U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

South Dakota / North Dakota Pipeline Safety Seminar

April 2009

Rapid City, South Dakota

Wayne St. Germain

U.S. DOT/PHMSA T&Q

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Pipeline and Hazardous Materials Safety Administration

PHMSA Organization and Regulatory Overview

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Pipeline and Hazardous Materials Safety Administration

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Pipeline and Hazardous Materials Safety Administration

PHMSA's Mission Statement

To ensure the safe, reliable, and environmentally sound operation of the nation's pipeline transportation system.

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Pipeline and Hazardous Materials Safety Administration

DOT Reorganization

PHMSA = Pipelines and Hazardous Materials Safety Administration

OPS = Office of Pipeline Safety

TQ = Training and Qualifications

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DOT Reorganization

NTSB

DOT

FMCSA

FRA

MARAD

FAA

NHTSA

RITA

TSI

FTA

PHMSA

HMT

OPS – TQ

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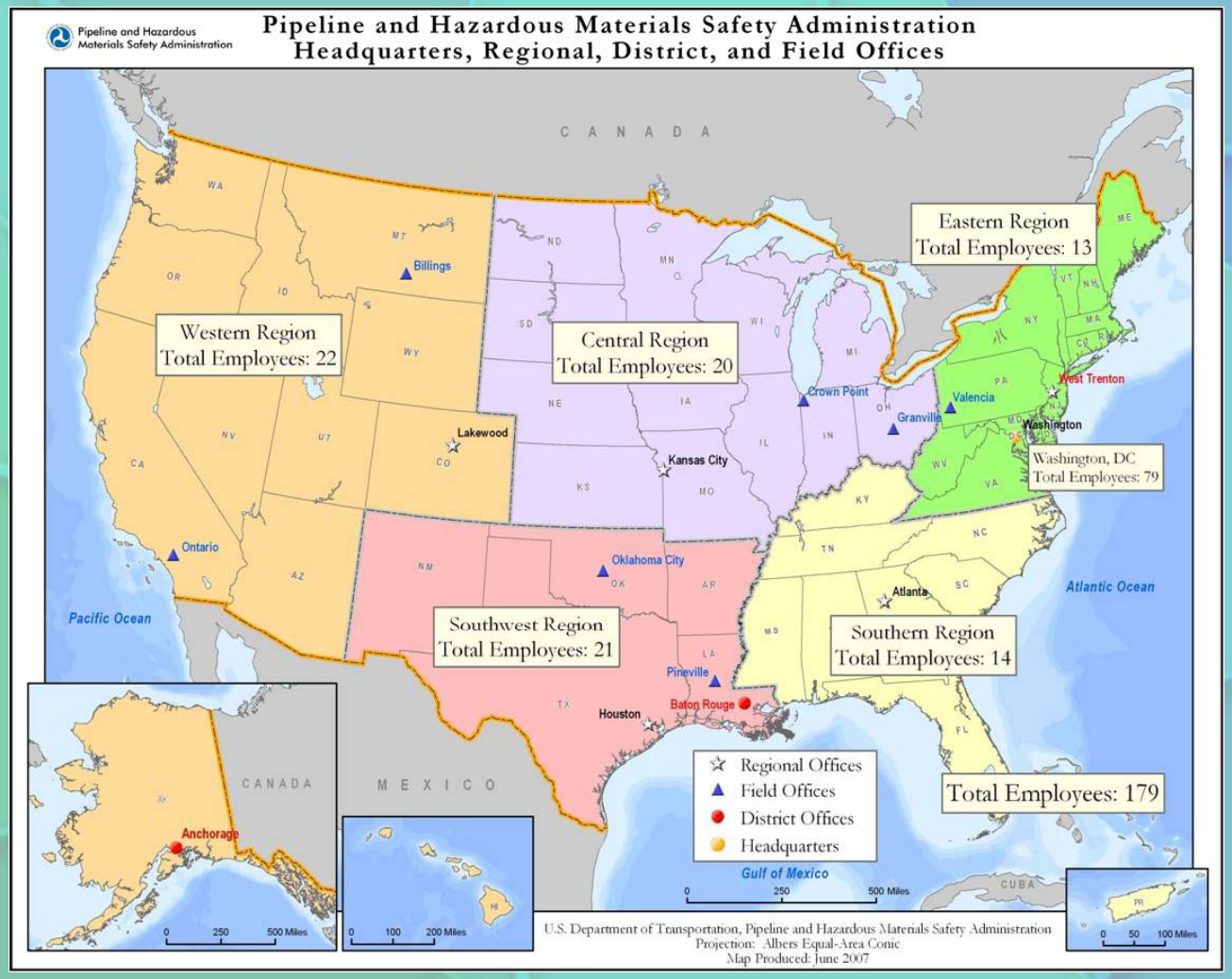
PHMSA Regional Offices



