

PIPELINE SAFETY

What can **YOU** do?

March 2011

TOPICS

- Recent Incidents
 - 6 Major incidents in 5 months
- Local Incidents
 - Atmos & BHE
- Regulations will change!
- Warning signs
- What can **YOU** do?
- Questions?

INTERESTING QUOTES

- It' s not that bad...is it?
- Someone else will figure it out...
- Oh...they do that all the time
- We have done it like that for years and never had a problem
- I know what the policy says, but...
- It would take forever to do it that way!
- That' s not my job, my area, my responsibility
- I' ve told them a hundred times...
- They never listen to me...

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San Bruno, California

- September 9, 2010
- Pacific Gas and Electric (PG&E)
- 30” transmission line erupts
- 1956 vintage coated and wrapped, cathodically protected line
- 400 psig MAOP
- [San Bruno](#)
- **8 people died, 60 people injured, over 55 homes damaged or destroyed**
- Apparent cause – Operator oversight (inaccurate records), defective seam, pressure spiking
- The ruptured pipe segment was constructed of five sections of pipe, some of which were short pieces measuring about four feet long. Records indicated the pipe was seamless when it was not.
- NTSB Chairman Hersman said, “This accident has exposed issues that merit further attention and have implications for the pipeline infrastructure throughout the country.” Pointed a need for “a new perspective on safety culture.”

WAYNE, MICHIGAN

- December 29, 2010
- Consumers Energy
- Furniture store explodes
- **2 people died, 1 person injured**
- Apparent cause – Unknown, but two leaks found near the store
- Consumers Energy had employees 2 blocks away responding to gas leaks in the area when the explosion happened.

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Philadelphia, Pennsylvania

- January 19, 2011
- Philadelphia Gas Works (PGW)
- Nations largest municipality
- 12” distribution line erupts
- High pressure
- [Philly](#)
- **19 year old Utility worker died, 5 injured, 3 buildings destroyed**
- Apparent cause – Unknown, suspect static, third party damage, water line
- Explosion happened 1 hour after responding as crews were trying to repair the gas main break

Fairport Harbor, Ohio

- January 24, 2011
- Dominion Gas
- Overpressure of LP system ignites multiple homes
- [Ohio](#)
- 18 – 20 homes damaged, remarkably there are no injuries
- Apparent Cause – DRS failure creates overpressure of ounce system

Allentown, Pennsylvania

- February 9, 2011
- UGI Utilities
- 12” Cast Iron main
- 1928 vintage low pressure (quarter pound) main
- [Allentown](#)
- **5 people died including 4 month old boy and 16 year old girl**
- 8 homes destroyed and 47 more damaged
- Apparent cause – Crack in cast iron mainline
- Took 5 hours to shut the line off
- Leak survey was completed less than 48 hours prior to the incident and showed no leaks

Hanoverton, Ohio

- February 11, 2011
- El Paso Corporation
- 36” transmission line
- 1960’ s vintage
- The explosion, involving Tennessee Gas Pipeline equipment, took place in a rural area about 50 miles northwest of Pittsburgh, Pennsylvania. Gas lines feeding the fire were shut down around midnight, as fire crews put out brush fires in the area.
- Nobody was injured
- One home was damaged
- Apparent cause – Unknown

Two Kansas Incidents in 7 Days

September 22, 2010

- Atmos Energy
- Easton, KS
- Two employees injured while working in bell hole
- [Easton](#)
- Two company employees burned
- Apparent cause – static

September 28, 2010

- Black Hills Energy
- Andale, KS
- Hit service line ignited and injures two contract employees
- Apparent Cause, static (Contractor did not follow procedures)
- Discovered weakness in OQ monitoring and emergency response training

POTENTIAL REGULATION CHANGES

- **NTSB** – National Transportation Safety Board
- **PHMSA** – Pipeline and Hazardous Materials Safety Administration

As a result of San Bruno incident:

- PHMSA issues Advisory Bulletin
 - Urges all pipeline operators to aggressively & diligently search documents and records relating to pipeline system components
 - Especially in class 3 and 4 areas along with HCA areas in class 1 or 2 locations
- NTSB issued 7 safety recommendations (6 urgent) to PG&E
 - Complete an intensive record search
 - Determine MAOP as a result of that search
 - If MAOP cannot be validated, test the pipe
 - Three other notification requirements to federal and state agencies

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CHANGES ARE COMING

- San Bruno public hearing were held March 1st through 3rd
- First time a hearing has been conducted since the 2000 Carlsbad, NM explosion that killed 12 (internal corrosion)
- Remember the changes to Kansas regulations in 1988/1989?
 - 25% bare
 - utility responsible to building wall
 - class two leaks repaired in 6 months
- DIMP by August 2, 2011
- Potential Legislation...
 - HCA expanded to all class 3 & 4 areas
 - Smart pigging
 - Automatic shut-off valves
 - Reduction in MAOP
 - Replacement

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WARNING SIGNS

- It' s not that bad...is it?
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- We have done it like that for years and never had a problem
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ØHeed the warning signs and take action

ØIf someone is not following the rules, stop them!

