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


- [Gas IMP Protocols with Guidance](http://phmsa.dot.gov/foia/e-reading-room)
- And more....
Enforcement Guidance Examples

- 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](http://phmsa.dot.gov/foia/e-reading-room) or

- 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!!

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
    - 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!
• 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.
(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

- Click on Pipeline Safety tab
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

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