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PHMSA Office of Training and Qualifications

Providing Training For:

- State and Federal Pipeline Inspectors (Courses in OKC)
- Industry Personnel via Seminars

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PHMSA

Pipeline Safety

- Strategic Plans & Assessment
- Technology & Standards
- Monitoring State Programs
- Compliance

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State Programs
Section 60105
State Certifications

♦Adopted:

- **Federal Pipeline Safety Regulations as a <u>Minimum</u>**
- **Enforcement Authority**

Pipeline Safety Law

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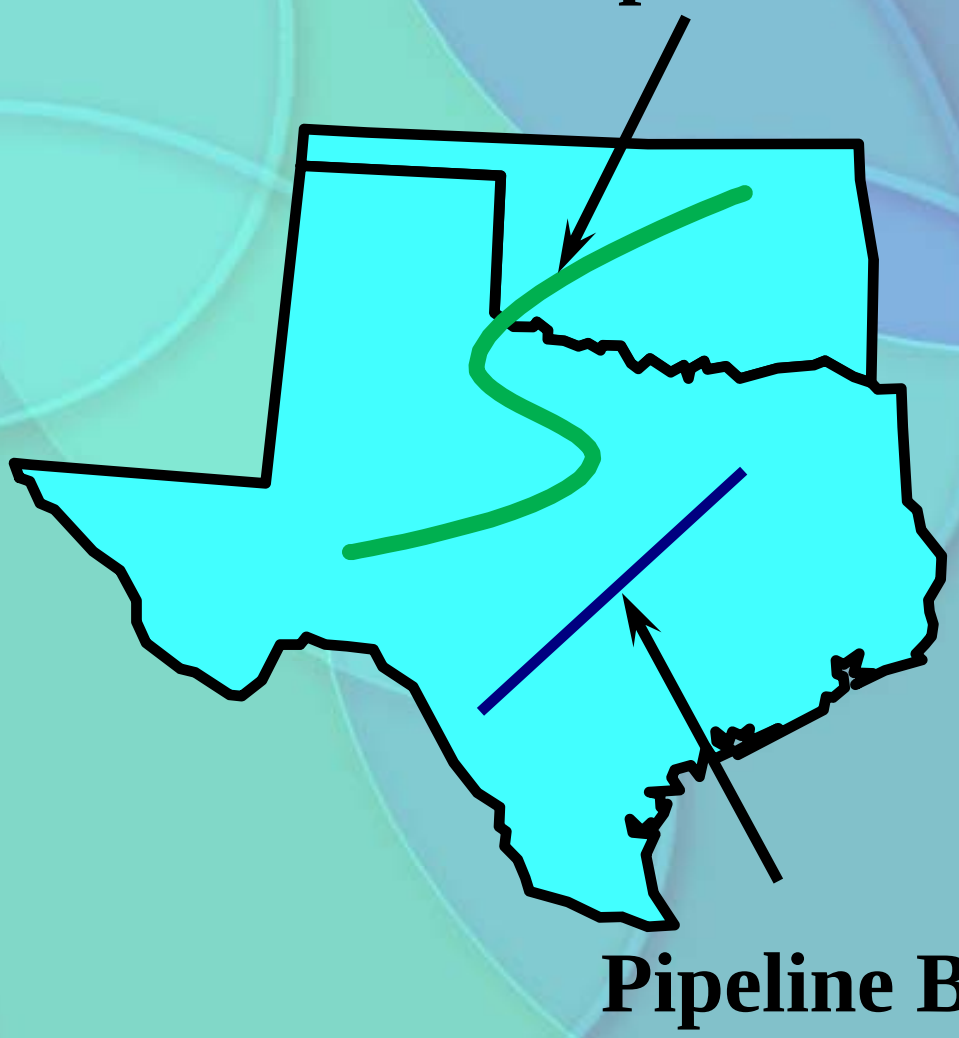
Pipeline Jurisdictions

