guidance Part 195 \(7 27 2011\)](#)
  - [Gas IMP Protocols with Guidance](#)
  - [OQ Enforcement Guidance \(7 6 2011\)](#)
  - And more....

# Enforcement Guidance Examples

- <http://phmsa.dot.gov/foia/e-reading-room>
  - [O-M Enforcement Guidance Part 192 \(12 7 2011\)](#)
  - Includes interpretation summaries by code section.
- A 'business district' is an area marked by a distinguishing characteristic of being used in the conducting of buying and selling commodities and service, and related transactions. A 'business district' would normally be associated with the assembly of people in shops, offices and the like in the conduct of such business.

# PHMSA Explanation of Concepts: Policy Statements Pipeline Interpretations

- <http://phmsa.dot.gov/foia/e-reading-room> or
- <http://phmsa.dot.gov/pipeline/regs/interps>
  
- **Allows searching by topic**
- **All interpretations prior to 2011**
- **Interesting searches:**
  - **Large volume customer; definition of transmission.**
  - **Wide variations; odorization (192.625(e))**

# Gas Gathering Update

- **Look for rulemaking to begin within six months.**
- **Possible Ideas:**
  - **Gathering begins at custody transfer point or point of commingling with other production lines.**
  - **Type A gathering would include a diameter threshold instead of a location determination.**
    - **Example: All gathering lines 10” and larger.**

# Gas Gathering Update

- **Possible Ideas:**
  - **Pipe downstream of last compressor may stay gathering as long as:**
    - **Sales point is adjacent to operator's compressor facility.**
    - **Less than one mile in length.**
    - **Does not cross "highway" or railroad.**

# Farm Taps as Distribution Piping

- **Interpretation on USB Stick.**
- **Confirms farm taps are distribution piping.**
- **Indicates there may be some room to exempt farm taps from DIMP program.**
- **Does not remove obligation to meet other distribution piping requirements for farm taps.**

# Kansas Jurisdiction of Yard Lines

- **K.S.A. 66-1,157a. Gas pipelines, responsibility for maintenance..**
- **(b) Except as provided by subsection (c), a public utility, municipal corporation or quasi-municipal corporation which renders gas utility service shall have full responsibility for maintenance of all pipelines that convey gas from a gas main to the outside wall of residential premises which are individually metered ...**

# Kansas Jurisdiction of Yard Lines

- 66-1,157a. Gas pipelines, responsibility for maintenance.
- (c) A city of the third class, or a city having a population of 2,000 or less, which renders gas utility service shall have ***responsibility for inspection of pipelines*** described in subsection (b) but shall *not* otherwise be responsible for maintenance of such pipelines.



# Kansas Jurisdiction of Yard Lines

- **Kansas Yardline jurisdiction only applies to single family residential customers.**
- **Small towns must inspect yard lines but are not responsible for repair.**
- **Inspection includes emergency response and classifying leaks.**

# Kansas Jurisdiction of Yard Lines

- **K.A.R. 82-11-1 (u) "Yard line" means the buried, customer-owned piping between the outlet of the meter and the building wall.**
- **Will consider altering the definition of yardline to reflect the statute requirements during next regulation rewrite.**
- **192.16 Still requires notice given to all customers with buried customer piping.**

# PHMSA Operator Validation

- Requirement of Part 191.22
- Each operator must have an operator ID on file with PHMSA.
- All existing operators must **VALIDATE** their operator ID by **SEPTEMBER 30, 2012!!**
- [https://opsweb.phmsa.dot.gov/cfdocs/opsapps/pipes/operator\\_registry.cfm?CFID=206602&CFTOKEN=49706635](https://opsweb.phmsa.dot.gov/cfdocs/opsapps/pipes/operator_registry.cfm?CFID=206602&CFTOKEN=49706635)

# Sharing Emergency Plans with Emergency Responders

- **PHMSA reminds pipeline operators of ...the need to share the operator's emergency response plans with emergency responders.**
- **PHMSA recommends that operators provide such information to responders through the operator's liaison and public awareness activities**
- **PHMSA intends to evaluate the extent to which operators have provided local emergency responders with their emergency plans.**

# Sharing Emergency Plans with Emergency Responders

- *Providing emergency plans to emergency officials.*
- – *How much to provide?*
- – *How often to provide?*
- – *How are updates handled?*

# Sharing Emergency Plans with Emergency Responders

- *How much to provide?*
- *Goal of Advisory Bulletin is to maintain an informed relationship with emergency responders.*
  - *Contact information.*
  - *Map of where you operate.*
  - *Types of emergencies that may be anticipated.*
  - *Your procedures and what the responders role will be during your response.*
  - *Summary of any agreements reached during annual liaison of what the responder will do for the emergency.*

# Sharing Emergency Plans with How much to provide?

- Emergency responders should be able to recognize different operations within gas system.
- ***NTSB recommends: require operators to provide system-specific information about their pipeline systems to the emergency response agencies. This information should include:***
  - *pipe diameter*
  - *operating pressure*
  - *product transported, and*
  - *potential impact radius*

