





Hazardous Liquids Inspections

Brad Cox July 2025













Guide to a Hazardous Liquids Inspection

- Scheduling of Inspection
- Form used in inspection
 - Program Review
 - Records Review
 - Field
- Closing of inspection
- Potential Violations
- Top 5 violations cited
- POC Follow up

Scheduling of Inspection



- 1. Inspections are assigned to inspectors by region
- 2. Inspector Identifies priority
- 3. Inspector starts contacting operators

Scheduling Note



Inspection Scheduling

When an inspector schedules an inspection with an operator, the inspector should allow the operator adequate time (typically two weeks) to prepare for the inspection.

Inspection Form



- The Inspection Form used is RRC Form 3
- The inspector will typically send a copy of the form to the operator before the inspection.
 - If you do not receive one, you can request a copy
- The RRC Form 3 is broken down into 3 tabs
 - Program & Reporting, Records Review, Field Review

Program Review



- Plans Programs and Procedures
- Procedure Review
- Annual Reports
 - Update PIPES system details
- Other Reporting

Plans Programs and Procedures

Review the last specialized inspection

- List dates of last specialized inspection for O&M and Emergency Plan, OQ, etc.
- Are the programs current
- Does the operator have a Texas integrity management plan TAC 8.101
- Does the operator have a Spill response plan **Part 194**

Procedure Review



- Operators' determination of active corrosion
- Abandoning pipeline
- Procedures for analyzing incidents
- Pipeline information in **NPMS**
- Procedures for directional boring
- Procedures for notification of excavation

Annual Reports



- 195.49 TAC 8.301(b), PHMSA F 7000-1.1

- T-4 Permit **TAC 8.1(b)(4)**
- P-5 Organization Report TAC 8.51
- School proximity notification TAC 8.315

Note: PIPES system information verified at this time

Other Reporting (1 of 3)



Incidents involving crude

- Notification to the Commission's emergency line at (512) 463-6788 at the earliest practicable moment following the discovery of the incident within 2 hours. TAC 8.301(a)(1)(A)
- Within 30 days of discovery of the incident, submit a completed Form H-8 to the Oil and Gas Division of the Commission and a copy of the required DOT form with the Division. TAC 8.301(a)(1)(B)

Other Reporting (2 of 3)



All other incidents

- Immediate Notice Reports to NRC (800-424-8802/or Online) and Supplemental NRC Reports. 195.52/TAC 8.301(a)
- Accident Reports (DOT Form 7000-1) (Must be submitted electronically after 01/01/2011). 195.54(a)/TAC 8.301(a)
- Supplemental Accident Reports (DOT Form 7000-1)
 195.54(b)
- National Pipeline Mapping System (NPMS) Submission.
 195.61(a-b)

Other Reporting (3 of 3)



- National Registry of Pipeline and LNG Operators-OPID Request, notifications of changes (flow reversal, conversion to service, operator change) 195.64(a-d)
- Safety Related Conditions 195.56/TAC 8.301(c)
- New Construction Report- 195.64(c) RRC Form PS-48 TAC 8.115

Records Review



- Subpart A General
- Subpart D Construction
- Subpart E Pressure Testing
- Subpart F Maintenance & Operation Records
- Subpart F Integrity
- Subpart G Operator Qualifications
- Subpart H Corrosion Control

Records Review (Cont'd)



- Offshore
- Breakout Tanks
 - Subpart F & H
- Pump Stations
 - Subpart F & H

Subpart A General



- Pipeline Records
- Pipeline testing
- Pipeline Repairs
- Pipeline replacements
- Pipeline Alterations

Note: If none of these apply, it will be marked NA

Subpart D Construction Records



- Construction inspector training and qualifications
- Test results to qualify for welding procedure
- Nondestructive technician qualifications
- Construction records
- Number of welds inspected by NDT, rejects, disposition of rejects
- Location and cover of each size of pipe installed
- Utility, pipe, and overhead crossings
- Valves and test locations
- Holiday detections

Note: If there has not been any recent new construction activity, this will be marked N/A

Subpart E Pressure Testing (1 of 2)



- Except as otherwise provided in this section and in 195.305(b), no operator may operate a pipeline unless it has been pressure tested under this subpart without leakage.
- Test Pressure. 4 hrs. at 125 %, or more, of MOP. Pipeline not visually inspected for leakage during test, an additional 4 hrs. at a pressure equal to 110%, or more, of MOP

Subpart E Pressure Testing (2 of 2)



- Manufacturer Testing of Components
- Test Medium: Except as provided in paragraphs (b),(c), and (d) of this section, water must be used as the test medium.
- Records of Pre-tested Pipe
- Pipeline Test Record

Subpart F O&M Records



- Abandonment
- Liaison with Fire, Police, and Public officials
- Maps and records
- MOP, establishing MOP
- Repairs
- ROW inspections
- Notification of potential rupture
- Valve maintenance and shut-off time
- Damage prevention, public awareness, public liaison, one-call records