ØYOU have the authority

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What Can YOU Do?

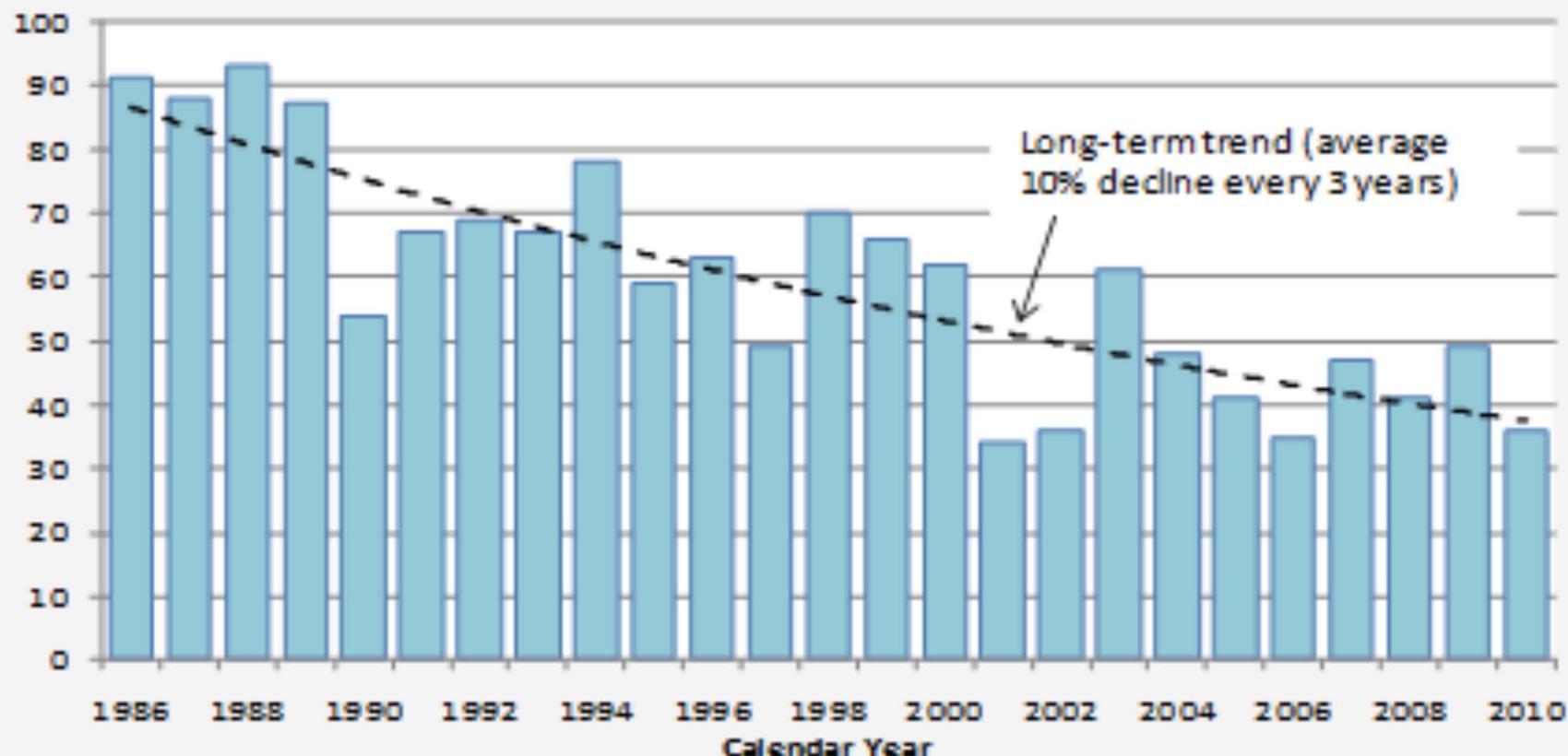
- We have ways to measure the safety factor of our natural gas lines
 - leak survey, CP, odorization, pressure charts, MAOP and safe operating pressure, public awareness, IMP and coming soon DIMP
- Know what the Pipeline **SAFETY** Regulations and the O&M say
- Always follow procedures
- Take your time and do it right
- Call for help
- Don't get complacent, respect the product we transport
- Be mindful of critical areas and undesirable pipe (bare, PVC, Aldyl A)
- Make your concerns known, talk to your lead, supervisor or manager about any concerns
- Make recommendations, be proactive and attentive
- Be responsible for keeping things safe for yourself, fellow employees, our contractors and customers
- Be cautious when you respond to potential leaks, think about the risks
- Be safe!

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Pipeline Incidents w/Death or Major Injury (1986-2010)



Data: DOT/PHMSA Pipeline Incident Data (as of Jan. 19, 2011)

Questions?

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