Pipeline safety: Why local governments should care

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March 27, 2014
The Pipeline Safety Trust
Who we are and where did we come from?
• Only national non-profit focused on pipeline safety.
• Information and Advocacy
• Independent technical papers
• Represents public interest in various forums
• National Conference, website, newsletter
What Happened in Bellingham?

• Pipeline was damaged by 3rd party
• Damage known but not fixed
• Valve installed wrong
• Valve malfunctioned
• Computer failure
• Operator Error
• Pipeline burst and exploded killing 3 youngsters and an entire salmon stream
Smoke plume from pipeline explosion
Bellingham, Washington
‘Everything is dead’

Bellingham fireball turned dreams of reviving salmon habitat to ashes

Federals investigate raising questions

More inside

British troops arrive in Kosovo

Kosovars cheer Russian hostages

in Pristina

U.S. Apache attack helicopters were parked with the British on the border.

The helicopters will land on high ground along a road overlooking the main road to the Kosovo capital Prishtina, where Russian troops are believed to have been earlier.
Creek on fire after gasoline pipeline rupture and explosion
Why Local Governments Should Care:

• Pipelines, while safe, are not perfect.
• Incidents, some completely preventable, will happen
• Local Government’s Roles:
  – Prevention
  – Preparedness
  – Response
Why local governments should care

• Prevention:
  – How you plan new developments around pipelines can increase or reduce risks to your community
  – How you plan new developments can affect operations, maintenance and repairs of the pipeline, which affect your constituents
  – Planning can also help protect municipal assets from damage, disruption
How much risk is there?

• The chance of a pipeline failing in any one specific place is extremely small

• When pipelines fail, the consequences can be catastrophic

Each pipeline has different risks, and should be considered separately
Consequences of spills from crude oil pipelines
Potential large liability to local government, businesses, property owners
Damage to property and expensive clean up
Environmental damage and drinking water contamination
Consequences of natural gas pipeline failures

Explosions & Fires
Pressure Impacts
Better Pipeline Siting and Land Use Planning Around Pipelines
PIPA Report

- Published Dec. 2010 as a web-based document
- Printable – entire report or individual recommended practices.
- Sort by stakeholder audience taking action

www.PIPA-Info.com
Illustrated: Growth Along Pipeline in Washington State
• Stakeholders
• Benefits and Risks
• Recommended Practices
• Appendices:
  o Model ordinance
  o Matrix of general acceptability/unacceptability of proposed land uses of ROWs
  o Technical information
Pipelines and Informed Planning Alliance (PIPA)

- PIPA is a partnership of stakeholders whose purpose is to further enhance pipeline safety.
- ~130 stakeholders participated, representing: local, state, and federal government; property developers; pipeline safety advocates, realtors, pipeline operators.
- PIPA initial focus was to develop guidance and recommendations for land use planning and development near transmission pipelines.
- Current goal is to...

   Engage local governments to promote their awareness of and support their implementation of the PIPA recommended practices for land use planning and development near transmission pipelines.
PIPA Recommended Practices

Identified with/directed to stakeholders:

- Local Government
- Property Developer / Owner
- Transmission Pipeline Operator
- Real Estate Commission

Categorized to be implemented by stakeholder:

- Baseline (BL) – *in preparation for future land use and development.*

- New Development (ND) – *when specific new land use and development projects are proposed.*
Examples - Recommended Practices for Local Government

**BL01**  Obtain Transmission Pipeline Mapping Data

**BL04**  Adopt Transmission Pipeline Consultation Zone Ordinance

**BL16**  Halt Dangerous Excavation Activities near Transmission Pipelines

**ND08**  Collaborate on Alternate Use and Development of Transmission Pipeline ROW

**ND12**  Reduce Transmission Pipeline Risk through Design and Location of New Roads

**ND23**  Consider Site Emergency Response Plans in Land Use Development
Different types of development near pipelines
Greater Likelihood of Damage to the Pipeline
Higher Potential
Consequences of Failure
Allowing space for repairs
Multiple layers of bad planning
BL01 Obtain Transmission Pipeline Mapping Data

National Pipeline Mapping System (NPMS)

www.npms.phmsa.dot.gov
Steps Local Governments Can Take

- Identify transmission pipelines in your jurisdiction
- Compare PIPA RPs with current practices
- Assess PIPA RPs to determine the benefit of implementing in your jurisdiction
- Work with developers/public and operators to implement RPs
- Contact the PIPA Communication Team for more information
- Apply for a Technical Assistance Grant (TAG)
- Add the PIPA logo to your organization’s website
Local governments should define a “consultation zone” to provide a mechanism for communication between property developers/owners and operators of nearby transmission pipelines when new land uses and property developments are being planned.

Absent site-specific information:

- 660’-1000’ Natural Gas Pipelines
- 1000’-1500’ Hazardous Liquid Pipelines
Pipeline right-of-ways and green space
Beyond PIPA

• Zoning restrictions for new pipelines: once the pipeline and houses are next to each other, the risk is the same. Reduce the risk for new development and new houses.

• Use local government control of road and utility ROW to impose some conditions on presence of pipeline: bonding, insurance, haul limitations, crossing requirements, etc.
Preparedness and response

• Public awareness programs of operators: Go! Ask questions!

• Regulations require “liaison” with local first responders: make sure that’s happening

• Fire flows: Ask your public works and fire departments to talk to each other about alternatives if fire water is affected by an incident
More

• Emergency Management planning: Are your drinking water and stormwater systems prepared for a release from hazardous liquid line?

• Does your building/planning department look at pipeline locations, have fire department weigh in on development plans and emergency response?
But wait, there’s more:

• There are a number of resources in addition to PIPA: example ordinances for a consultation zone, setbacks for hard to evacuate buildings and emergency response buildings

• MRSC website: mrsc.org (look under “pipeline safety” and “planning near pipelines”
• Visit our website:

http://pstrust.org/trust-initiatives-programs/planning-near-pipelines
• New Local Government Guide to Pipelines Coming Soon!

• Contact us with questions:
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