

Pipelines in Chester County: Municipal Roles in Zoning & Land Planning

West Pikeland TAG Workshop
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Issues to Consider

- PA sits atop one of the largest deposits of natural gas in the world; volume of gas estimated in PA = more extraction wells than any other state but Texas
- Long term implications – approximately 20 years of drilling and 50 years of extraction
- Deposits predominantly west of Chester County yet more than 25 transmission pipelines cross the county
- Newer, bigger, higher pressure pipelines; upgrades from lower to higher PSI

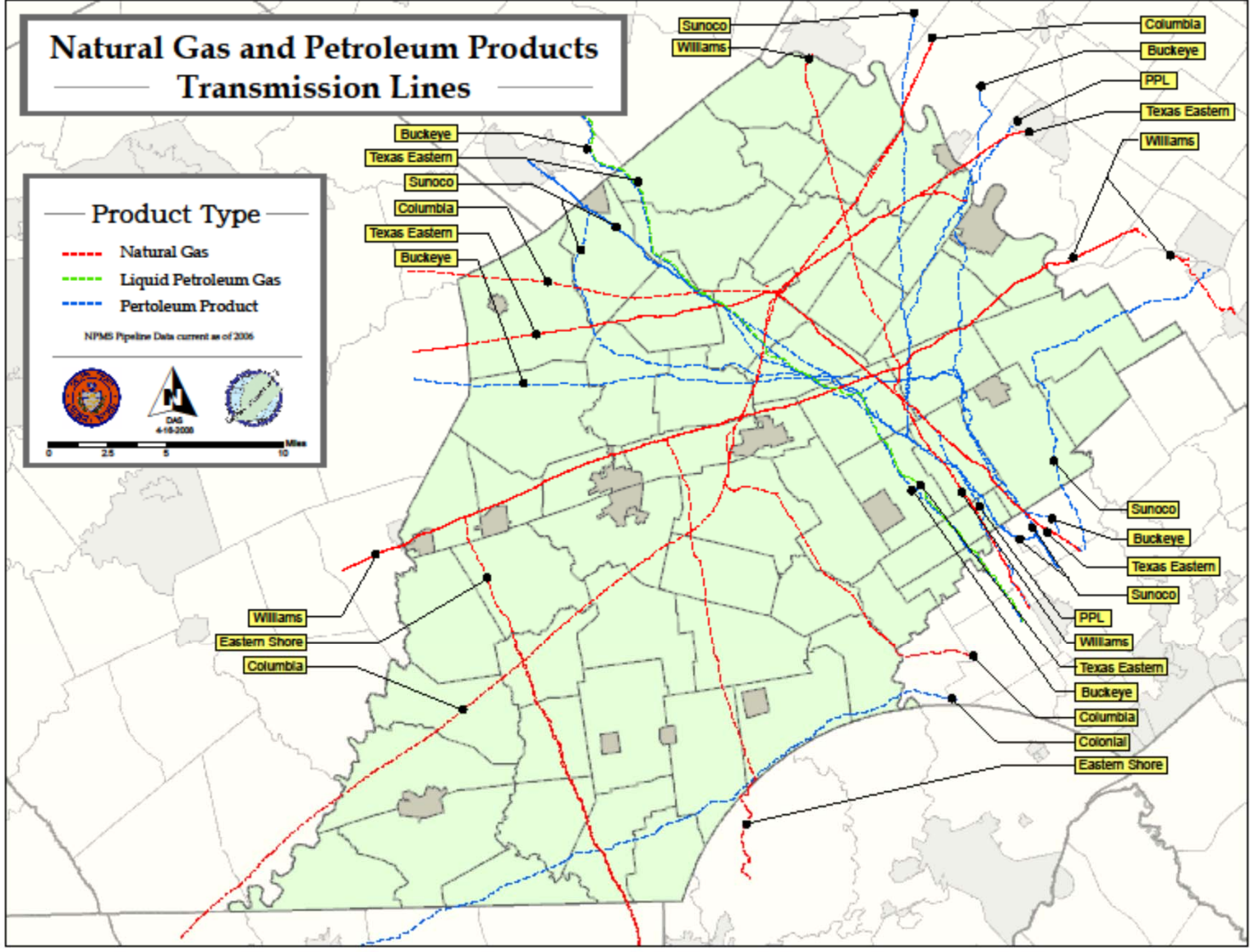
Natural Gas and Petroleum Products Transmission Lines

