



IMPORTANT BULLETIN

Bonding-Grounding and Cathodic Protection Risks!

In our charge to be BEST!, TT&R is committed to ensuring that we all stay vigilant and aware of the risks associated with our operations.

One big risk that can sometimes go overlooked is the need for proper bonding & grounding of piping during maintenance and project work.

Recall the Flash Fire Incident associated with a Cathodic Protection system on a jointly owned piping manifold between Marathon and CITGO that occurred on 12/4/2012. While the cause of the fire was not directly related to bonding & grounding, it showed us the very real potential that exists when separating pipe flanges; where cathodic protection (or other such electrical sources) can create an ignition source, if adequate electrical continuity is not accounted for.

GUIDANCE TO HELP YOU...

- Review TT&R's Piping Construction Standard ([TTMCON017](#)). Specifically sections 8.3.6.2.b; 8.3.7.3 & 8.3.7.4 for TT&R's requirements on bonding & grounding.

"8.3.6.2: In the case that tie-ins are made or are to be made on previously "in-service" piping with the intention of placing the line back into service, the following safety precautions shall be observed as a minimum:

b. Whenever a line is to be separated for any reason, a set of "bonding cables" shall be attached prior to the work being performed. The "bonding cables" shall provide electrical continuity across the area. The pipe also needs to be grounded."

- Review the RWI & incident investigation info related to the flash fire incident noted above ([1910-2012](#)).
 - See how Cathodic protection acted as the ignition source, and
 - Consider how a similar situation could arise in your regular operations/maintenance/etc. due to a lack of adequate bonding & grounding, as well as presence of CP as an ignition source.
 - Consider other potential ignition sources that bonding & grounding can protect you from.

**EXCELLENT
OPERATIONS**

**SAFETY
ALWAYS**



STOP WORK if ***bonding & grounding*** hasn't been accounted for... **DO YOUR PART TO ENSURE EVERYONE GOES HOME SAFELY!!!**



"Be the BEST!"

Custodian: TT&R-HES&S ADM/60

Discuss / Review as Appropriate

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