- Interstate (Federal)
- Intrastate (State)



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Compliance Section 60118

♦ Operator Shall:

- Comply with Applicable Safety Standards
- Prepare and Follow an O&M Plan
- Maintain Records Required by the Safety Standards

Pipeline Safety Law

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Strategic Initiatives to Improve Pipeline Safety

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Strategic Focus

- Improve the safety of the Nation's pipelines
  - Reduce the number of serious incidents causing death & injury
  - Reduce the likelihood of any incidents in high consequence areas
  - Reduce the potential for hazardous liquids spills into unusually sensitive areas
- Provide the basis for increased public confidence in pipeline safety

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Pipeline Safety Mission

- Hazardous Liquid Pipelines 186,000 miles
- Natural Gas Transmission 306,000 miles
- Gas Distribution Pipelines 1.2 million miles
- Liquefied Natural Gas (LNG) 108 Facilities

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Pipeline Safety Challenges

- **<u>March 23, 1994, Edison, NJ</u>**
- 30” Natural gas transmission line operating at 970 psig ruptured
- Force of escaping gas excavated area around pipe and gas ignited
- Several apartment buildings burned
- Investigation found “teeth marks” on pipeline
- Crushed Ford Ranger pick-up truck excavated near rupture

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Pipeline Safety Challenges

- **<u>June 10, 1999, Bellingham, WA</u>**
- 16” Gasoline pipeline leaked into a creek in a city park and stretched for 1.5 miles
- 1.5 hours after leak started, gasoline ignited
- 3 fatalities, 8 injuries
- $45 million in property damage
- Leak caused by damage to pipeline during 1994 water treatment plant construction

