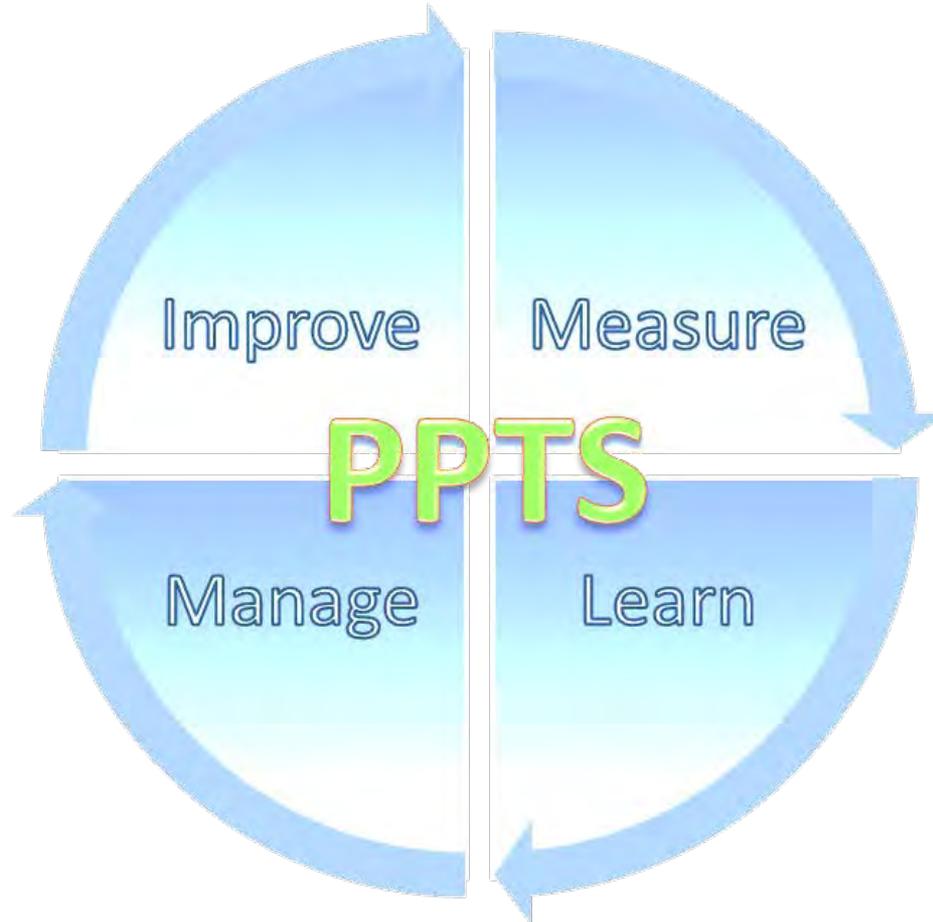


Hazardous Liquids Pipeline Industry; Improving the Use of Data

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Pipeline Performance Tracking System



Industry Data -- PPTS

- Pipeline Performance Tracking System (PPTS) created in 1999 – (soon to be 14 years of data)
 - Releases of 5 gallons or more to soil; all releases to water
 - Release-related information on all participant assets
 - Participation covers about 85% of PHMSA jurisdictional mileage
- Significant changes to reports in 2000, 2003, 2007 and 2009
- Many of the original data fields and subsequently changed/added fields have been adopted by PHMSA
- Discussions between industry's Data Mining Team and PHMSA's data staff help identify points of common concern/interest

Significant Changes to the PPTS Incident Report

Changes are driven by examining the record to find where available data does not support analyses

2000: Added info about gathering lines not regulated by PHMSA

2003: Added volumes for releases <5 bbl; IMP repairs; HCA releases; mileage by commodity

2007: Eliminated Short Form; added DIRT data

2009: Expanded choices for facility releases; added more detailed questions on operator error and incorrect operation; and expanded information on OQ

2012: Clarify if there were actual impacts to an HCA

2003 Changes – learning what is needed

- Started collecting the release volumes on small releases – not just if a release happened
- Added mileage by commodity to annual report
- Responding to new integrity requirements –
 - Repairs
 - HCAs

2007 – Doing more with less

- Dropped the short form so we could have more detailed information on small releases
- Added DIRT reporting module – one-stop reporting for liquid operators

2009 – Facilities and Operator Error become focuses

- Added many more choices for item involved in facility and pipe sections
 - More granularity for facility releases
- Equipment Failure vs Operator Error
 - Is it a “flange failure” because someone over torqued bolts?
 - Is it a “valve failure” if valves were misaligned?
- Was a qualified person doing the work or being supervised by a qualified person?
- Was it a human error or a bad procedure (or both)?
- More alignment with 2010 PHMSA report

More Choices; Fewer “Others”

- Expanding choices leads to better reporting
 - Fewer uses of “other” or “unknown”
 - Better characterization of cause and system part

Possible Modifications for PHMSA Integrity Management Information

- Info by State of no practical use in determining risk because interstate pipelines aren't managed differently at state borders
- Current information about integrity assessments and repairs collected
 - What does it tell us? Answer: Not Much!
 - Better information about tools used and what the actual repairs were could be of more use to industry and PHMSA – would need to work through the best way to address this

Personal and Operational Safety Data

- Recent discussions among the HES professionals in the HL Pipeline Industry
 - More systematic data on behavior-based personal safety
 - More focus on operational “Pipeline” safety
- Some of this is already captured in benchmarking exercises and PPTS
- This will be influenced by current efforts to develop a Safety Management System standard
- PPTS to be upgraded in 2015 – will consider some of these expansions

Using the PHMSA Data

- We are very conscious of the appropriate use of PHMSA data by the public and PHMSA staff
 - e.g., visibly good trends in HL incident data BUT numbers look large compared to natural gas because of small volume reporting, explosions and fires, and the significant cleanup costs for even small releases
- Need to recognize points of discontinuity in time series due to changes in reporting thresholds/form changes: e.g., in 2002 & 2010
- Need to be sure to normalize – generally need mileage if you are going to describe data regarding pipe; harder to do with facilities

More on Using the PHMSA Data

- Separate line pipe from facilities – different causes and solutions
 - Facility releases more numerous but smaller and less impact on the public
 - More moving parts, vibration, fittings, low flow piping, etc.
- Pipe material, pipe seam, and equipment failures don't seem a natural grouping – different failure mechanisms
 - however PHMSA has historically grouped them
 - Should only group parts experiencing similar causes and reflecting similar risks
- Gas versus Liquid – only really comparable for “serious” incidents (death/injury); different reporting criteria make comparisons inappropriate

GPS data standard

- API and AOPL have been working on this for some time
- Alignment on datum and notation
- GTSA has accepted our proposed guidelines for GPS
- Hope to get CGA to adopt for purposes of one call requests and locates

Opportunities for the Future

- Migration of PPTS to new software platform expected in the 2015 timeframe
 - Improved functionality, including reporting and data extraction
 - Chance to implement new safety data collection and analysis
- Infrastructure data from GIS systems – report to PHMSA via NPMS?
 - Not there yet, but soon?

Questions?

