

Agenda

- What is a safety management system?
- Why would a company develop one?
- Why should the public want a company to develop one?
- What are the major SMS elements under consideration?
- How can we have input into the process?
- How do we know it is working?
- Who is involved in development of the standard?

What is a Safety Management System?

- A framework of goals, objectives, processes, and procedures applied by people, enabled by technology to ensure that an organization can fulfill the tasks required to achieve safety and business success.
- Enables people to execute tasks using risk management, established controls, assessment and continuous improvement to meet safety and business objectives.
- Built on processes providing more discipline in use of data and other information for better decision making.

It is a journey, not a project

Why?

- U.S. National Transportation Safety Board (NTSB) review of past pipeline incidents and safety practices found that adoption of safety management systems would help operators improve their safety performance
- In 2012, NTSB recommended the American Petroleum Institute lead a multi-stakeholder process to develop and adopt a pipeline specific industry-wide safety management system standard

THE PRIZE IS IMPROVED PIPELINE SAFETY

Why? It is the Right Thing to Do

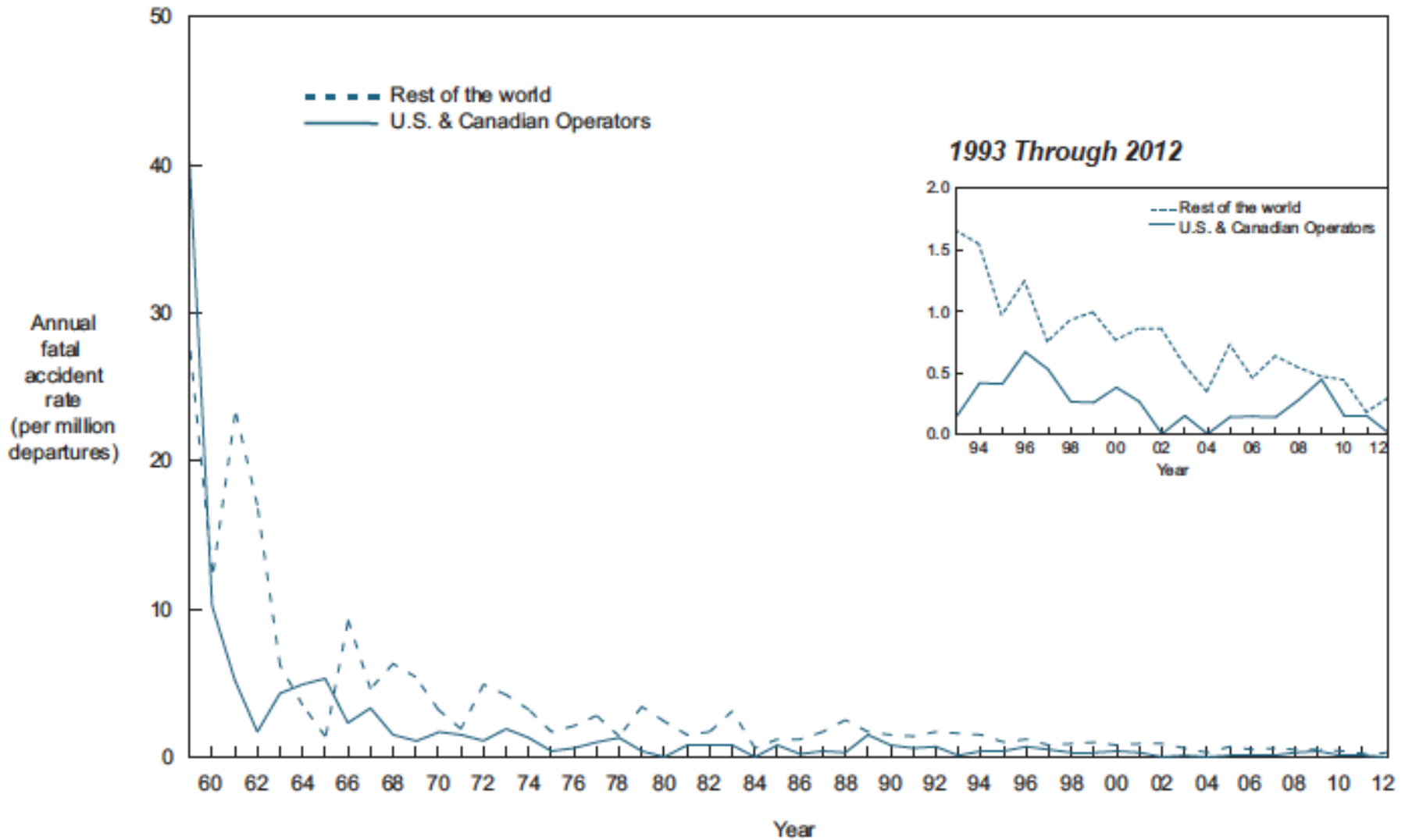
- Pipeline operators no matter their size can benefit from a PSMS:
 - A PSMS will bring a more regular, formal structure to those already doing many of the envisioned PSMS efforts
 - Operators with an SMS will be able to identify gaps and make improvements
 - Those new to SMS will benefit from a structured approach to measure, track and improve their safety programs and performance

