

U. S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

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Pipelines and Informed Planning Alliance (PIPA)

Land Use Planning Examples & Resources

Presented by Blaine Keener, PHMSA January 15, 2008













Community Growth

- Communities throughout our Nation are Expanding
- Community Growth is Managed at the County, City, or Township Level
 - Texas has 254 Counties
 - Rhode Island has 5 Counties
- Disparate Management of Development along Transmission Pipeline ROW



Excavation Damage to Pipelines

- Excavation Damage happens locally and a people are usually close by
- Gas Transmission & Hazardous Liquid Pipeline Excavation Damage from 2002 thru 2006:
 - 14% total Significant Incidents
 - 9 Fatalities (70% total)
 - 9 Injuries (19% total)



Communities are Pipeline Safety Stakeholders

- Residents along ROW are Directly Impacted by Pipeline Incidents
- Residents May be the First to Identify a Pipeline Incident
- API RP 1162 <u>Public Awareness Programs for</u>
 <u>Pipeline Operators</u> seeks improved awareness by the public, local government officials, and excavation contractors



PIPA Advance Materials

- Risk-Informed Land Use Planning Familiarization Material
 - Risk Concept
 - Risk Characterization in the Pipeline Industry
 - Overview of Role of Risk in Land Use Planning
- Word document covers the basics
- Excel spreadsheet covers additional topics
 - Land Rights
 - Communication Process



Examples of Local Guidance

- Washington State Model Ordinances
- Municipal Code of Edison (NJ) Township
- City of Austin Hazardous Liquid Pipeline Ordinance



Washington State Model Ordinances

- Setback for buildings 50 feet from edge of ROW
- Noted that setback designed to protect the pipeline from damage during building construction
- Protection of people achieved through restricting allowed building uses
- Comprehensive model Franchise ordinance



Municipal Code of Edison (NJ) Township

- Interference with pipelines in Section 17.08.210
- No building or land disturbance within 75 feet of any pipeline
- No building containing hazardous materials within 125 feet of any pipeline



Austin, TX Hazardous Liquid Ordinance

- "Use requiring evacuation" prohibited within 500 ft of pipeline
- New construction within 200 ft of pipeline must meet enhanced building code
- No structures or excavation within "restricted pipeline area" (within 25 feet of pipeline)
- Residential lot less than 1 acre cannot include a "restricted pipeline area"



Existing Resources

- Washington State Consultation Process
- API Guidelines for Property Development
- National Pipeline Mapping System (NPMS)
- Public Awareness Programs



Consultation Process in Washington State

- Focus is on promoting stakeholder communication when considering changes to land use near existing transmission pipelines
- Consultation should take place if proposed development is within 660 feet of pipeline
- Roles and responsibilities for participants in consultation are proposed



Beyond the Consultation Process

- Draw property development stakeholders into the process
- Risk-informed guidance allowing land use planners to "calculate" size of the consultation zone based on basic pipeline characteristics
- Risk mitigation measures, such as more stringent building codes near transmission pipelines



API Guidelines for Property Development

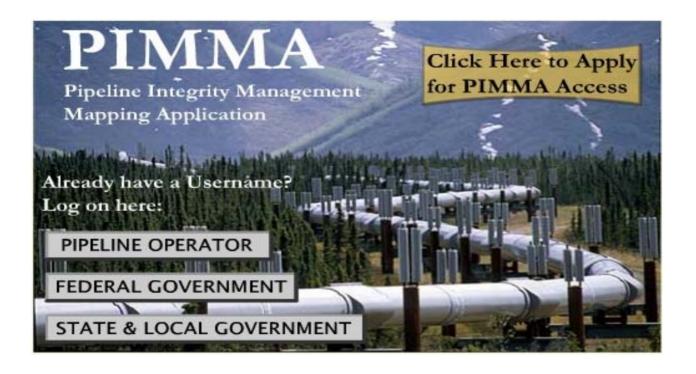
- Similar to document prepared independently by many gas transmission and liquid pipeline operators
- Describe unacceptable ROW uses
- Setbacks for specific structures, roads, and vegetation
- Measures setbacks from center of pipeline



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National Pipeline Mapping System (NPMS)

http://www.npms.phmsa.dot.gov/





NPMS

- Layered Geographic Information System (GIS)
- Public and Local Official access through the Pipeline Integrity Management Mapping Application (PIMMA)
- Local officials are allowed to release information obtained through PIMMA and show pipelines on Planning Maps



PHMSA's Public Awareness History

- Pipeline Safety Regulations Requiring:
 - Damage Prevention awareness for Excavators
 - Emergency Plans for Fire, Police, & Public Officials
 - Public Education
- Participant in American Petroleum Institute (API) committee to create API RP 1162
- Operator workshops in 2003 and 2005
- Final Rule published May 2005 requiring RP 1162-style programs by June 20, 2006



Pipeline Operator Public Awareness Programs

- Baseline Program
 - Applied to all portions of pipeline system
 - Creates minimum level of Awareness among all Stakeholder Audiences
- Supplemental Enhancements
 - When conditions along the pipeline suggest a more intensive effort is needed
 - Land Development Activity is one condition to be considered



Baseline Program

- Pipeline awareness targets Residents along pipeline ROW
- New emphasis on raising awareness among Local Public Officials – permit agencies and planning & zoning officials
- Land Use Guidance created through PIPA would be used by these same Local Public Officials



Supplemental Program

- Supplemental Messages to Local Public Officials include ROW encroachment prevention
- Supplemental Messages to Land Developers and Real Estate Agents include ROW encroachment prevention and NPMS



PHMSA Pipeline Safety Stakeholder Communications Web Site for PIPA

- Land Use Planning Examples and Resources already available
- PIPA Advance Materials will be posted
- All presentations from January 2008
 PIPA meetings, both Plenary and Task Team, will be posted
- http://primis.phmsa.dot.gov/comm/PIPA.htm



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THE END

Questions???

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