

Safety Notice

Issued: 2020-Sep-08

To: All TSSA Registered Gas Technicians Working in Houses and Buildings in EGI's Service Area

Updates to Electrical Bonding of Gas Supply Piping and Tubing

Summary

Enbridge has updated inspection practices for electrical bonding on gas supply piping systems, in accordance with similar recent updates issued by the Ontario Electrical Safety Authority. Installers of gas supply piping should familiarize themselves with Enbridge's inspection practices so installations can be accepted as safe for use under CSA B149.1 *Natural Gas and Propane Installation Code* (and as amended for Ontario) ("the Code"). Installations not meeting the characteristics listed here will be deemed to be not meeting the Code and will be issued an infraction notice, resulting in gas not being turned on in a new system until it is repaired.

Background

ESA issued *Bulletin 10-14-9* updating electrical bonding requirements for gas piping systems.

Awareness

- 1) If you install electrical bonding on gas supply piping and tubing, use the following new requirements for electrical bonding:
 - a) Provided the piping system is entirely metallic and continuous (even if different metals are used), only one bond is needed in the system, connected to any of:
 - A connector fitting on corrugated stainless steel tubing (CSST).
 - A connector fitting on copper tubing.
 - A connector fitting on black steel pipe or directly on black steel pipe, but only downstream of the meter tailpiece and only if the paint/plating/sheathing has been removed on the pipe where the bonding clamp is attached.
 - b) In the situation where a piping system does not include any yellow CSST, and if the piping system connects to at least one gas appliance using electricity (whose electrical circuit is tied into the electrical grounding system for the building), then a bonding conductor will not be needed.
 - c) Any length of yellow CSST used in the gas piping system will require the use of a bonding conductor to attach the gas piping system to the electrical grounding system of the building.

- d) If a gas piping system serves only appliances that do not use electricity, then it must be bonded using a bonding conductor, regardless of the material of the piping or tubing, and even if it is black CSST.
 - e) Any piping, tubing, or fitting introduced into the gas piping system that will cause the gas piping system to be separated into more than one electrically continuous system (e.g., plastic pipe, insulated fitting), will necessitate the need for a bond across that piping, tubing, or fitting.
- 2) CSST manufacturer's installation instructions may specify additional bonding instructions, and must be followed if they exceed the above stated requirements.
 - 3) If you have any questions about Enbridge practices related to electrical bonding, please contact Enbridge's Technical Desk at 1-800-924-5534, or speak with the Enbridge technician with whom you are dealing.
 - 4) For more general information about electrical bonding, please contact the Ontario Electrical Safety Authority at www.esasafe.com or 1-877-372-7233.