Why? Experience in Industries Where Accident Consequences Are Unacceptable

Many industries, from aviation to petrochemicals, petroleum refining, nuclear power and medical, are using safety management systems to improve their safety performance

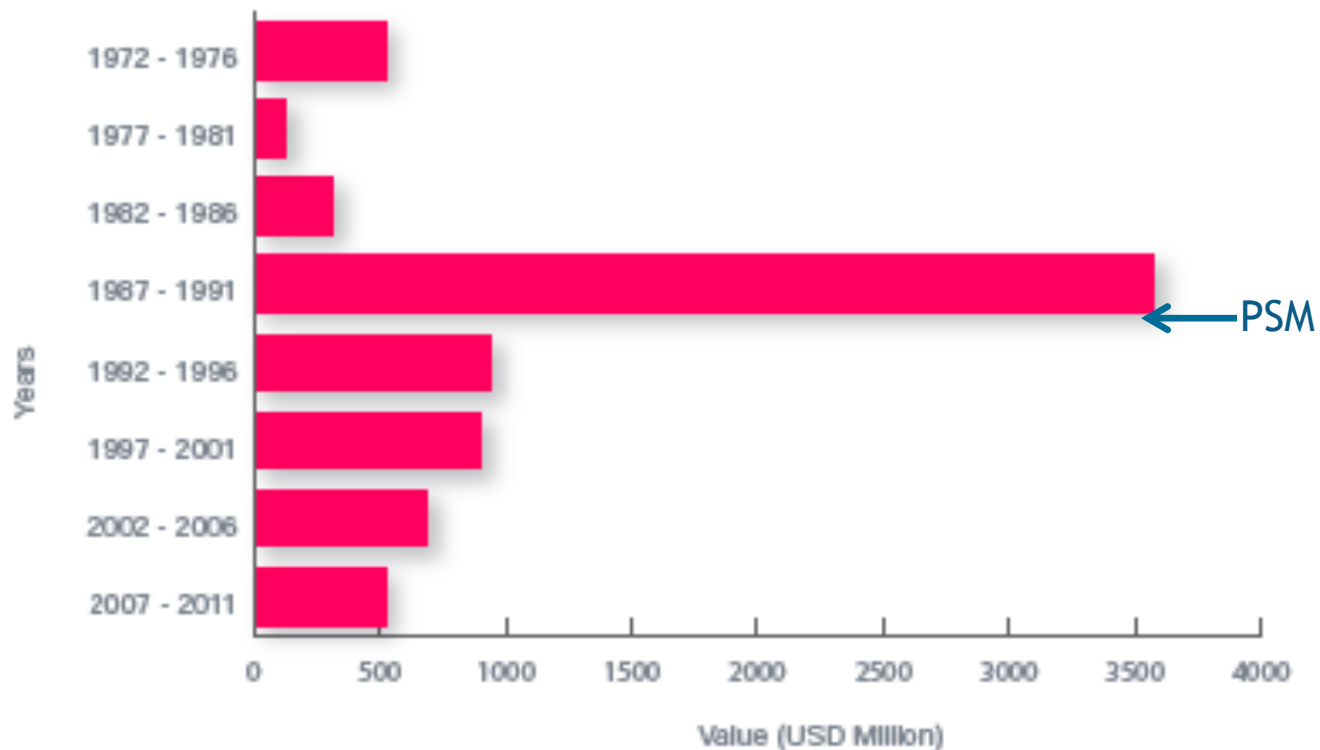
U.S. and Canadian Operators Accident Rates by Year

