Today’s Agenda

• Some Basics on Pipeline Safety
• Where are These Pipelines and Why Do I care?
• Who is PHMSA?
• Perspective on Past Performance – Industry and PHMSA
• Four More Years!
• PHMSA Agency Priorities for 2012
• Open Discussion Session
U.S. Energy Pipeline Transportation System
## Basics on Pipeline Safety

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<th>Pipeline System Components</th>
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<th>Operators</th>
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Basics on Pipeline Safety

- The U.S. Congress Creates the Pipeline Safety Laws
  - ...and reauthorize them every 4 years
- The Congress Directs the Secretary of Transportation to Carry Out the Pipeline Safety Laws
  - Allows him to partner with States to accomplish the laws
- The Secretary Delegates His Authority to Pipeline and Hazardous Materials Administration (PHMSA)
- PHMSA Carries Out Mandates Through Regulations, Inspections and Enforcement, and Non-Regulatory Programs
- The States Adopts PHMSA’s Regulations Into Their State Code
  - They may supplement, but not go below the U.S. Code
Why Do I Care?

- You probably have a pipeline close to your home.
- Pipelines are being built to deliver natural gas from the Rockies/Appalachians to Populated Areas.
- Crude Oil pipelines coming down from Canada; Refined products being sent from Salt Lake refineries to Las Vegas.
- In the case of Utah, you are near ground zero for pipeline construction.
- Also been subject to spills locally and devastating ruptures in the National news.
Ruby Pipeline Construction, near Brigham City, Utah
(3/1/2011)
PHMSA Inspectors Reviewing Welding Operations on Ruby Pipeline, near Brigham City, Utah on March 1, 2011
San Bruno, CA – Sept 9, 2010
Chevron – Salt Lake City, June 12, 2010

- Approx 750 BBL of crude spill into Salt Lake City creeks and small lakes on June 11/12, 2010.
- Power company built substation immediately adjacent to pipeline. Fence post directly on top of pipeline.
- Fault current burned dime sized hole in pipeline.
ExxonMobil Silvertip – July 2011
Yellowstone River, MT
PHMSA Office of Pipeline Safety

Mission:

To ensure the safe, reliable, and environmentally sound operation of the nation’s pipeline transportation system.
Where We Are
What PHMSA Does

• Data Analysis and Trending
• Regulatory Development and Coordination
• Inspection, Enforcement and Emergency Response
  – Integrity Management
  – Emergency Response
• State Pipeline Safety Grant Programs
• Damage Prevention and Public Education
• Research and Development
Perspective on Past Performance

Data Sources: Census Bureau, Energy Information Administration, PHMSA Annual Report Data, BTS ton-mile estimates, PHMSA Incident Data - as of Jan. 18, 2012
Pipeline Incidents w/Death or Injury
(1986-2011)

Data source: DOT-PHMSA Incident data (as of Jan. 18, 2012)

\[ y = 89.103e^{-0.034x} \]
(3.4% decline/yr.)
Liquid Pipeline Spills w/Envr. Consequences (1986-2011)

\[ y = 306.99e^{-0.044x} \]

(4.4% decline/yr.)

Data source: DOT-PHMSA Incident data (as of Jan. 18, 2012)
What Was PHMSA Doing Nationally to Make Pipelines Safer

- We Learned from Devastating Incidents in Bellingham, WA (1999) and Carlsbad, NM (2000)
  - Integrity Management, Operator Qualification, Control Room Management,
- We expanded Regulatory Coverage after BP spill in AK (2006)
  - Low Stress/Gathering Pipelines in High Consequence Areas
- Collecting Better Data and Becoming a Risk Driven Organization
- Enhanced Damage Prevention and Public Awareness
- Better Funding for Our State Partners
Still Not Good Enough

- Regardless, these high profile spills and ruptures show room for improvement in PHMSA oversight and operator performance
- We have 13 new NTSB recommendations
  - And expecting even more by Summer – Marshal, MI
- We expect the Inspector General to have recommendations for HL pipelines soon
  - Next up: State programs and oil spill response planning
- GAO is issuing some recommendations, and has more to do
- We are spooling up a lot of workshops, studies, and regs
- We are still trying to oversee recently issued regulations – e.g., DIMP, CRM, PA
Four More Years!

