

Facility Integrity – One Viewpoint

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Disclaimer

- **The views, opinions, and conclusions expressed today are those of the presenter and do not necessarily reflect those of Kinder Morgan Energy Partners nor the American Petroleum Institute.**

Agenda - Facility Integrity

- What exactly is Facility Integrity?
- Why should you be concerned?
- What should you be concerned about?
- What Kinder Morgan Terminals is attempting to do about it
- What should you do about it?

What is Facility Integrity?

- Exact definition will be different for each Company, Location and even Individual
- Physical Assets such as piping, valves, tanks, etc.
- Inspection Procedures
- Maintenance Procedures
- Audits/Assessments

What is Facility Integrity?

- Definition will also depend on whether you are talking about a remote valve site, pump station, truck terminal or major tank farm
- Most people think Facility Integrity is about keeping the product inside the pipe or tank
- Should also include keeping everything running as scheduled
- Should also include environmental and regulatory compliance

Why should you be concerned?

- Employee Safety
- Environmental/Regulatory Concerns
- Customer Satisfaction
- Good Business
- Industry Trends

Why should you be concerned?

- More than half of the incidents in the Pipeline Performance Tracking System (PPTS) involved facility releases
- Even though normally small in volume and contained on site, they are trending upward year over year

What should you be concerned about?

- Tanks

- Do you have a formal 653 Tank Inspection program?
- Do you have good records?
- Do you have good inspection and repair procedures?
- Large volume potential, normally contained

What should you be concerned about?

- Piping
 - Do you have a formal Piping Inspection program?
 - API working on a new Recommended Practice, API 2611, less stringent than API 570

What should you be concerned about?

- Main Causes of Facility Leaks (per PPTS)
 - Tubing and Small Piping
 - Drain Lines
 - Dead Leg Piping
 - Relief Lines

What is Kinder Morgan Terminals doing?

- Formal, standardized, written operations and maintenance procedures
- Terminal Risk Assessment Plan (TRAP)
- Formal Audit and Assessment Program

What is Kinder Morgan Terminals doing?

- Internal Tracking System (OpsInfo)
- Technical Working Groups

What should you do about it?

- Two trite phrases:
 - Do it with Data
 - Facts are Friendly

Questions?



