



# PHMSA'S Web Conference Series 2014



## RP 1173: Pipeline SMS Requirements

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# Risk Management

## Operational Controls

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## Element 3: Risk Management

- The pipeline operator shall maintain (a) **procedure(s) for the performance of risk management**. The operator shall maintain a description of the assets comprising the pipeline, including the surrounding environment, to identify threats to pipeline safety.
- The operator shall **analyze risk considering the threat occurrence likelihood and consequence throughout the pipeline lifecycle**. The operator shall evaluate pipeline safety risk and make decisions on how to manage it through **preventive controls, monitoring, and mitigation measures**. Safety assurance sub-elements, including audits, data analysis, and performance evaluation are used to monitor the effectiveness of risk management.



# Risk Management

- Builds upon the fundamentals of risk management in integrity management – “Know your system and recognize potential threats”
- As well as international consensus standards such as ISO 31010 – Risk Management
- Starts with emphasis on data and data quality
- Risk Identification – “What Can Go Wrong?”
- Risk Mitigation
- Periodic Analyses – at least once annually
- Reporting to Top Management including risk analysis, mitigation methods and intended effectiveness



## Element 4: Operational Controls

- The pipeline operator shall maintain controls for the safe operation of each facility consistent with the pipeline operator's safety policies and objectives.



# Operational Controls

- “Operational controls” – used in other SMSs
- Operating Procedures – reviewed annually for lessons learned
- Safe Work Practices – addressing situations where stop work and procedural deviations are encouraged.
- System Integrity – Life cycle view
- Management of Change – includes organizational changes
- Use of Contractors



# Use of Contractors

- Communicating requirements of the PSMS
- Defining Responsibility, Authority & Accountability for managing the outsourced activities
- Incorporating work and findings
- Training and orientation on safety policies
- Evaluating contractor safety performance
- Communicating risks at the work sites, and
- Communicating the MOC procedure.