The Role of City and County Elected Officials in Pipeline Safety

Brought to you by



Pipeline Safety TRUST



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The Pipeline Safety Trust Born from a pipeline tragedy

What happened in Bellingham

- Pipeline was damaged by 3rd party
- Damage known but not fixed
- Valve installed wrong but not fixed
- Valve malfunctioned multiple times
- SCADA failure
- Operator Error
- Pipeline burst and exploded killing 3 youngsters and an entire salmon stream



The Pipeline Safety Trust Who we are and where we came from?



"... there's going to be a Trust that's going to be funded as part of today's sentencing. With \$4,000,000 ... they've nowhere near the lobbying potential of the oil industry. It's not even David and Goliath. It's more like Bambi and Godzilla. You've heard people today that are going to spend their lives trying to make this right, and they should be listened to. No industry polices itself very well... you need outside people, and these are going to be the people so pay attention to them."



The Honorable Barbara Rothstein United States District Judge At Olympic Pipe Line Co Sentencing

The things the Pipeline Safety Trust does to try to increase safety



- Improve pipeline safety regulations
- Increase transparency and access to pipeline information
- Provide a "public interest" voice to pipeline safety processes and events
- Partner with groups trying to move pipeline safety forward.
 - Provide technical assistance to impacted communities

Path to Greater Pipeline Safety



Typical Pipeline Systems

Natural Gas Pipelines

- Transmission lines
- Distribution lines

Hazardous Liquid PipelinesTransmission lines



INTERstate pipelines vs. INTRAstate pipelines

Hazardous Liquid Pipelines Carry

• Crude oil

- Refined petroleum products such as gasoline, diesel, jet fuel
- **Highly Volatile Liquids** such as propane, butane, ethylene, condensates
- Carbon dioxide
- Anhydrous Ammonia



National Pipeline Mileage

Mileage of Regulated PipelinesMilesNatural Gas Transmission302,252Natural Gas Regulated Gathering17,757Natural Gas Unregulated Gathering438,884Natural Gas Distribution Mains1,318,587Natural Gas Service Lines943,910Crude Oil84,150Refined Products63,106

Refined Products63,106HVLs (like propane, butane, etc.)72,464CO25,147Biofuels17Total3,246,274

Data from PHMSA as of 10/4/2020

Transmission Pipelines In the U.S.



Why Pipeline Maps Are Important

Emergency Response & Planning
 Informed Community Development
 Risk Reduction in your own operations



Where are the major pipelines in your County? How do you find out?



National Pipeline Mapping System https://www.npms.phmsa.dot.gov/PublicViewer/



2128	
Attribute	Value
Category: PIPELINE ATTRIBUTES	
OPERATOR ID	2128
OPERATOR NAME	CASCADE NATURAL GAS CORP
SYSTEM NAME	BELLINGHAM TRANSMISSION SYS.
SUBSYSTEM NAME	
PIPELINE ID	42491
MILES	5.53
COMMODITY CATEGORY	Natural Gas
COMMODITY DESCRIPTION	
INTERSTATE DESIGNATION	N
PIPELINE STATUS CODE	Active (filled)
REVISION DATE	02/20/2019
FRP SEQUENCE NUMBER	
Category: GENERAL CONTACT	
FIRST NAME	Lynsay
LAST NAME	Demko-Edwards
TITLE	Public Awareness Coord
ENTITY	
PHONE	(509) 734-4584
EMAIL	lynsay.demko-edwards@cngc.com
ADDRESS	8113 W. Grandridge Blvd.
CITY	Kennewick
STATE	WA
ZIP	99336

Where to get more map (GIS) Info



NATIONAL PIPELINE MAPPING SYSTEM

Access Pipeline Maps and Information At

https://www.npms.phmsa.dot.gov/GovOfficial.aspx

Where Do The Regulations Come From? Who enforces the regulations?