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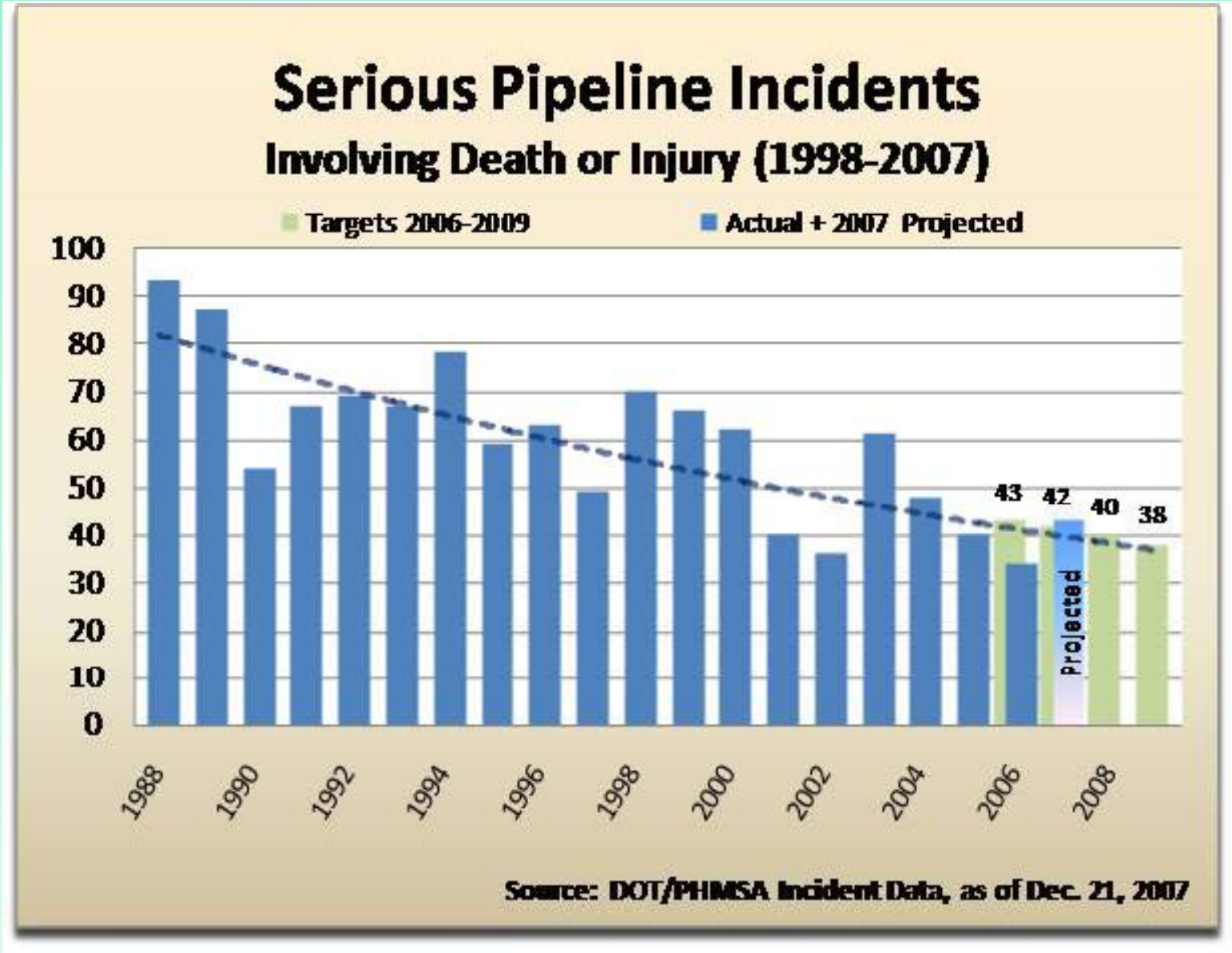