# Sharing Emergency Plans with Emergency Responders

- *Working with Kansas Department of Emergency Management to develop a way to place plans on secure website that can be accessed by emergency responders.*
- **[www.kansaswebeoc.com](http://www.kansaswebeoc.com)**
  - *Set up section under ESF 12 File Library.*
  - *Send Emergency Mgmt. section to KCC for forwarding to KDEM.*
  - *Train county emergency responders on use of webeoc.*
  - *Stay tuned.....*



# Emergency Notification Advisory

- **Advisory Bulletin (ADB–2012–09) (*just issued*)**
- **directly notify the Public Safety Access Point (PSAP) that serves the communities and jurisdictions in which those pipelines are located when there are indications of a pipeline facility emergency.**
- **have the ability to immediately contact PSAP(s) along their pipeline routes if there is an indication of a pipeline facility emergency to determine if the PSAP has information which may help the operator confirm an emergency.**

# Emergency Notification Advisory

- Advisory Bulletin (ADB–2012–09) (*just issued*)
- Operator to INITIATE contact with emergency responders when operator knows of an emergency.
- If SCADA indicates an emergency, operator should be able to contact PSAP to see if the public is reporting anything.

*On the subject of Public Awareness...*

## Notification of Public Officials

- **Drought induced water line breaks significant across Kansas this summer.**
- **Excavation damage to low pressure gas mains while working on an adjacent water line breaks have resulted in significant repair costs from water entering gas system.**
- **Coordinate with water utilities where low pressure gas mains are present.**

# DIMP and Failure Investigation

- **DIMP relies on tracking and analyzing failure (leak) data.**
- **Accuracy of DIMP depends on front line repair crews in providing accurate analysis of what caused the leak.**
- **Type of material, manufacturer, and year of installation typically not available in the field.**
- **Type of material, manufacturer and year important for plastics.**
- **Need process to review and “fill in the blanks” for each leak.**

# DIMP and Failure Investigation Training Needs

- **Leaking Cap on Service Tee:**
  - **Is it an O-ring failure?**
  - **Is it a gasket failure?**
  - **Is it a cap failure?**
  - **Is it a main leak or a Service line leak?**
  - **Is it an operations failure? (overtightening)**
- **Reported data needs to be consistent!**

# DIMP and Failure Investigation

- **Leaks Reported as “OTHER”**
  - **If possible, attempt should be made to identify reason for leak.**
  - **If inserted in old piping, can use “other” as the leak designation but should note that it was inserted.**
  - **For trigger sector calculations, inserted lines are to be considered as corrosion leak**

# DIMP and Threshold Risks

- **Risk = Likelihood of Failure X Consequences of Failure**
- **If minimal leaks on system, likelihood of failure is small.**
- **Don't forget "Consequence" side of the equation!!**

# DIMP and Risk Ranking Example

## Vehicle Damage to Aboveground Piping

- **Risk = Likelihood of Failure X Consequences of Failure**
  - **Few hits = few damages= low likelihood overall.**
  - **Damage next to hospital would be high consequence.**
- **For ranking this threat, consider:**
  - **Segmenting system to consider consequence even if overall chance of damage is low.**



# 192.1007

- **(c) *Evaluate and rank risk....*** This evaluation must consider each applicable *current and potential* threat, the *likelihood* of failure associated with each threat, *and the potential consequences* of such a failure.
- An operator may subdivide its pipeline into regions *with similar characteristics* ...*and* for which *similar actions likely would be effective in reducing risk.*

# Segment Selection

- **Depends on:**
  - **Current Threat**
  - **Potential Threat**
  - **Likelihood**
  - **Consequences**

# Kansas One Call and The Notification Center

- **KS Supreme Court upheld constitutionality of KUUDPA regarding the Call Center.**
- **Kansas One Call is not the Notification Center**
- **KCC Docket 12-GIMX-884-GIV looking for a means of creating the Notification Center as a Public Agency.**
- **More information on webpage under the docket heading.**

# KCC WEBPAGE

- [www.kcc.ks.gov](http://www.kcc.ks.gov)
- Click on Pipeline Safety tab

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

- Click on Pipeline Safety tab
- 2011 Presentations
  - [Keynote Address - Chairman Mark Sievers, KCC](#)
  - [Overview of Kansas topics for Discussion - Leo Haynos, KCC](#)
  - [Leakage Survey Investigation Case Study - Jeff Canady, Pipeline Regulatory Consultants, Inc.](#)
  - [Construction & Pipeline Coatings – PHMSA](#)
  - [Distribution New Construction - Inspection Findings Related to Plastic Materials](#)
  - [Qualification of Personnel Performing New Construction Tasks & the Quality of Installation - NAPSR](#)

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

- 2010 Presentations also available.
- Other presentations available from past years, but not on website.