

## Hidden hazards!

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Some hazards are more obvious than others. We all respect a sharp knife, knowing the potential for a serious cut.

The same can be said about a drum of hazardous material that has the appropriate labels. However, it is difficult to determine if a pipe or vessel is full or empty, pressurized or not. It is even more difficult to understand the hazards associated with all of the materials and energies handled in your manufacturing process.

In a plant that was being dismantled, an unmarked and not even documented part of piping was found to contain sulfuric acid, which injured an employee.

So, what should we do? We need to treat them all as if the worst situation is present until better information can be obtained.



### Did You Know?

Why is this important? You can only manage hazards that you see and recognize. Chemical or petrochemical plants do not have many moving parts to show activity. This means hazards need to be identified, understood, and systems put in place to manage their safety.

Knowing the hazards is especially important when pipes or vessels are to be opened. Without a good understanding of what is or was in the process equipment, and what the temperatures and pressures are, preparing for the task is difficult, and the work can be dangerous.

### What Can You Do?

- Know your process and what is in each part of equipment. For reactive systems, this could change with time.
- Verify that pipe and equipment labeling is accurate and clearly visible/readable.
- When equipment changes service either with different batches or after it has been changed physically, ensure proper review using your Management of Change (MOC) processes, and consider the need to update equipment labeling.
- Follow line-breaking, vessel-opening and Lockout Tagout (LOTO) procedures.
- When preparing systems for these activities, be diligent about completing the required permits. If there is an unclear or unresolved issue, stop and ask someone to review the situation before proceeding. Many incidents (see *Beacon* of June 2018) have been caused by poor permitting practices.

**Hazard Identification – the first step for process safety!**

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