

# UTC PIPELINE SAFETY INSPECTION PROGRAM



# UTC PIPELINE SAFETY INSPECTION PROGRAM

- ◉ Statutory Requirements
- ◉ Who we Inspect
- ◉ The inspectors
- ◉ Types of Inspections
- ◉ Inspection Frequency
- ◉ The inspection Process

# STATUTORY REQUIREMENTS

Chapter 81.88.060 RCW & 81.88.065 RCW

“The commission shall develop and administer a comprehensive program of pipeline safety in accordance with this chapter.”

# STATUTORY REQUIREMENTS

## Chapter 81.88.090 RCW

“The commission shall maintain federal certification for the state’s pipeline safety program. The commission, at a minimum shall do the following:

(1) Inspect hazardous liquid pipelines and gas pipelines periodically as specified in the inspection program;”

# STATUTORY REQUIREMENTS

## Chapter 81.88.100 RCW

“The commission may inspect any record, map or written procedure required by federal law to be kept by a pipeline company concerning releases, and design, construction, testing or operation and maintenance of pipelines.”

# PIPELINE COMPANIES

- ◉ Liquid/gas
- ◉ Interstate/intrastate
- ◉ Headquarters/units
- ◉ Master Meters

# PIPE LINE COMPANIES

## ⦿ Companies

- 12 Liquid
- 25 Gas

## ⦿ Units

- 17 Liquid
- 57 Gas

# PIPE LINE COMPANIES

Hazardous Liquid

“Petroleum, petroleum products or anhydrous Ammonia”

# PIPE LINE COMPANIES

## Liquid Operator Exemptions:

1. Lines regulated by Coast Guard
2. Lines fed by gravity
3. Lines 1 > mile long

# PIPE LINE COMPANIES

## **Breakout Tank**

A storage tank that:

1. Relieves surge from a pipeline, or
2. Re-injects product back into a pipeline

# PIPE LINE COMPANIES

## Gas

“Natural gas, flammable gas or gas which is toxic or corrosive.”

# INTERSTATE COMPANIES

- ◉ Puget Sound Energy
- ◉ KB Pipeline
- ◉ Gas Transmission Northwest Corp (GTN)
- ◉ Northwest Pipeline Corp (WGP)
- ◉ Olympic Pipe Line Company
- ◉ Chevron Pipeline Company
- ◉ ConocoPhillips
- ◉ Exxon Mobil Oil Corporation
- ◉ Trans Mountain Pipeline (Puget Sound) LLC

# INTRASTATE COMPANIES

- Avista
- Cascade Natural Gas
- Northwest Natural
- Puget Sound Energy
- City of Buckley
- City of Ellensburg
- City of Enumclaw
- Solvay Chemical
- Akzo Nobel
- Air Liquide
- BP Pipeline
- Cardinal Glass
- Georgia Pacific
- Weyerhaeuser
- Inland Empire
- Lamb Weston/BSW
- McChord Pipeline
- Tidewater Terminal
- Nustar
- JR Simplot
- Chevron Pipe line
- Swissport
- **Sound Refining**

# LIQUID OPERATORS

- ◉ Olympic Pipe Line
- ◉ Chevron Pipe line
- ◉ ConocoPhillips
- ◉ Exxon Mobil Oil Corporation
- ◉ Trans Mountain Pipeline (Puget Sound) LLC
- ◉ McChord Pipeline Company
- ◉ Tidewater Terminal
- ◉ Nustar Pipeline Operating Partnership, L.P.
- ◉ Swissport
- ◉ Sound Refining

# GAS OPERATORS

- Avista
- Cascade
- NW Natural
- Puget Sound Energy
- City of Buckley
- City of Ellensburg
- City of Enumclaw
- Solvay Chemical
- Akzo Nobel
- Air Liquide
- JR Simplot
- KB Pipeline
- Gas Transmission NW Corp (GTN)
- Northwest Pipeline Corp (WGP)
- Arco Western
- Cardinal FG
- Inland Empire
- Lamb Weston/BSW
- Weyerhaeuser
- Georgia Pacific

# LNG OPERATORS

- Northwest Pipeline Corp (WGP)
- Puget Sound Energy

# INTRASTATE INSPECTION UNITS

## ◉ Avista

- Goldendale/Stevenson
- Pullman/Clarkston
- Spokane/Ritzville
- Colville

## ◉ Cascade

- Whatcom
- Skagit/Island
- Kitsap
- Cowlitz
- Tri Cities/Walla Walla
- Wenatchee/Moses Lake
- Yakima/Sunnyside
- Mason/Grays Harbor

