

BREAKOUT TEAM

- Moderator: Danelle Scotka, Director, Operating Strategy & Management Systems, Plains All American
- Panelists:
 - Jimmy Powell, VP Operations Liquid Pipelines, Kinder Morgan
 - Shannon McClure, OMS Coordinator, Plains All American
 - Anthony Limon, US Pipeline Integrity Program Lead, TransCanada

MANAGEMENT REVIEW — API RP 1173

- **General:** The PSMS and safety performance shall be reviewed to determine the extent to which the performance goals and objectives have been met.
- Input: goals and objectives, status and effectiveness of corrective actions, performance measures, results of risk management review, results and recommendations of incident investigations, results of audits and evaluations, changes that could affect the PSMS, stakeholder feedback, evaluation of PSMS maturity, opportunities for improvement
- Output: shall include a summary assessment of the effectiveness of the PSMS and any resulting improvements in risk management effectiveness and pipeline safety performance; shall include any decisions and actions, changes to required resources, and improvements to the processes and procedures made to meet requirements



KINDER MORGAN— GETTING STARTED

Getting Started:

- Established a Corporate PSMS team, including business unit representation
- Gap analysis: API 1173 and legacy KM Operations Management System (PSMS)
 - 17 % required no change
 - 74% required minor tweaking
 - 9% required development
- Identified "Big Three" items for Products Pipelines
 - Formalized a QA/QC process
 - Developed PSMS audit process
 - Developed/formalized key performance indicators

Meetings and Impact:

- O PSMS Weekly, monthly, quarterly, and annual meetings
- Enhanced monthly meeting by:
 - including lessons learned topics for internal and external events and
 - including field Safety Coordinators
- Share lessons learned across all KM Business Units



KINDER MORGAN— LESSONS LEARNED

Key Success Factors:

- PSMS communication between senior management and field staff
- Feld staff's understanding of PSMS
- Communications regarding PSMS between KM and external PSMS stakeholders
- Always looking for opportunities for continuous improvement with intentionality

Continuous Improvement ... Going Forward:

- Participated in a Safety Culture survey
- Established a PSMS maturity matrix
- Senior Managements' continued support of PSMS
- Senior Management identifies PSMS required meetings in opening comments



Plains All American — Getting Started

• Getting Started:

- Understand the API RP 1173 requirements
- Determine best approach for our organization
- Just do it get started and continuously improve

• Meetings and Impact:

- Monthly Operations Leadership Team (OLT) Demonstration of executive leadership's earnest commitment to the success of the Operations Management System (OMS), in turn prompting commitment throughout the company
- O Bi-weekly Operations Management Team (OMT) Reflection of executive leadership's commitment to the OMS, promoting accountability and two-way communication around the OMS and improvement activities
- Quarterly Management Reviews Opportunity for OLT and OMT to actively engage in discussion around improvement activities including status and decisions, review of the effectiveness of the OMS and fulfill the requirement for annual risk review



Plains All American — Lessons Learned

Key Success Factors:

- Active engagement
- Clear decisions on improvement activities and other OMS business
- Continual progress in implementation of improvement activities

Continuous Improvement ... Going Forward:

- Use of survey to formally identify improvements
- Request informal feedback with the implementation of each new process
- Add additional required pieces of information as they become available



TRANSCANADA — GETTING STARTED

• Getting Started:

- Consistent understanding of what you expect to get out of MR
- Plot out the logistics of executing MR
- Communication You get out what you put in

Meetings and Impact:

- \circ A layered approach that leverages the overarching MS hierarchy (MS \rightarrow Programs \rightarrow BU) enables visibility and coordination at top and bottom of the organization.
- Frequency based on governance cycles:
 - BU/Functional Level: monthly performance management and oversight
 - Program Level: minimum annual review of program effectiveness & efficiency
 - System Level: mid-year & annual review of program and system effectiveness, efficiency, maturity



TRANSCANADA — LESSONS LEARNED

Key Success Factors:

- Agree on what good looks like (Define effective & efficient, today and in future)
- Actionable intelligence, not data (ability to roll it up and drill down)
- Timing (don't miss the window of opportunity to take action)
- Disciplined Approach (a good process & commitment to the process)

Continuous Improvement ... Going Forward:

- Track and monitor the impact of MR decisions
- Performance targets and MR evolve in tandem (the degree of inputs, not the process)
- Simplify as much as possible while maintaining quality
- Showcase to MR participants how their input influenced change



LET'S DISCUSS

- How did you get started with management review? How is it going?
- Have you seen a broader impact outside of the actual meeting(s)?
- What have been your success factors? And challenges?
- How do you measure success? Identify gaps? Continually improve?