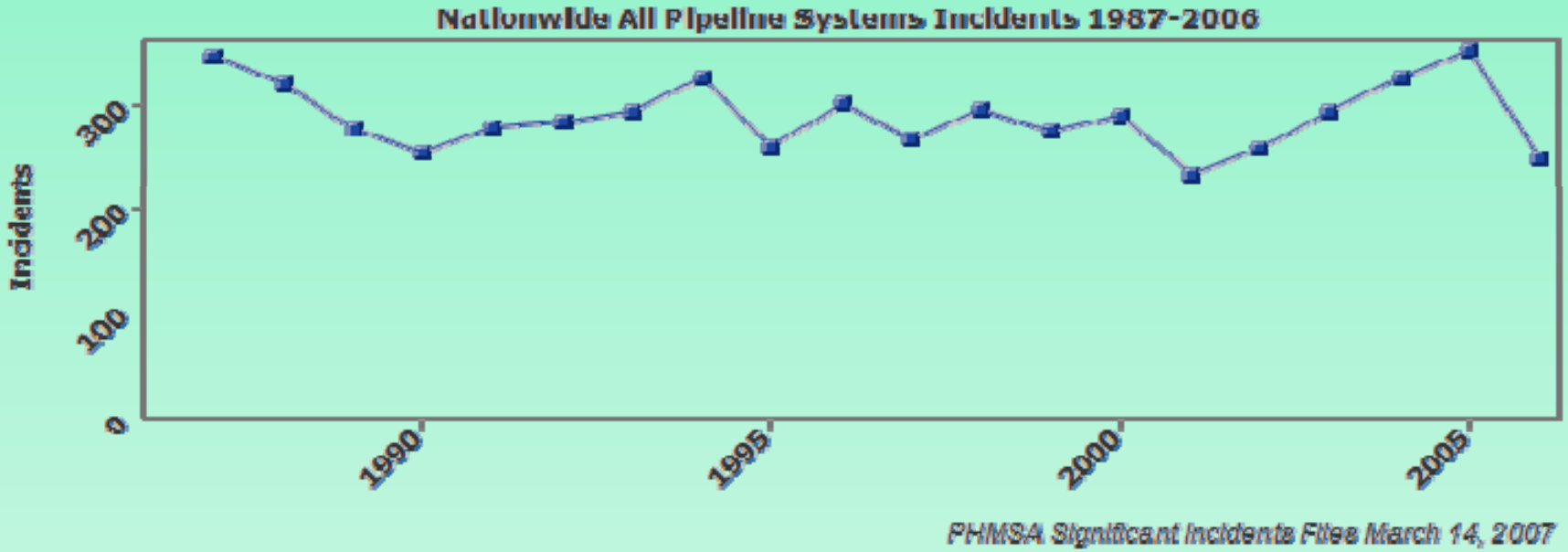
Pipeline Safety Challenges