Product Type

- Natural Gas
- Liquid Petroleum Gas
- Petroleum Product

NPMS Pipeline Data current as of 2006

0 2.5 5 10 Miles



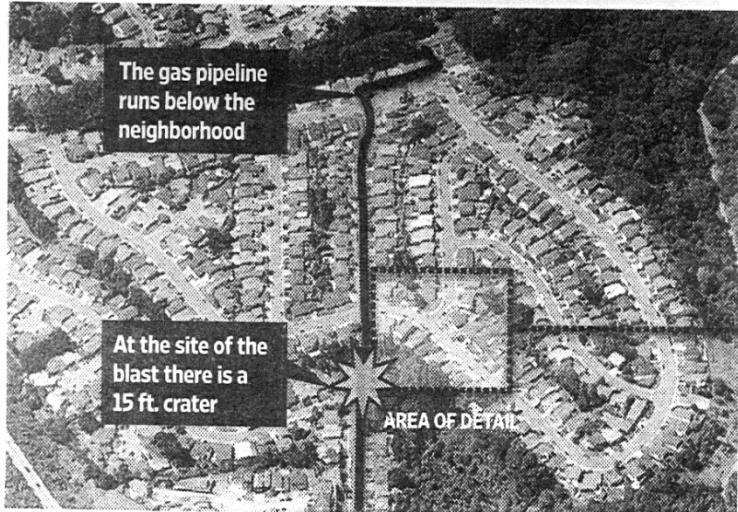
Issues to Consider (cont.)

- Opportunities –
 - Valuable resource (although the price is currently below the cost of production)
 - Cleaner than other forms of fossil fuels (emits about 50% less carbon when burned).
 - PA ideally suited to deliver gas (transportation accounts for approximately 40% of fuel costs)
- Costs and Risks –
 - Pipelines, drilling pads and wastewater storage pits alter the landscape, fragment wildlife habitat, impact land use decisions (including property values)
 - Health impacts
 - Billions of gallons of water used to frack shale
 - Heavy rigs damage roads
 - Accidents and errors have contaminated land and drinking water (Clearfield Co. discharge; Dimock Twp., Susquehanna Co. contamination)
 - Numerous state parks and forest lands are under lease for gas drilling (Ohiopyle)
 - September '10 San Bruno, CA transmission pipeline explosion
 - The “Retirement Party” and the lack of a real National Energy Policy

San Bruno Transmission Pipeline Explosion

September 9, 2010

Before



After



Safety

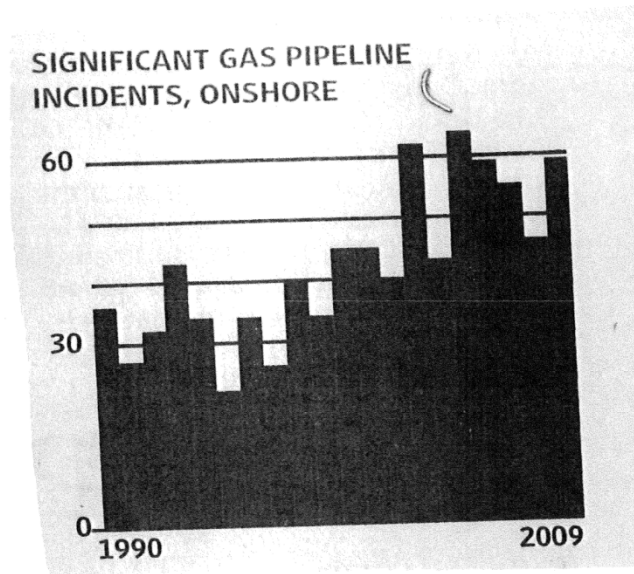
- Old Pipes – San Bruno is not unique; many pipelines in PA are 50+ years old
- Inadequate maintenance, Incorrect repairs, Leaks go undetected
- Residents unaware of pipelines
- NTSB Investigation of 2008 Fatal Pipeline Explosion in Rancho Cordova, California found as a major contributing factor the inability to quickly identify the source of the leak and the failure to evacuate the neighborhood
- Is maintenance spending keeping up with deterioration?
- Need a new focus on Maintenance Issues

Safety (cont.)

