Section 114 of PIPES ACT of 2020 Guidelines for Master-Metered Natural Gas Systems

Pursuant to the "Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020" (PIPES Act of 2020) each operator of natural gas and propane gas distribution systems, including master-metered distribution systems located in a mobile-home park or a jurisdictional propane system, must update its operation, inspection, and maintenance written plans to address the elimination of hazardous leaks and minimize releases of natural gas (including, but not limited to, intentional venting during normal operations) from the operators' pipeline facilities no later than December 27, 2021. Also, the PIPES Act of 2020 requires those written plans to address the replacement or remediation of pipelines that are known to leak due to the pipe material (including cast iron, unprotected steel, wrought iron, and historic plastics with known issues), design, or past operating and maintenance history. In addition, Title 49 U.S.C. Section 60108(a)(2) requires that operators continue updating these written plans to meet the requirements of any future regulations related to leak detection and repair that are promulgated under Title 49 U.S.C. Section 60102(q).

To assist you in updating your written Plan for SECTION 114 of the PIPES Act, the Gas Safety and Reliability Branch of the California Public Utilities Commission has prepared the following guidelines to address the Section 114 inspection questions for master-metered operators. The examples provided herein should not be interpreted as being the only information that must be addressed in your Plan. It is the responsibility of the pipeline owner/operator to ensure that your plan addresses all the requirements in the PIPES Act of 2020, pertaining to master-metered gas or propane distribution system.

Audit Question(s)	Explanation	Example of how to write it in your procedure
Q5 – **Leaks & Releases - Identification of Fugitive Emissions** *Do procedures provide a methodology for identifying sources of fugitive natural gas emissions in the system?*	In a master-metered distribution system like the Mobile Home Park (MHP) distribution system, the main source of natural gas emissions will be leaks from pipes and valves. Regular leak surveys, patrolling, and prompt leak repairs will be the best way to cut down on fugitive emissions.	Example: Park management is conducting annual leak surveys which is more frequently than required by the federal code. Also, park staff conducts quarterly patrols to check for leaks in between the annual leak surveys. We are monitoring for leaks much more frequently than required to find and remediate any leak as soon as possible. The leak survey and patrol procedures are located in the Operation and Maintenance Plan.

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Q6 – **Leaks & Releases - Venting** *Do procedures identify measures for minimizing natural gas release volumes associated with non-emergency venting and blowdowns from operations and maintenance?* Q7 – **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?*	Venting is when gas is released to atmosphere during pipeline projects such as pipe replacements. As these types of projects occur very infrequently in an MHP these questions are likely not applicable to your system. However, the procedure should include language to show that you have considered the possibility of emissions reductions in this area.	Example: Sierra Mobile Home Park does not typically vent gas. Our pipeline repair works are typically very short segments containing a small volume of gas. The majority of our pipeline repairs are performed by a qualified third-party contractor who does all the gas handling.
Q8 – **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?*	Leak data should be collected and evaluated to see if there are any trends that might lead to further emissions reductions.	Example: All leaks detected are repaired and documented in the gas binder and records will be kept for a minimum of 5 years. Records of minor repairs that are made by the maintenance team and records will also be kept. During the annual review of the Operations and Maintenance plan, the leak history will be reviewed for any trends.
Q9 – **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?*	The MHP system is generally not large enough to include stations. However, the procedure should include language to show that you have considered the possibility of emissions reductions in this area.	Example: Sierra MHP does not have stations as part of their system. Park management does quarterly patrols of the entire gas system and repairs all discovered gas leaks.

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Q10 – **Leak Mitigation & Repair** *Do procedures define a process to identify, classify, mitigate and repair leaks?*	This will be your biggest area of emissions reductions. You should describe your timeline for repairing leaks.	Example: Gas leaks are identified through the MHP's leak survey programs and patrols. Leaks identified are repaired by our maintenance team within __ (days, weeks, months) after discovery. Underground Grade 1, 2, or 3 leaks are repaired by qualified personnel immediately. Also, management schedules all aboveground gas leaks for repairs by park personnel or qualified personnel as soon as they are available but not later than __ months.
Q11 – **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?* Q14 – **Testing - Relief Valves** *Do relief valve testing procedures include measures to minimize natural gas releases?* Q15 – **Flaring** *Do procedures for flaring from pipeline facilities for transporting natural gas include measures for minimization of natural gas emissions?*	Most MHPs do not have the capacity to track LAUF and do not have relief valves or flaring. However, the procedure should include language to show that you have considered the possibility of emissions reductions in this area.	Example: The gas master-metered distribution system is not equipped to track and monitor unaccounted for gas. The park does not have gas flaring or purging/blow down. The system gas losses are through inground and aboveground leaks.
Q12 – **Regulator Stations - O&M** *Do maintenance or operational procedures contain measures for reduction of natural gas releases from regulators?* Q13 – **Regulator Stations - Configuration** *Do maintenance or operational procedures contain measures for identifying potential configuration changes that would reduce natural gas releases from regulators?*	While some MHPs may have regulator stations, these questions are referring to the larger district regulator stations or the master meter regulator that vents into the atmosphere. If you do have small regulator stations, please ensure that they are part of the leak survey and are getting the annual testing done.	Example: Sierra MHP has 4 low pressure regulator stations that bring our system pressure from 5 psi to 7 inches water column. The system design appears to have infrequent releases that produce very minimal volumes of gas. These are checked regularly as part of the patrolling and leak survey program.

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Q16 – **General - Feedback to Design/Configuration Practices** *Do operation and maintenance procedures contain mechanisms for identifying potential design/configuration changes for reducing natural gas releases?*	Examine your leak history and trends to see if there is an area where you might reduce leaks or damage to your pipeline.	Example: We have a master-metered distribution system. We do not plan design and configuration changes except for leak repair/replacement.
Q17 – **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?* Q18 – **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?* Q19 – **Leak-Prone: Leaks 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?*	Leak prone pipes include cast iron, unprotected steel, wrought iron, and historic plastics with known issues. If your gas pipeline was installed many decades ago, does not have CP, and has had gas leaks you may consider the pipeline to be leak prone. If you do have leak prone pipe in your system be sure to state it in your procedure.	Example: Sierra MHP has PVC mains that were installed in 1965 and steel services that are not cathodically protected. The gas pipeline may be considered leak prone pipe if it has history of gas leaks. All leak repairs, regardless of type of pipe, will be documented in the gas binder and will be kept for a minimum of 5 years. Minor gas leak repairs will be dated by the maintenance team. We will keep repair records for all underground leaks. During the annual review of the Operations and Maintenance plan, the leak history will be reviewed for any trends.
Q20 – **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?*	If you have a section of pipe that is consistently leaking, your management should create a plan to replace it.	Example: We have a master-metered distribution system. We do not plan on any design configuration changes. But will repair or replace leaking pipelines. (Indicate in your plan if you applied for the CPUC's Utility Upgrade Program for the serving utility to take over your master-metered distribution system and replace the old pipeline in your park.)

For further information from PHMSA, you can visit: https://www.phmsa.dot.gov/

For information on U.S.C: https://www.law.cornell.edu/uscode/text