- **<u>August 19, 2000, Carlsbad New Mexico</u>**
- 30’’ Natural gas transmission line ruptured, ignited, and burned, for 55 minutes
- 12 people who were camping near the pipeline failure site were killed
- Adjacent pipeline equipment was heavily damaged and three vehicles destroyed
- Property and other losses totaled approx. $998,296
- Investigation found significant pipe wall loss due to internal corrosion

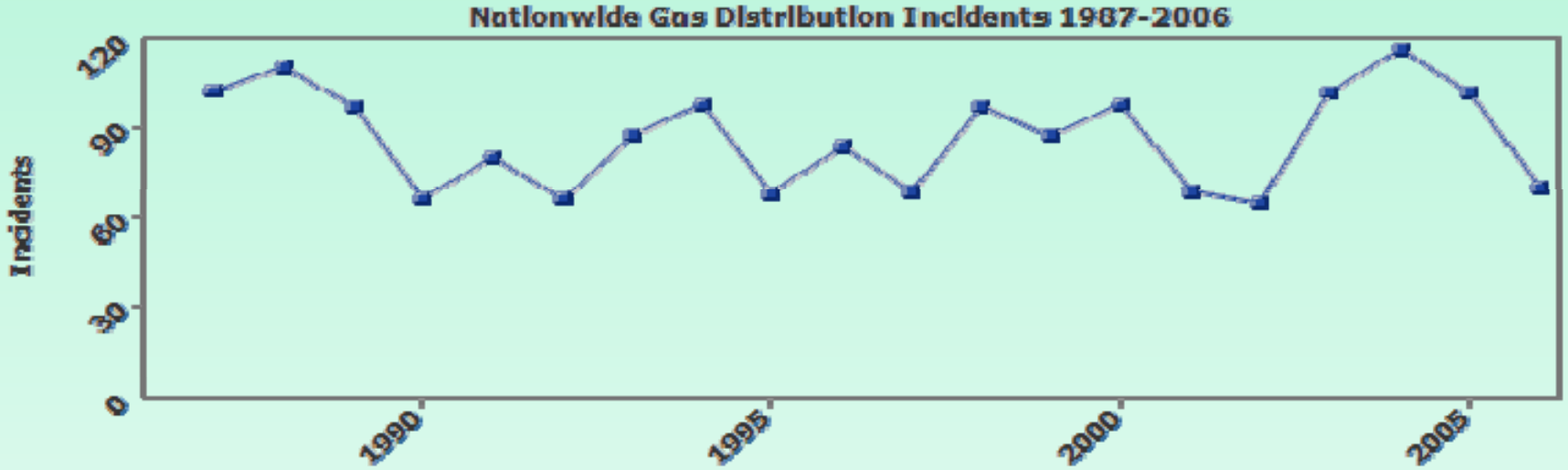
Good News on Serious Incidents



Significant Incidents Rather Flat

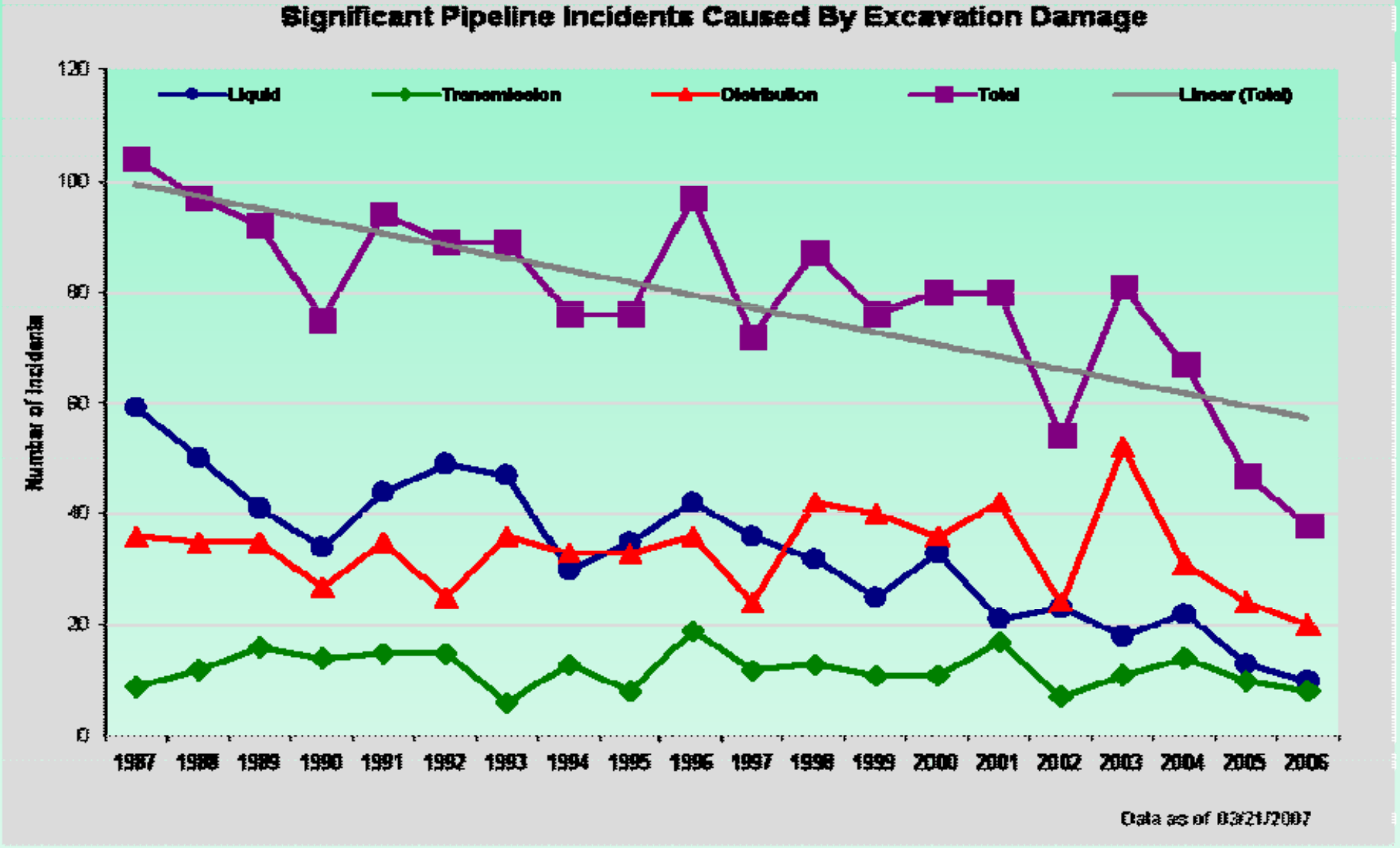


PHMSA Significant Incidents Files March 14, 2007



PHMSA Significant Incidents Files March 14, 2007

Excavation Caused Damages Declining



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Data Driven Organization

- More focus on root cause analysis of incidents
- Integration of inspection findings across regions
- Recently, significantly improved availability of information through OPS web site:

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Rule Update

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Pipeline and Hazardous Materials Safety Administration

Advisory Bulletin No. ADB-08-01 Issued May 7, 2008 Pipeline Safety: Natural Gas Transmission Operators

- This document advises operators of gas transmission lines that the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 has eliminated the former exception of direct sales natural gas pipelines from the definition of an interstate gas pipeline facility.
- As a result, direct sales gas transmission pipelines subject to FERC jurisdiction (formerly considered to be intrastate pipelines), are now subject to PHMSA regulatory oversight and inspection.

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Advisory Bulletin No. ADB-08-04 Issued May 30, 2008 Pipeline Safety: Natural Gas Distribution Operators

- This document advises operators of gas distribution pipeline systems of a statutory requirement for the installation of excess flow valves in certain gas service lines.

- The PIPES Act of 2006 instructed PHMSA to write regulations requiring operators of gas distribution systems to install excess flow valves as close as possible to the main, on select service lines installed after June 1, 2008. PHMSA will include this requirement in the upcoming Distribution Integrity Management (DIMP) rule.