- Pipeline Safety Laws *Just* Reauthorized – 4 more years!
- What’s the Congress Calling For – A LOT! (more on how in a minute)
  - Stronger enforcement with due process protections – for basics (x2), restoring spill plan authority, and for excavation damage (exemptions)
  - MAOP Confirmation (grandfather clause), valves, leak detection, EFV’s, depth of cover, damage prevention (grants), emergency notification
  - Transparency: cast iron, spill plans, basic data
  - Studies galore: valves, leak detection, expansion of IMP, gathering lines, risks of dilbit transport, nonpetroleum hazardous liquid pipelines, new construction permit process (State and Federal - GAO)
  - Limitation on use of national consensus standards
Agency Priorities for 2012

- Will Continue to Operationally Focus Efforts On:
  Control Room Management, Distribution Integrity Management, Utilize Risk Ranking Inspection Models, Replace and Train Retiring Work Force, Scrutinize New Construction, and Validate Companies Integrity Management Programs and Assumption

- Focus on legislative mandates & NTSB recommendations
  - Regulatory (next)
  - Workshops (coming up)
  - Studies (transparent)
2012 Regulatory Priorities

• Major Priorities (In progress or mandated)
  – Federal enforcement on excavation damage
  – Hazardous Liquid rule
  – Pipeline Enforcement rulemaking
  – Gas rulemaking –
    • Likely to pick up most Congressional/NTSB items
  – MAOP verification in class 3 & 4 + HCA’s (and beyond?)
  • Associated issues of records inadequacies, reporting exceedances, and material testing requirements
2012 Regulatory Priorities

- Other New Mandates
  - Cost recovery for “design reviews”
  - Incorporation of consensus standards – transparency
  - Larger application EFV’s
  - Gathering lines – data collection and report to Hill
  - CO2 (gaseous) and biofuel pipeline fixes
  - Risk management and class location dilemma
  - Mapping – accuracy, HCA updates, & detailed attributes
  - Miscellaneous rulemaking: Seismicity, accident/incident notification, consensus standards updates
2012 Studies

- Valves for New/Rehabilitated Gas Pipes
  - GAO to look at application to existing pipelines
- Leak Detection – Hazardous Liquid and Natural Gas
- Cover Over Inland Water Crossings – Hazardous Liquid
- Cast Iron Inventory and Replacement/Rehabilitation
- Diluted Bitumen (Dilbit) Transportation Risks
- Excavation Damage and Role of Exemptions
- Non-Petroleum Hazardous Liquids (?)
Upcoming Events

• Emergency Responder Forum Follow-up
• Leak Detection Workshop – March 27th (webcast)
• Valve Workshop – March 28th (webcast)
• Data and Metrics Workshop – May/June (webcast)
• DIMP Workshop – June 27 (DFW) (webcast)
• R&D Workshop – July
• Other possible workshops/events – capacity limited
  – Damage prevention exemptions
  – Risks Associated with Pipeline Transportation of Dilbit
  – Gas gathering, IMP Expansion / Class Location
Discussion?
Focus on Damage Prevention

- Rulemaking: Federal Enforcement of 3rd Party Damage to Pipelines
- Promoting State Primacy in Damage Prevention
  - Letters to Governors, Public Utility Commissions, Pipeline Safety State Partners
  - Participation in Common Ground Alliance Educational Efforts
  - Removal of Most Exemptions
- National Safe Digging Month (April) & 811 Promotion
- Indirect Influence
  - Current regulatory efforts: DIMP, PA, HL/NGT IMP, ER Liaison
  - Pipelines and Informed Planning Alliance (PIPA) promotion
What’s On Tap For:

- **Natural Gas Distribution**
  - DIMP – Taken Seriously
    - Records – plan to get what you don’t have
    - Leak prone pipe identification/rehab/replacement
    - Risk assessment
    - Preventive and mitigative actions
  - Basic regulatory program
    - Increased emphasis on leak surveys and response
    - EFV’s – branch and multi-family, small commercial
  - Engagement with emergency response community
What’s On Tap For:

- **Natural Gas Transmission**
  - Gas Transmission IMP – baseline coming to an end
  - Records – and reconfirmation of MAOP – coming
  - Pressure tests and pigging – coming
  - Valves – in Class 3 & 4, plus other HCA’s – coming
  - Study on ending class location regime - coming
  - Engagement with Emergency Responders
    - Maps, contact info, training and drills, notification
What’s On Tap For:

• **Hazardous Liquid**
  - Water body crossings (study, report to Hill)
  - Valves – greater use as P/M measure – coming
  - Leak detection (study, report + rule (??))
  - More emphasis on oil spill planning and preparedness
• Drills are key – invite us whenever you can