

Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2020, Section 114 Inspection

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Inspection Information

Table 1A – Attendees

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|--------------------------------------------------------------------------|---------------------------------------------|
| Date of Inspection: | |
| Inspection Team (designate Lead Inspector) [Name/E-Mail/Organization] | Operator Team [Name/E-Mail/Organization] |
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Table 1B – Operator Information

| Asset Type* | Master Operator (if applicable) | OPID** | Operator Name | State | Included in Inspection? |
|-------------|---------------------------------|--------|---------------|-------|-------------------------|
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1. Complete the sections of the form for the selected Asset Types, leave other sections blank.
 2. LPG is not treated as a natural gas/methane source for Section 114 inspections.
 3. If an operator’s temporary LNG/CNG installations have procedures different than those evaluated for Section 114 compliance, a separate additional inspection is warranted.
 4. All system types, including HL and LPG, must complete the “Scoping” and “Leak-Prone Pipe” section of this form.
 * GT, GG, GD, MM, UNGS, LNG, LPG, or HL
 ** OPIDs included in inspection signifies that all share the same procedures as related to natural gas emissions and leak-prone pipe.

Scoping

1. Scoping – Inspection Coverage

What are your assets comprised of?

2. Scoping – Gas Transportation

Do you transport natural gas as a specific commodity (i.e., not a byproduct or constituent of another substance)?

3. Scoping – Driver or Engines

Do you use natural gas-fueled drivers or engines to compress natural gas?

4. Scoping – Use of Natural Gas

Do you use natural gas for fuel or power appurtenances or instrument gas on regulated facilities?

Gas Transmission

1. Compressors

Do the maintenance and operations procedures for compressors include provisions to minimize fugitive natural gas losses?

2. Drivers & Engines

Do maintenance procedures include measures for monitoring and correcting incomplete combustion of natural gas in driver or engine exhausts and taking corrective action if identified?

3. Leaks & Releases – Identification of Fugitive Emissions

Do procedures provide a methodology for identifying sources of fugitive natural gas emissions in the system?

4. Leaks & Releases – Venting

Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?

5. Leaks & Releases – Investigation of Unanticipated Vented Releases

Do procedures provide for investigation of any unanticipated vented releases of natural gas, and if so, what are the associated actions?

6. Leaks & Releases – Leak Data Collection and Analysis

Do procedures include a methodology to collect, retain and analyze detailed information from detected natural gas leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

7. Leaks & Releases – Detecting Leaks

Do procedures include instructions for personnel to detect leaks to help further reduce emissions in stations and along the right of way?

8. Leak Mitigation & Repair – Repair Procedures

Do procedures provide alternatives to cutouts (to reduce emissions)?

9. Testing – Emergency Shutdown Devices

Do procedures contain measures for ensuring ESD testing minimizes natural gas releases?

10. Testing – Relief Valves

Do relief valve testing procedures include measures to minimize natural gas releases?

11. Flaring

Do procedures for flaring from pipeline facilities for transporting natural gas include measures for minimization of natural gas emissions?

12. General – Feedback to Design/Configuration Practices

Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?

13. General – Compressor Station

Do procedures contain mechanisms for minimizing natural gas emissions from operations and maintenance activities within a compressor station (i.e., beyond compressor/driver-specific procedures)?

Underground Natural Gas Storage

1. Compressors

Do the maintenance and operations procedures for compressors include provisions to minimize fugitive natural gas losses?

2. Drivers & Engines

Do maintenance procedures include measures for monitoring and correcting incomplete combustion of natural gas in driver or engine exhausts and taking corrective action if identified?

3. Leaks & Releases – Venting

Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?

4. Leaks & Releases – Investigation of Unanticipated Vented Releases

Do procedures provide for investigation of any unanticipated vented releases of natural gas, and if so, what are the associated actions?

5. Leaks & Releases – Leak Data Collection and Analysis

Do procedures include a methodology to collect, retain and analyze detailed information from detected natural gas leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

6. Leaks & Releases – Wellhead

Do procedures provide for periodic leakage surveys around the wellhead?

7. Leaks & Releases – Annulus

Do procedures provide for periodic checking of wellhead annuluses for indications of leaks (e.g., unexplained pressure variations)?

8. Leaks & Releases – Field Integrity

Do procedures provide for leak surveys for well casing containment or geologic issues?

9. Testing – Relief Valves

Do relief valve testing procedures include measures to minimize natural gas releases?

10. General – Feedback to Design/Configuration Practices

Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?

Liquified Natural Gas

1. Compressors

Do the maintenance and operations procedures for compressors include provisions to minimize fugitive natural gas losses?

2. Drivers & Engines

Do maintenance procedures include measures for monitoring and correcting incomplete combustion of natural gas in driver or engine exhausts and taking corrective action if identified?

3. Leaks & Releases – Identification of Fugitive Emissions

Do procedures provide a methodology for identifying sources of fugitive natural gas emissions in the system?

4. Leaks & Releases – Venting

Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?

5. Leaks & Releases – Investigation of Unanticipated Vented Releases

Do procedures provide for investigation of any unanticipated vented releases of natural gas, and if so, what are the associated actions?

6. Leaks & Releases – Leak Data Collection and Analysis

Do procedures include a methodology to collect, retain and analyze detailed information from detected natural gas leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

7. Leaks & Releases – Detecting Leaks

Do procedures include instructions for personnel to detect leaks to help further reduce emission in stations and along the right of way?

8. Leaks & Releases – Tank Shell

Do procedures provide for monitoring for temperature variations on tank shells that could be indicative of leaks?

