



MURCHISON
LAW FIRM, PLLC

Corrosion Conference & Expo 2019
Nashville, Tennessee

PHMSA Pipeline Safety Forum

**“Best” Practices From the Operator
and Technician Perspective**

Vince Murchison, Member and Manager

March 26, 2019

The Pipeline & Energy Authority



Overview

- **Fundamentals**
- **What Happens When An “Event” Occurs?**
- **Real-Life Example**
- **How Can You Help Your Future Self?**



Fundamentals – What Authorities Apply?



Pipeline Safety Act – 49 U.S.C. 60101 et. seq. (2015) – THE LAW

- 60102(a)(2) – Minimum Safety Standards
- 60122 – Civil Penalties
- 60123 – Criminal Penalties





The Regulations – How Do They Differ From the PSA?

49 C.F.R. 195 – Transportation of Hazardous Liquids by Pipeline

Subpart H – Corrosion Control

49 C.F.R. 192 – Transportation of Natural and Other Gas by Pipeline

Subpart I – Requirements for Corrosion Control

These subparts prescribe the minimum safety requirements for protecting against corrosion

- Which pipelines must have cathodic protection
- Determining adequacy of cathodic protection
- Monitoring corrosion control
- Remedial measures
- Atmospheric corrosion control
- Direct assessment
- Records maintenance



49 C.F.R 195 – Subpart G - Qualification of Pipeline Personnel

49 C.F.R. 192 – Subpart N - Qualification of Pipeline Personnel

Minimum Requirements for Qualification of Individuals Performing Covered Tasks on a Pipeline Facility

- Written operator qualification program
- Required recordkeeping

49 C.F.R. 195.452 – Pipeline Integrity Management in High Consequence Areas

49 C.F.R. Subpart O – Gas Transmission Pipeline Integrity Management

Minimum Requirements of an Integrity Management Program

- High Consequence Areas
- Could Affect an HCA



NACE SP0169-2007 – *Standard Practice for Control of External Corrosion*

- CP criteria for achieving effective control of external corrosion. *Incorporated by reference at 49 C.F.R. § 195.571 (49 C.F.R. § 195.3).*
- Recommends practices for the piping system design process; external corrosion control on piping systems; design, installation, operations and maintenance of cathodic protection systems; recording data and record maintenance

ASME B31Q-2010 – *Pipeline Personnel Qualification*

- Establishes requirements for developing and implementing an effective Pipeline Personnel Qualification Program.

API RP 1161- *Recommended Practice for Pipeline Operator Qualification*

- Provides guidance for developing and maintaining an OQ program that is compliant with OQ regulations.



Clean Water Act *Federal Water Pollution Control Act § 311*

- Regulates discharge of oil or hazardous substances into or upon the waters of the United States.
- Generally, any person who is in charge of any onshore facility from which oil is discharged in violation of the CWA is subject to civil penalties up to
 - \$25,000 per day of violation or
 - \$1,000 per barrel
- Liability for actual costs of removal.





What Happens When An “Event” Occurs?



When An Event Occurs, Company Will ALWAYS Go To Engineer/Technician FIRST.

What Do I Mean By Event?

- Accidents and Incidents – only one kind...
- Investigations gone bad
- Audits gone bad
- Inspections gone bad



Why Does The Company Go To The Engineer/Technician First?

- Engineer/Technician has knowledge, skill, education, experience, training, and day-to-day familiarity
- Responsibility Flows Downhill – responsible for:
 - Record keeping
 - Safe operating procedures
 - Protect property and lives



When An Event Occurs, Company Will ALWAYS Go To Engineer/Technician FIRST.

What will you be asked?

- What did you know?
- When did you know?
- If you didn't know, when should you have known?
- What did you do about it if you did know?
- Where are your records, your notes, your emails...and texts?



A photograph of four large, cylindrical industrial storage tanks, likely for oil or gas, arranged in a row. Each tank has an external metal staircase leading to a walkway at the top. The tanks are light-colored, possibly white or light grey, and are set against a clear blue sky. The image is slightly faded, giving it a soft appearance. The text "Real-Life Example" is overlaid in the center-right of the image.

Real-Life Example



Anyone Recognize This?





Shell Pipeline Company – Milwaukee Airport Release

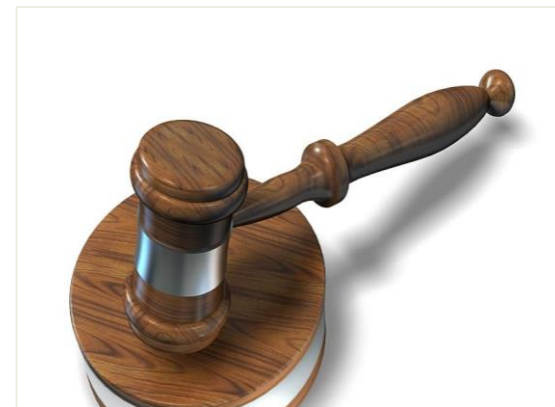
- Onshore corrosion coordinator responsible for Shell pipeline delivering jet fuel to the Milwaukee airport
- Responsibilities included rectifier reads and annual pipe-to-soil reads
- Did not conduct required reads for about a year
- PHMSA schedules an inspection
- Technician enters made-up data into computer
- Next month, jet fuel released from corrosion damage – 214 bbl of jet fuel released - \$19.3 million to respond and cleanup





Shell Pipeline Company – Milwaukee Airport Release

- Criminal charges brought against technician
- Three counts of violating the Pipeline Safety Act
 - Failure to conduct the required readings and making a false statement to PHMSA in the form of false data
- Technician felt overworked and overwhelmed in his role
- Pleaded guilty to all counts
- Sentenced to 5 years probation
- Ordered to pay \$19.3 million in restitution





Shell Pipeline Company – Milwaukee Airport Release

Lessons Learned:

- Um, conduct required reads
- Keep thorough and precise records
- Stop and reflect – Have I met all requirements and all intents of regulations and company procedures?
- Little things can become disproportionately significant in a hurry
- History catches up with itself
- Significant liability is ready, ... waiting...





How Can You Help Your Future Self?



Bottom Line –

1. Do What Ya Gotta Do
 2. Then Do What You Oughta Do
- Bad records lead the agency to easy findings of violation
 - Generally, better outcome with good records
 - Pencil-whipping is a dead-end road





Manage Risk

- There's a reason...
 - Not everything is within your control
 - Control very well those things that are within your control
- Create and maintain detailed and precise records
 - Including records of investigations of near loss situations
- Maintain an adequate document/record retention program
 - Records are there when you need them
- When in doubt – ask counsel





Manage Risk and the Social License

- Agency Rapport
 - Don't interact with PHMSA only during inspections
 - Communicate and build relationships with PHMSA over time
- Pipeline Safety Management Systems – API RP 1173
 - Addresses ways to continually operate safely and improve safety performance
 - Plan-Do-Check-Act – the cycle of continuous assessment and improvement
 - PHMSA participated in the development of SMS and promotes its implementation





Vince Murchison

Murchison Law Firm, PLLC

Vince.Murchison@PipelineLegal.com

214-716-1923

Credit Where Credit's Due:

Chris Paul

John Clayton

Kevin Garrity

API

AOPL

PHMSA