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Advisory Bulletin No. ADB-08-07 Issued July 24, 2008 Pipeline Safety: Natural Gas Distribution, Transmission, and LNG Operators

- Beginning on January 1, 2009, PHMSA is requesting that operators submit their NPMS data concurrently with hazardous liquid and gas transmission annual report submissions.
- PHMSA suggests that beginning on January 1, 2009, gas transmission NPMS submissions be submitted by March 15, 2009, and represent the pipeline operator assets as of December 31, 2008. LNG plant operators would also submit to NPMS by March 15, 2009, representing assets as of December 31, 2008.

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Pipeline and Hazardous Materials Safety Administration

Advisory Bulletin No. ADB-08-07 Issued July 24, 2008 Pipeline Safety: Natural Gas Distribution, Transmission, and LNG Operators

- Hazardous liquid annual reports and NPMS submissions would both be submitted by June 15, 2009, representing assets as of December 31, 2008. In 2010 and beyond, the annual report and NPMS submission due dates would remain March 15 for gas transmission and LNG plants and June 15 for hazardous liquid pipelines.
- NPMS submissions would represent physical assets as of December 31 of the previous year.

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Final Rule December 24, 2008 (Volume 73, Number 248) 49 CFR Part 192 Docket ID: PHMSA-2005-21305 Pipeline Safety: Polyamide 11 (PA-11) Plastic Pipe Design Pressures

- Polyamide PA-11: Allows certain thermoplastic pipelines made from new Polyamide-11 (PA-11) pipe, to operate at a higher design pressure limit.
- Raises the design factor from 0.32 to 0.40, and raises the design pressure limit from 125 PSIG to 200 PSIG Max. for certain types of PA-11 only.

This final rule took effect January 23, 2009.

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NPRM Issued June 25, 2008
49 CFR Part 192
Docket ID: PHMSA-2004-19854
Pipeline Safety: Integrity Management Program for Gas Distribution Pipelines

- Distribution Integrity Management: Would require operators of natural gas distribution systems to install excess flow valves on certain single feed service lines, and to develop an integrity management plan for their gas distribution pipeline systems.