• U.S. Congress – the Statutes

 U.S. Dept. of Transportation, Pipeline & Hazardous Materials Safety Admin. – sets minimum standards and regulates and enforces interstate

• The States – Can pass stronger rules for in<u>tra</u>state pipelines – can regulate and enforce intrastate lines

 Local Government – <u>Cannot</u> regulate the safety of pipelines, but can use their authority to help increase the safety of people living near pipelines

Thinking About Risk to Your Community



Low Probability, High Consequence events

Consequences of natural gas pipeline failures



Consequences of hazardous liquid pipeline failures



Environmental and drinking water contamination, fire and explosions

U.S. Incidents with deaths or hospitalizations



Significant Incidents - All U.S. Regulates Pipelines





Gas Transmission

Causes of Onshore Significant Incidents 2015 – 2019 1533 Total Incidents

- ALL OTHER CAUSES
 CORROSION
 EXCAVATION DAMAGE
 INCORRECT OPERATION
 MATERIAL/WELD/EQUIP FAILURE
 - NATURAL FORCE DAMAGE
 - OTHER OUTSIDE FORCE DAMAGE



Hazardous Liquids

Local Government can help reduce these causes





U.S. Fatalities - Pipelines Compared to other Causes – 2014 data

- Heart Disease 633,842
- Flu and Pneumonia 57,062
- Occupant in passenger vehicle crash 21,022
- Assault by firearm 10,945
- Hit by vehicle while walking 6,259
- Falling on stairs 2,285
- Drowning in a swimming pool 701
- Air transport accident 412
- Earthquake and ground movement 86
- Killed by tornado 47
- Bitten or struck by dog 36
- All Types of Pipelines 26
- Hit by lightning 25
- Gas Transmission Pipeline 2



What Can Local Government Do?

- Help prevent excavation damage
- Provide Information to reduce risk (maps and contacts)
- Require actions near pipelines during land development, planning, and permitting
- Ensure emergency responders are aware and trained
- Ensure easements/franchise/road crossing agreements are adequate
- Have a local government voice in pipeline issues and rule makings

What Can Local Government Do?



Help prevent excavation damage

- Require use 811 system
- Report others not using 811

Know what's **below. Call** before you dig.

What Can Local Government Do? Planning Near Transmission Pipelines



Most pipelines were put in rural areas

But now growth is encroaching on many pipelines



This creates an increased risk that communities should consider when planning



Multiple layers of bad planning



Different types of development near pipelines







Partnering to Further Enhance Pipeline Safety In Communities Through Risk-Informed Land Use Planning Final Report of Recommended Practices November 2010



http://PIPA-info.com

45 Recommended Practices

Consultation Zone — Requiring consultation between developers and pipeline companies



Local government may determine the appropriate width of the consultation zone based on its own research and discussions with stakeholders.

Planning Area – Where risk reduction strategies apply

The area where you may want to impose additional development regulations to mitigate risk

Types of Construction

- International Building Code
- National Fire Protection Association (NFPA) 5000





Setbacks or Protection Zones

The area where you may want to restrict the allowed land uses or the conditions under which those uses will be permitted





Evacuation Plans

Temporary Protections During Construction



What Can Local Government Do? Ensure Your People Are Ready



What Can Local Government Do? Easement, franchise, road crossing agreements

These types of agreements can give local government some leverage to obtain additional and reasonable conditions from pipeline companies if both parties agree.

- insurance and indemnification
- increased payments
- increased communication and information sharing
- terms for work scheduling and restoration
- terms if ownership, use, products, or capacity changes
- even safety requirements that local governments can not usually require

What Else Can Local Government Do?

Push for a local government voice and engage your state and federal officials



Ensure there is a 3rd leg

Lots of good info and assistance available!

Customized local government presentations from the Pipeline Safety Trust – contact Carl

PHMSA's Community Liaison Services https://primis.phmsa.dot.gov/comm/CATS.htm



Partnering to Further Enhance Pipeline Safety In Communities Through Risk-Informed Land Use Planning Final Report of Recommended Practices November 2010





Hazard Mitigation Planning:

Practices for Land Use Planning and Development near Pipelines

2015



U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration



Where to get more information?

- PHMSA Stakeholder website <u>https://primis.phmsa.dot.gov/comm/LocalOfficials.htm</u>
- Pipeline Safety Trust <u>http://pstrust.org/about-pipelines/local-governments/</u>
- Washington Municipal Research and Services Center <u>http://mrsc.org/Subjects/PubSafe/transpipes.aspx</u>
- Pipelines and Informed Planning Alliance <u>http://PIPA-info.com</u>
- Pipeline Association for Public Awareness <u>https://pipelineawareness.org/</u>
- Individual Pipeline Companies



Thanks for listening and for your interest in pipeline safety

Pipeline Safety
TRUSTCredible.
Independent.TRUSTIn the public interest.

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