- Recent pipeline leaks and explosions in:
- Allentown – 600 people evacuated, 2 homes destroyed, 5 people killed
- Philadelphia – Several injured, 1 person killed
- New York City – 2 Apt. buildings, 8 killed, “aging infrastructure”



Incidents



Need To Find A Balance:

Drilling and Transporting

v.

Protection/Restoration of Natural
Environment; Health, Safety and
Welfare

Moving Forward

- Federal – FERC (Federal Energy Regulatory Commission); PHMSA (Pipeline and Hazardous Materials Safety Administration)
- PA Act 13 – consolidating and modifying the Oil and Gas Act of 1984; Recent Supreme Court Ruling
- Municipalities Planning Code (MPC)
- State, County & Local Regulations/Ordinances in other communities

- What is the Municipal Role in PA?

Part 2 – Land Use Planning and Model Ordinances

Municipalities want a say regarding the land use implications of pipelines

- Wanted to address the health, safety and welfare issues of siting transmission pipelines and be consistent with local land use planning regulations and comprehensive land use planning
- “How vs. Where”
- Wanted to provide for:
 - Uses not otherwise permitted;
 - Securing sites against vandalism;
 - Suitable access to pipeline sites;
 - Landscape buffers and setbacks for new development;
 - Signage;
 - Etc.

The TAG Grant Approach

Post Act 13 Supreme Court Ruling

- A multi-prong municipal regulatory approach that addresses:
 - 1) Surface land uses affiliated with pipelines (providing for uses not otherwise permitted in most ordinances),
 - 2) Street opening standards,
 - 3) Standards for new development in proximity to pipelines, and
 - 4) Revisions to municipal comprehensive plans (providing the nexus between the comp. plan and code of ordinances).
- These four items combined to provide an effective approach towards proactively addressing pipelines within the legislative and regulatory climate in existence.
- Considered on solid ground from a planning and legal perspective (post-Act 13) – PHMSA circulated model ordinances statewide.

Surface Land Uses Affiliated With Pipelines

- Above-ground transmission pipeline facilities including, but not limited to, compressor stations, pumping stations, regulator stations, launcher/receiver stations, and other surface pipeline appurtenances.
- Purposes
 - Accommodate such uses consistent with desire to protect the health, safety and welfare of the citizens of the municipality;
 - Minimize aesthetic, nuisance and visual impacts through proper design, siting and screening;
 - Ensure the location of such uses complies with industry standards; and
 - Preserve community character adjacent to such uses.

Surface Land Uses Affiliated With Pipelines

(cont.)

- Locational Provisions
 - Industrial Districts, etc.
 - Special Use Districts (areas where pipeline corridors already exist)
 - Prohibitions (within historic preservation overlay districts, scenic corridor overlay districts, etc.)
 - Conditional use?
- Standards
 - Setbacks from property line or right-of-way
 - Screening and Buffering: landscape plan, fencing
 - Noise reduction
 - Odor reduction
 - Signage: limit to appropriate warning and utility identification
 - Parking
 - Lighting
 - Design: engineered plan and review function, compatibility with surrounding uses
 - Visual Impact Reduction
 - Sufficient Need
 - Licensing Documentation
 - Removal Requirements

Street Opening Standards

- Providing for the regulation of street openings, installations and driveways.
- Purpose
 - To provide applicable standards for the opening, cutting, excavating, grading, boring, crossing, installation or disturbance upon, in, under, or across a municipal road or road right of way.
- Standards
 - Permit requirement
 - Application and Fees
 - PA One-Call
 - Traffic Maintenance
 - Detour provisions

Street Opening Standards (cont.)

- Standards (cont.)
 - Erosion Control (possible references)
 - OSHA requirements
 - Work notification
 - Backfill requirements
 - Overnight site security and public safety
 - Installation and Clean-up
 - Temporary and permanent road restoration
 - Identification of applicant and contact information
 - Security deposit and work guarantee
 - Utility placement and drainage
 - Violations and penalties
 - Insurance
 - Driveway Standards (optional): permits, dimensions, locations, etc.