9. Leaks & Releases – Tank Disturbances

Do procedures for tank inspections after meteorological or geophysical disturbances include leak detection?

10. Leaks & Releases – Tank Cooldown

Do procedures provide that after cooldown stabilization is reached, flanges, valves and seals are checked for leaks?

11. Leaks & Releases – Tank Boil Off

Do procedures provide for collection of boil-off gas from LNG tanks to avoid releases?

12. Testing – Emergency Shutdown Devices

Do procedures contain measures for ensuring ESD testing minimizes natural gas releases?

13. Testing – Relief Valves

Do relief valve testing procedures include measures to minimize natural gas releases?

14. Flaring

Do procedures for flaring from pipeline facilities for transporting natural gas include measures for minimization of natural gas emissions?

15. General – Feedback to Design/Configuration Practices

Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?

16. General – Compressor Station

Do procedures contain mechanisms for minimizing natural gas emissions from operations and maintenance activities within a compressor station (i.e., beyond compressor/driver-specific procedures)?

17. General – LNG

What procedures are in place to reduce natural gas emissions during normal maintenance activities on facilities that contain LNG?

Gas Distribution & Master Meters

1. Leaks & Releases – Identification of Fugitive Emissions

Do procedures provide a methodology for identifying sources of fugitive natural gas emissions in the system?

2. Leaks & Releases – Venting

Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?

3. Leaks & Releases – Investigation of Unanticipated Vented Releases

Do procedures provide for investigation of any unanticipated vented releases of natural gas, and if so, what are the associated actions?

4. Leaks & Releases – Leak Data Collection and Analysis

Do the procedures include a methodology to collect, retain and analyze detailed information from detected natural gas leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

5. Leaks & Releases – Detecting Leaks

Do procedures include instructions for personnel to detect leaks to help further reduce emissions in stations and along the right of way?

6. Leak Mitigation & Repair

Do procedures define a process to identify, classify, mitigate and repair leaks?

7. Leak Mitigation & Repair – Lost & Unaccounted for Gas

Do procedures provide for review of Lost & Unaccounted for Gas (LAUF) and do procedures specify actions to reduce the associated volume?

8. Regulator Stations – O&M

Do maintenance or operational procedures contain measures for reduction of natural gas releases from regulators?

9. Regulator Stations – Configuration

Do maintenance or operational procedures contain measures for identifying potential configuration changes that would reduce natural gas releases from regulators?

10. Testing – Relief Valves

Do relief valve testing procedures include measures to minimize natural gas releases?

11. Flaring

Do procedures for flaring from pipeline facilities for transporting natural gas include measures for minimization of natural gas emissions?

12. General – Feedback to Design/Configuration Practices

Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?

Gas Gathering & Boosting

1. Compressors

Do the maintenance and operations procedures for compressors include provisions to minimize fugitive natural gas losses?

2. Drivers & Engines

Do maintenance procedures include measures for monitoring and correcting incomplete combustion of natural gas in driver or engine exhausts and taking corrective action if identified?

3. Leaks & Releases – Identification of Fugitive Emissions

Do procedures provide a methodology for identifying sources of fugitive natural gas emissions in the system?

4. Leaks & Releases – Venting

Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?

5. Leaks & Releases – Investigation of Unanticipated Vented Releases

Do procedures provide for investigation of any unanticipated vented releases of natural gas, and if so, what are the associated actions?

6. Leaks & Releases – Leak Data Collection and Analysis

Do procedures include a methodology to collect, retain and analyze detailed information from detected natural gas leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

7. Testing – Emergency Shutdown Devices

Do procedures contain measures for ensuring ESD testing minimizes natural gas releases?

8. Testing – Relief Valves

Do relief valve testing procedures include measures to minimize natural gas releases?

9. Flaring

Do procedures for flaring from pipeline facilities for transporting natural gas include measures for minimization of natural gas emissions?

10. General – Feedback to Design/Configuration Practices

Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?

11. General – Compressor Station

Do procedures contain mechanisms for minimizing natural gas emissions from operations and maintenance activities within a compressor station (i.e., beyond compressor/driver-specific procedures)?

Non-Natural Gas – Using Natural Gas as Fuel, Power Appurtenance or Instrument Gas

1. Drivers & Engines

Do maintenance procedures include measures for monitoring and correcting incomplete combustion of natural gas in driver or engine exhausts and taking corrective action if identified?

2. Leaks & Releases – Identification of Fugitive Emissions

Do procedures provide a methodology for identifying sources of fugitive natural gas emissions in the system?

3. Leaks & Releases – Detecting Leaks

Do procedures include instructions for personnel to detect leaks to help further reduce emissions in stations and along the right of way?

4. General – Feedback to Design/Configuration Practices

Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?

Leak-Prone Pipe

1. Leak-Prone: Leaks & Releases

What procedures are in place to monitor for and identify pipe segments that are leak-prone, and what criteria (e.g., frequency of leak or failure events) are specified for determining a pipeline segment is leak-prone?

2. Leak-Prone: Leaks & Releases – Leak Data Collection and Analysis

Do procedures include a methodology to collect, retain and analyze detailed information from detected leaks, including those eliminated by lubrication, adjustment, tightening or otherwise below thresholds for regulatory reporting?

3. Leak-Prone: Leak Mitigation & Repair – Replacement and Remediation (Example Section 114 Materials)

Do procedures identify cast iron, unprotected steel, wrought iron, and vintage plastic pipe with known leak issues?

4. Leak-Prone: Leak Mitigation & Repair – Replacement and Remediation (Other Materials)

Do procedures clearly define a process to address replacement or remediation of pipe segments with known leak issues beyond those specifically identified in Section 114?