





# **Pipeline Safety Standard Comprehensive Inspections**

#### Justin Markham July 2025













#### Presentation Agenda



- Standard versus specialized
- General structure of these inspections
- Database information needed
- Forms covered during these inspections
- Provide considerations during inspections (throughout the presentation)



# Standard versus Specialized

### Standard versus Specialized



- Standard comprehensive is system specific.
  - Focus is on procedures/records applicable to a pipeline system.
- Specialized inspections are plan specific.
  - Example: Operation, maintenance, and emergency plan.
    - Encompasses covered assets and applicable procedures and records.



# **Standard Inspection Structure**

### Standard Comprehensive Structure

- Open inspection package in database
- Input system data into inspection package
- Gather drug and alcohol information and data
- Review plans, permits, procedures, and records
- Conduct field inspection
- Conduct executive closing



# Database (PIPES) Information

### **Database Information Needed**



- Database = PIPES
  - Pipeline Inspection, Permitting, and Evaluation System
- Company Representative for correspondence
  - Not executive closing forms
  - Our rule is a Vice President or higher\*
- Input of system-specific information

   Gathering/Transmission and Distribution

### Distribution Data for PIPES (1 of 4)

- Purchased meters
- Customers
- Odorizer (Self or supplier)
- Odorizer Type
- How many odorizers?
- Odorant used
- How many city gates?

### Distribution Data for PIPES (2 of 4)



- Patrol points
- Any safety related conditions?
- Any farm taps?
- Average service length
- Unrepaired grade 2 leaks (Rule 8.207)
- Unrepaired grade 3 leaks (Rule 8.207)
- Review PS-95's

### Distribution Data for PIPES (3 of 4)

- Regulator Stations
- Master Meter Regulator Stations
- Any low-pressure sections on system?
- Cathodic protection zones
- Short cathodic protection sections
- Amount of casings
- Any shorted casings?

### Distribution Data for PIPES (4 of 4)

- Lost and Unaccountable Gas (LUG)
  - Thousand cubic feet (MCF) purchased
  - MCF sold
  - Calculate the percentage of LUG
- Number of services by type/size
  - Service material (Steel/Plastic)
  - If steel, is it (are they)coated?
  - If steel, does it (do they) have cathodic protection?
  - What is the diameter?

### Transmission Data for PIPES (1 of 4)

- Also applies to gathering systems
- Inlets
- Outlets
- Customers
- Odorizers and odorant used
- Customers odorizing
- Regulator Stations

#### Transmission Data for PIPES (2 of 4)

- Patrol Points (Exposures)
- Navigational Crossings
- Any Safety Related Conditions (SRCs)
- Compressor Stations
- If so, are the stations attended?
- CP zones
- Short CP sections

#### Transmission Data for PIPES (3 of 4)

- Casings
- Shorted casings (If any)
- H2S Inlets
- H2S Max PPM
- Farm Taps
- Any unrepaired leaks?

### Transmission Data for PIPES (4 of 4)

- Miles of pipe by size and material
  - Steel/Plastic
  - CP or no CP?
  - Coated? If so, what type?
  - Diameter
  - Mileage
- Split by different attributes

### Additional Data for PIPES (1 of 3)

- Maximum Allowable Operating Pressure (MAOP)
  - What pressure?
  - Entire System?
- Overpressure protection method

   Relief valve? Provided by self or upstream?
- Any repaired leaks?

### Additional Data for PIPES (2 of 3)

- Miles in different class locations
  - What class?
  - Mileage in that class?
  - Is it odorized?
  - HCA?
  - Smart piggable?
  - Pressure tested?
  - Pipe Grade/Wall Thickness/Diameter/MAOP
    - Split out by attributes



- Supplier(s) of the pipeline system
  - Traceability



# Drug and Alcohol (D&A) Information

### Drug and Alcohol (D&A) Data



- Do you have a D&A plan?
- Supervisor Training verification
  - 1 hour of drug (49 CFR 199.113(c))
  - 1 hour of alcohol (49 CFR 199.241)
- Employee Assistance Program number – "Hot-line" number (49 CFR 199.113(b))
- Go over latest Management Information System (MIS) data.



### **Brief Checklist Overview**

### **Beginning Checklist Coverage**

- Covers applicable plans
   Date plan was last reviewed
- Covers permits and reports
  - P-5 and T-4 permit(s)
  - Annual report, new construction, and incidents (if applicable).

### **Procedure and Record Portion**



- Checklist covers applicable procedures and records associated with system
  - Cathodic Protection
  - Construction
  - Integrity (If applicable)
  - Pressure Testing
  - Operations and Maintenance
  - Operator Qualification (OQ)



## **Field Portion**

### **Field Portion**



- Compressor stations and offshore piping (If applicable)
- Cathodic Protection
- Atmospheric Corrosion
   Soil-to-air interface
- Emergency valves
- Overpressure protection
- Farm Taps
- Line Markers (Signage)

### **Field Portion Considerations**



- Texas weather is slightly unpredictable
   Schedule can be adjusted accordingly
- Inspectors sometimes request copies of records for field
  - Not to take home, just for notes purposes.



# Odorization (If applicable)

### Odorization (If applicable)



- Instrument used to test odor
- Serial number of instrument
- Calibration date
- Percentage of gas to air mixture



## **Executive Closing**

#### **Executive Closing**



- Conducted at the end of each inspection
  - List any alleged violations (if any)
  - Will be emailed via the PIPES database
    - Email will come from <u>Safety@rrc.texas.gov</u>





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