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

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**Inspection Information**

**Table 1A – Attendees**

<table>
<thead>
<tr>
<th>Date of Inspection:</th>
<th>Operator Team</th>
<th>Operator Team</th>
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<tbody>
<tr>
<td>Inspection Team (designate Lead Inspector) [Name/E-Mail/Organization]</td>
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**Table 1B – Operator Information**

<table>
<thead>
<tr>
<th>Asset Type*</th>
<th>Master Operator (if applicable)</th>
<th>OPID**</th>
<th>Operator Name</th>
<th>State</th>
<th>Included in Inspection?</th>
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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)?

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 minimizing 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 minimizing 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?