Fatal Accidents – Worldwide Commercial Jet Fleet – 1959 Through 2012



Experience From Petrochemicals

PETROCHEMICAL LOSSES IN FIVE YEAR PERIODS



Source: Marsh: The 100 Largest Losses, 2012

What?

- Pipeline safety stakeholders working together to improve pipeline safety by developing a Pipeline Safety Management System (PSMS):
 - Pipeline operators/trades;
 - Federal and state regulators/officials;
 - Public representatives; and
 - Safety experts

What? Getting to “Zero”

A new industry-wide standard to help pipeline operators continually improve pipeline safety

Beneficial Outcomes

- An SMS will promote continuous improvement by doing the following:
 - Enlist employees from top to bottom in a commitment to safety
 - Engage outside stakeholders
 - Clarify responsibilities for safety initiatives and oversight
 - Proactively address safety issues before they become incidents
 - Document and enforce safety procedures
 - Investigate and learn from failures, and
 - ... as an opportunity to improve, not punish
 - Create a safe environment for employees to report safety concerns
 - Regularly evaluate operations to identify and address risks

Pipeline Safety Management System Requirements

API 1173
FIRST EDITION, XXXXX 2014
VERSION 7

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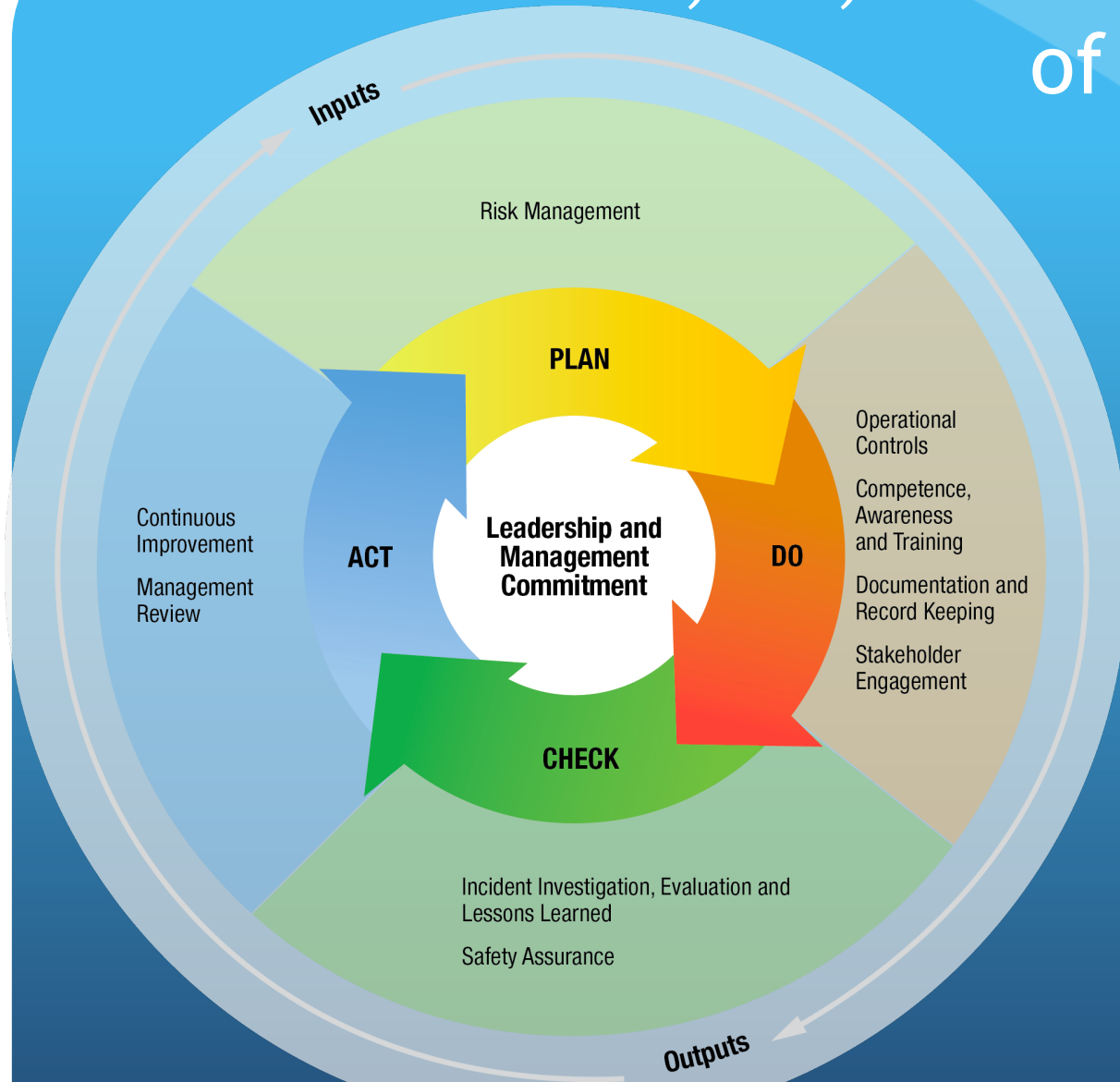
API 1173