## ◉ NW Natural

- Clark
- Columbia Gorge

## ◉ PSE

- King East
- King West
- Pierce
- Snohomish
- Thurston/Lewis
- Kittitas
- Propane Peak Shaving
- LP Gas Distribution

# INTERSTATE INSPECTION UNITS

- Northwest Pipeline Corp (WGP)
  - Sumas
  - Redmond
  - Battleground
  - Pasco
  - Spokane
- Gas Transmission Northwest Corp (GTN)
  - Rosalia
  - Wallula
- PSE
  - Sumas Gas Pipeline
  - Jackson Prairie
- Olympic Pipe Line
  - North
  - South
  - Intra Laterals
- Chevron Pipe Line
  - Pipeline
  - Tanks

# MASTER METERS

- ◉ List of 700
- ◉ 7 confirmed

# INSPECTORS

- ◉ 8 inspectors
- ◉ Background
- ◉ Training

# T&Q TRAINING

- ◉ Gas regulation
- ◉ Liquid regulation
- ◉ LNG regulation
- ◉ Overpressure protection
- ◉ Corrosion
- ◉ Accident Investigation
- ◉ Welding
- ◉ Joining
- ◉ SCADA
- ◉ In-line inspection
- ◉ Control Room Management
- ◉ Root Cause Analysis
- ◉ Direct Assessment
- ◉ Liquid Integrity Management
- ◉ Gas Integrity Management
- ◉ Operator Qualifications
- ◉ Compliance and Enforcement
- ◉ Reliability Assessment
- ◉ 24 hour safety Awareness

# TYPES OF INSPECTIONS

- Team/Individual
- Standard
- Follow-up
- O&M
- Integrity Management
  - Gas transmission
  - Distribution
  - Liquid
  - State
- Operator Qualifications
- Public Awareness
- Control Room Management
- Drug and Alcohol
- Crew/Construction
- Incident Investigations
- Complaints
- Master meters
- Integrated Inspection

# CONSTRUCTION INSPECTIONS



# CORROSION CONTROL



# STRUCTURAL INTEGRITY



# PIPE LINE REPAIRS



# INCIDENT INVESTIGATIONS



# INSPECTION FREQUENCY

- ◉ Interstate

- ◉ Intrastate

- Risk based
- 3 year max for standard
- 5 year max for Integrity management/OQ/O&M/Public Awareness/Control Room management
- 7 year for drug and Alcohol

# WHAT WE DO DURING A STANDARD INSPECTION

- Pre-inspection Work
  - Past records
  - Pre-field
  - O&M review
- Records review
- Field Work
  - Observation
  - Testing
  - OQ review

# RECORDS REVIEW

- Reporting
- Construction
- Pressure Testing
- MAOP (MOP)
- Operating Pressure
- Damage Prevention
- Corrosion Control
- Pipe Repair
- Drug and Alcohol
- Integrity Management
- Operator Qualifications
- Patrolling
- Public Awareness
- Maps
- Leak Surveys (Gas)
- Abnormal Operations
- Emergency Procedures
- Emergency response training
- Periodic review
- Customer notifications (gas)
- Odorant (Gas)
- Pressure control
- Valves
- Breakout Tanks (Liquid)
- Over fill alarms (Liquid)
- Leak detection (Liquid)
- Fire equipment (Liquid)
- Depth cover (liquid)

# FIELD REVIEW

- ◉ Odorization (gas)
- ◉ Corrosion Control
- ◉ Valve Operation
- ◉ Pipe Supports
- ◉ Land Movement
- ◉ Markers
- ◉ Signs
- ◉ Right-of-Way
- ◉ Pressure Control
- ◉ Operating pressure
- ◉ Leak Surveys (gas)
- ◉ Compressor stations (gas)
- ◉ Pump Stations (liquid)
- ◉ Breakout tanks (liquid)
- ◉ Leak Detection (liquid)
- ◉ Fire Fighting (liquid)
- ◉ Alarm Logs
- ◉ Security
- ◉ Station Sensors
- ◉ Supports

# COMPLIANCE AND ENFORCEMENT

- Interstate
- Intrastate
  - Letters
  - Orders

# QUESTIONS?