Subpart F Integrity



- HCA determination
- Texas risk-based program
 - Risk-based or Prescriptive
- Risk analysis
- Assessment of integrity issues
- Repair/removal of defects
- Review PHMSA Form 7000-1.1 F, G, G1

Subpart G Operator Qualifications Record

- Review OQ plan
- Review OQ Records
 - Identification of qualified individuals
 - Identified covered task the individual is qualified to perform
 - Dates, verify qualifications are current
 - Qualification method

Note: The details of the OQ plan will be reviewed in a specialized inspection

Subpart H Corrosion Control Records

Corrosion Control

- Supervisors qualifications
- Annual CP test, pipe casings, interference
- Corrosive effect investigation
- Coupon testing
- Localized corrosion
- Atmospheric corrosion
- Remedial action taken

Offshore



- Identified specific points of operating responsibility
- Pipeline condition reports
- Abandoned facility reports
- Underwater inspections based on identified risk
- Exposed pipeline
- Atmospheric corrosion

Note: no offshore pipeline is marked NA

Breakout Tanks

Breakout tank records will be reviewed in two parts:

- 1. Subpart F Operation and Maintenance
- 2. Subpart H Corrosion Control

Breakout Tanks Subpart F

- Overfill protection
- Relief valves
- Pressure control equipment
- Firefighting equipment
- Inspection records of tanks
- Signage
- Security of facility

Breakout Tanks Subpart H



- Cathodic Protection records for buried piping
- Each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API RP 651
 - The inspection is not required if procedures established under 195.402(c)(3)

Pump Stations Subpart F & H



- Daily discharge pressure records
- Over-pressure protection
- Firefighting equipment
- Signage
 - No open flames
 - No smoking
- Security of facility
- Cp records and documentation

Field Review

- Field Inspection Results
- Over pressure protection valves
- Cp data from tests points
- Breakout tanks
- Pump Stations

Field Inspection Results



- Supervisor knowledge of emergency response procedures
- ROW markers and condition
- Valve maintenance and protection
- Pressure limiting devices, controllers, relief valves
- Signage and security
- Cp test points, case crossing, interference, rectifiers
- Atmospheric conditions

Break Out Tanks

- Relief valves
- Overfill protection
- Firefighting equipment
- Inspection of in-service tanks
- Signage

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- Security
- Cp readings

Pump Station



- Adequate ventilation of the pump station
 - Safety devices to prevent over-pressurization
 - Emergency shutdown device
 - Adequate fire protection
- Relief Valves
- Firefighting Equipment
- Signage
- Cathodic Protection

Closing of Inspection



- After the inspection has been completed there will be a formal closing
- We do not make any recommendations
- We will discuss any concerns that may have been observed during the inspection
- Discuss any potential violations that have been cited
- Produce an executive closing with potential violations or no violations cited.

Potential Violations



- Potential violations are just that, potential
- Any violations found during the inspection will be presented at the closing of the inspection.
- Deficiency in records or no records will be stated as no records were available at the time of the inspection.
- Issues in the field will include the location and issue found during the inspection.

Number 1 Violation



 49 CFR 195.428(a) - The operator did not, at intervals not exceeding 15 months, but at least once each calendar year, test the pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment listed below, to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

Number 2 Violation



 49 CFR 195.571 - Cathodic protection of buried or submerged pipelines required by 195.563 did not comply with one or more of the applicable criteria and other considerations for cathodic protection contained in paragraphs 6.2 and 6.3 of NACE Standard RP0169-96.

Number 3 Violation



- 49 CFR 195.573(e) An identified deficiency in corrosion control was not corrected as required by 195.401(b).
- (b) An operator must make repairs on its pipeline system according to the following requirements:
- (1) Non Integrity management repairs. Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it must correct the condition within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.
- (2) *Integrity management repairs*. When an operator discovers a condition on a pipeline covered under §195.452, the operator must correct the condition as prescribed in §195.452(h).

(3) *Prioritizing repairs*. An operator must consider the risk to people, property, and the environment in prioritizing the correction of any conditions referenced in paragraphs (b)(1) and (2) of this section.

Number 4 Violation



 49 CFR 195.573(a)(1) - Tests were not conducted on cathodically protected pipeline at least once each calendar year with intervals not exceeding 15 months to determine compliance with the cathodic protection criteria of 195.571.

Number 5 Violation



 49 CFR 195.573(a)(2) - Circumstances were not identified in which a close-interval survey or comparable technology is practicable and necessary to accomplish the objectives of paragraph 10.1.1.3 of NACE Standard RP0169-96 before December 29, 2003 or not more than 2 years after cathodic protection was installed.

POC Program of Correction



- Any violations found during the inspection will require a POC
- POC Program of Correction is due in 40 days.
- The POC should include the following
 - List the violation that was cited
 - What will be done to correct the issue
 - What is the completion date to resolve the issue
- Violations will go into delinquent status if no POC has been submitted in 40 days.
- Failure to respond to 3rd letter of delinquent POC, the inspection will go to the regional manager over that system
- Follow up inspection will be conducted unresolved issues will be cited as repeat violations with fines and enforcement



Questions?





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