Standards for New Development in Proximity to Pipelines

- Plan submission, buffer, setback, signage and landscaping provisions for new development adjacent to transmission pipelines.
- Purposes
 - Help prevent and minimize unnecessary risk to the public health and welfare due to transmission pipelines and ensure consistency with the intent of the Municipal Comprehensive Plan;
 - Minimize the likelihood of accidental damage to transmission pipelines due to external forces, such as construction activity and equipment;
 - Avoid exposing land uses with high on-site populations that are difficult to evacuate; and
 - Help reduce adverse impacts in the event of a pipeline failure.

Standards for New Development in Proximity to Pipelines (cont.)

- Applicability and Standards
 - Plan content for preliminary and final plan submissions
 - Document the location, r-o-w and limits of all easements for transmission pipelines.
 - Setbacks for new uses, including “Potential Impact Radius” (PIR)
Protection of pipeline r-o-w - temporary barricades and signage.
 - Consultation Zone – applies to any application for new uses within proximity of pipeline r-o-w. Requires applicant to communicate plan details to pipeline operator and provide sufficient access to pipeline.
 - Land uses with high on-site populations – Such uses within 660 feet of pipelines shall develop mitigation measures (emergency procedures, employee training and education).
 - Design, buffering and screening – incorporating linear appearance of pipeline into development design; landscaping to minimize and buffer pipeline.
 - Signage – need for, number of and placement of identification and/or warning signs

What we are trying to avoid!

Washington State

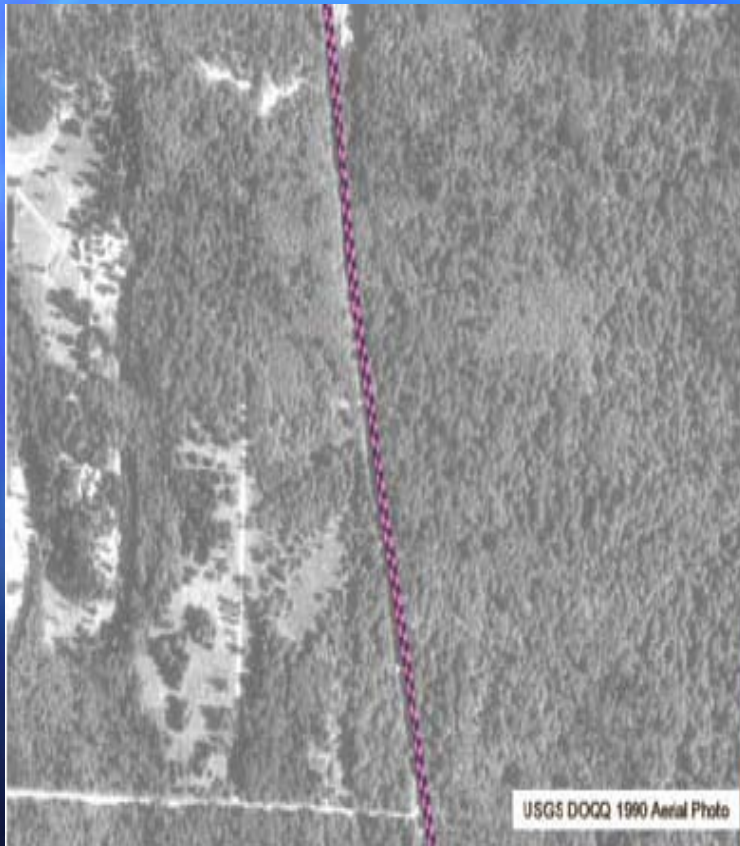


Figure 1 - 1990



Figure 2 - 2002

Municipal Comprehensive Plans

- Provides the rational nexus between the comprehensive plan and municipal ordinances (Sect 105 of the MPC)
- Revisions to chapters/sections addressing community facilities and services.
 - Acknowledge existing and proposed pipelines
 - Acknowledge benefits and risks
 - The need to monitor existing and proposed activity
 - The need to enact regulations complimentary to state and federal law
 - Examples: access provisions, buffer and setback standards, etc.
 - Seek out increased communication with pipeline operators
 - Issues: new development impacts, land uses with high on-site populations, etc.
 - Reference related county and statewide planning goals
 - Coordinate with county and state on new pipeline projects

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Land Use and Ordinance Components

- Municipal Survey sent out in conjunction w/ CCATO
- Model ordinances available free
- Limited free municipal meetings to discuss ordinances

Contact us if you did not receive the survey, have any questions, or desire additional information

Contact Information

Municipal meetings,
model ordinances, survey:

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