(NPRM on June 25, 2008, comment period closed October 23, 2008)

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NPRM Issued September 12, 2008
49 CFR Part 192 , 193, 195
Docket ID: PHMSA-2007-27954
Pipeline Safety: Control Room Management/Human Factors

- Control Room Management: Would require operators of natural gas, LNG facilities, and hazardous liquids pipelines to amend their existing written operation and maintenance procedures, OQ programs, and emergency plans to assure controllers and control room management practices and procedures used maintain pipeline safety and integrity.

(NPRM on September 12, 2008, open for comment until November 12, 2008)

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Final Rule Issued October 17, 2008
49 CFR Part 192
Docket ID: PHMSA-2005-23447
Pipeline Safety: Standards for Increasing the Maximum Allowable Operating Pressure for Gas Transmission Pipelines

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Pipeline Safety: Standards for Increasing the Maximum Allowable Operating Pressure for Gas Transmission Pipelines

- Increase Maximum Allowable Operating Pressure for Natural Gas Transmission Pipelines: Allows an increase of the MAOP design limitation (with certain additional design and operational requirements) for class 1 locations to 80%, class 2 to 67%, and class 3 to 57% of SMYS.

(Effective Date: December 22, 2008)

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Final Rule Issued January 16, 2009

49 CFR Part 190, 191, 192, 193, 194, 195, and 199

Docket ID: PHMSA-2007-0033

Pipeline Safety: Administrative Procedures, Address Updates, and Technical Amendments

Effective Date: This final rule is effective February 17, 2009.

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Establishes the procedures PHMSA will follow for issuing safety orders and handling requests for special permits, including emergency special permits.

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The rule also notifies operators about electronic docket information availability; updates addresses for filing reports, telephone numbers, and routing symbols; and clarifies the time period for processing requests for written interpretations of the regulations.

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Final rule makes minor amendments and technical corrections to the regulatory text in response to written public comments received after issuance of the interim final rule.

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Final Rule Issued April 14, 2009
49 CFR Part 190, 191, 192, 193, 194, 195, and 199
Docket ID: PHMSA2008-0334
Pipeline Safety: Incorporation by Reference Update: American Petroleum Institute (API) Standards 5L and 1104

Effective Date: This rule is effective April 14, 2009 without further action, unless adverse comment is received by June 15, 2009. If adverse comment is received, PHMSA will publish a timely withdrawal of the rule in the Federal Register.

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This direct final rule incorporates by reference the most recent editions of API Specification 5L "Specification for Line Pipe" and API 1104 "Welding of Pipelines and Related Facilities."

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The purpose of this update is to enable pipeline operators to utilize current technology, materials, and practices to help maintain a high level of safety relative to their pipeline operations. PHMSA is not eliminating the use of the current referenced standards but simply allowing the additional use of these new standards. PHMSA may in the future propose to eliminate the incorporation of the existing referenced standards.

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Challenges for PHMSA in Pipeline Safety

- Public Perception of Unresponsiveness
- Pressures to Perform (Congress, NTSB, IG)
- Growing Economy – Strain to Meet Energy Demand/Pipeline Capacity
- Growing Stakeholder Community (Agencies, Advocates, Local Communities, Citizen Groups)
- Better informed public and stakeholder community
- Improved Public Confidence

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Information Available from PHMSA

- Latest News
- Training Calendar
- Joint Industry Training
- Operator Qualification
- Resource Links
- Regulatory Information
- Codes
- Pipeline Safety Laws
- Federal Regulatory Information

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Pipeline and Hazardous Materials Safety Administration

PHMSA Information Websites

PHMSA Training and Qualification

http://www.phmsa.dot.gov/pipeline/TQ

PHMSA Pipeline Safety Regulations

http://www.phmsa.dot.gov/pipeline/TQ/Regulations

PHMSA Rulemaking

http://www.phmsa.dot.gov/pipeline/regs/rulemaking

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PHMSA Training and Qualifications

Remember,

We're with the Government

and We're Here to Help!