







Our Implementation Journey: Leak Detection Program Management

- Agenda
 - RP1175 Overview
 - Implementation Progress
 - Gap Assessment Comparison
 - What's Next
 - What Success Looks Like



What is API RP 1175 Leak Detection Program Management?

Purpose:

- Addresses PHMSA's request to improve industry leak detection programs and capability
- Provides non-technical recommendations for managing an integrated leak detection program

Elements:

- Leak detection culture and strategy
- Selection of leak detection methods
- Performance targets, metrics, and KPIs
- Testing
- Control Center procedures for recognition and response
- Alarm management
- Roles and responsibilities and training
- Reliability centered maintenance for leak detection equipment
- Overall performance evaluation of the LDP
- Management of change
- Improvement process(es)







Our Journey: What's Industry Been Doing Since RP1175 Issued?

2014-2015

Developed RP

Dec 2015

Published RP 2016

Formed API team to support implementation

2017/2018

Implementation of API RP 1175

Mar 2017

1st Gap assessment. RP Guide book. Apr 2017
Hosted API
leak detection
workshop.

Nov 2017

Developed Strategy template. Hosted Webinar. Mar 2018

2nd Gap assessment to measure progress. Apr 2018

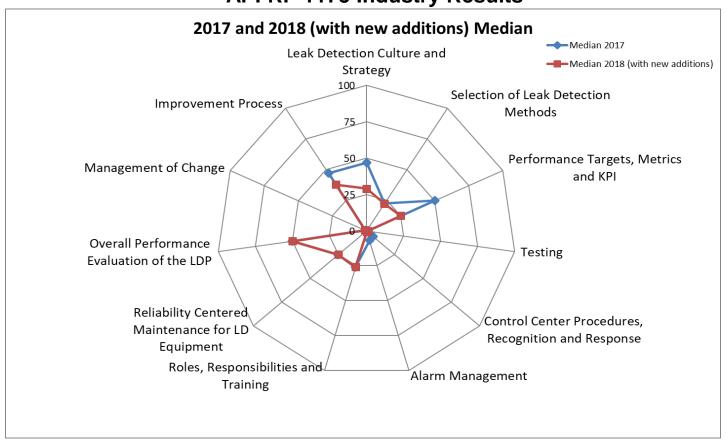
Cybernetics Symposium Session on KPIs.





So, Just How Far Have We Come?

API RP 1175 Industry Results







Continuing Strong Industry Engagement!

2017 Base Line Gap Survey	2018 Progress Gap Survey
37% of API& AOPL Members	42% of API& AOPL Members
	84% of Industry Total BBL Miles
Composite Score = 28	Composite Score = 20



What's Next? Where Do We Go From Here?

Operators:

- 1. Leaders must visibly drive the right leak detection culture.
- 2. Communicate your LD strategy.
- Complete gap assessments & close gaps.
- Organize peer-to-peer exchanges.
 Learn from each other.
- Be innovative. Be bold. Invest in new LD methods to improve.

Example Only

Components		Median
Leak Detection Culture and Strategy	0	47
Selection of Leak Detection Methods		22
Performance Targets, Metrics and KPI	<u> </u>	50
Testing		1
Control Center Procedures, Recognition and Response	<u> </u>	6
Alarm Management		7
Roles, Responsibilities and Training	0	26
Reliability Centered Maintenance for LD Equipment		25
Overall Performance Evaluation of the LDP	0	50
Management of Change		1
Improvement Process	0	47
Total Gap Score		28





Additional Resources

- Leak Detection Program Road Map
- API Safety Management System (SMS) Website
 - http://www.pipelinesms.org/index.php/moresystems/leakdetection/





What Does Success Look Like?

- 1. Having a "Think Leak" safety-first culture
- 2. Operators fully implementing programs to API RP 1175
- 3. Collaborating with industry to continuously learn and improve
- 4. Improving gap closure scores (2017>2018>2019)
- Minimizing consequences from spills (quicker detection, quicker shut down, smaller releases)

It Starts with Top Management Commitment to Provide Resources (People & Technology) to Improve





RP 1175 Implementation Team:



API -Buckeye Pipeline -Chevron Pipe Line -Enbridge -LOOP -Marathon Pipe Line - Jason Dalton Phillips 66 Pipeline -

TransCanada -

Stuart Saulters Rick Bishop Robert Morgan **Rick Barlow Donny Chiasson** Doug Sauer Marieli Romero