Pipeline Safety Management System Requirements

What Are the Major SMS Elements Under Consideration?

1. Leadership and Management Commitment
2. Stakeholder Engagement
3. Risk Management
4. Operational Controls
5. Incident Investigation, Evaluation & Lessons Learned
6. Emergency Preparedness & Response
7. Competence, Awareness & Training
8. Safety Assurance
9. Management Review & Continuous Improvement
10. Documentation & Record Keeping

Plan, Do, Check, Act - The core of the standard...



Continuous Improvement is the Goal

We want your input!

- Today – share your perspectives
- Public workshop in mid-February
- Public comment period into April
- Work group considers all input
 - Every comment is resolved
- Concurrent API and ANSI ballots
 - Resolve comments from balloting
- Publication in Summer/Fall 2014

How do we know it is working?

Assessing Maturity



Who? Pipeline Safety Stakeholders

- Ron McClain, Kinder Morgan EP, Chair
- Mark Hereth, P-PIC, Content Editor
- Scott Collier, Buckeye Partners
- Tom Jensen , Explorer Pipeline
- Paul Eberth, Enbridge Pipelines
- Mark Weesner, ExxonMobil Pipeline
- Brianne Metzger-Doran, Spectra Energy
- Tracey Scott, Alliance Pipeline
- William Moody, Southwest Gas
- Nick Stavropoulos, Pacific Gas and Electric
- Steve Prue, City of Ellensburg, WA
- Bill Hoyle (CSB/Public) – Public Representative
- John Bresland, Public – Public Representative
- Stacey Gerard, Public – Public Representative
- Jeff Wiese, PHMSA
- Linda Daugherty, PHMSA (alternate)
- Robert Miller, AZ Corporation Commission
- Massoud Tahamtani, VA Corporation Commission
- John Vorderbrueggen, NTSB
- Bob Beaton, NTSB (alternate)
- Hans Mertens, NAPSR
- Kate Miller, AGA
- Christina Sames, AGA
- John Erickson, APGA
- John Stoody, AOPL
- Scott Currier, INGAA
- Peter Lidiak, API
- Edmund Baniak, API (Standards Support)

Direct Participants:

- 5 - Liquids Pipelines
- 5 - Natural Gas Transmission
 - 2 - Transmission
 - 2 - Distribution
 - 1 - Municipal
- 3 - Public Representatives
- 3 - Regulators
- 1 - NTSB
- 4 - Trade Organizations
- 1 - Contract Engineering
- 1 - Standards Organization

Discussion