

Manage Temporary Changes – Including Clamps!

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Figure 1. A temporary Pipe clamp over a valve that had been leaking

A plant experienced a piping leak and could not shutdown to properly repair it. Using their leak clamp procedure, they consulted the required experts and approved use of a temporary clamp for 6 months. After that time, the status of the clamp was to be reviewed, evaluated and if acceptable, reapproved by the proper people. Two years later this clamp started to leak. The reevaluations and reapprovals had not taken place and the clamp remained in service for much longer than allowed by the company's policies and procedures.

A pipe clamp is a temporary solution when proper repairs cannot be made. It is weaker than the original piping. Besides, the underlying problem that led to the first leak is still there. It has to be fixed eventually. Pipe clamps are not meant to be "permanent" solutions.

All temporary changes need to be managed under the company's Management of Change process. And best practice is to enter a "turnaround" type work-order so maintenance can plan to repair/replace the leaking pipe at the next turnaround.

Did You Know?

- Pipe clamps are one of several types of Engineered clamp-on leak-sealing devices. They place a pressure-envelope around the location of the leak, then use pumped-in polymers to fill their internal space and seal up any gaps. They are effective temporary ways to stop a leak.
- All changes to a hazardous process should be reviewed, approved and managed under your site's Management of Change (MOC) process.
- Pipe clamps are not intended to last forever. Eventually, the pipe or valve should be replaced with one built to conform to the original pipe specification.
- It is easy to lose track of a temporary repair like a pipe clamp even though it can be seen.
- The goal of asset integrity systems is to maintain the reliability of the process equipment. When these systems are not followed, the equipment reliability declines, and safety is compromised.
- A by-passed control loop or device may not be as obvious.

What Can You Do?

- When you see a temporary repair, ask your supervisor about it. Your question may point out an overdue review or inspection.
- Each temporary repair should have an approved temporary MOC associated with it. Temporary MOCs must be managed rigorously – including a regular check and re-authorization until it can be replaced at the next turnaround with a permanent solution.
- Various components of the process can be temporarily by-passed for inspection or calibration. If you see this during your rounds, point it out to your supervisor. Do not change this unless you have been authorized.
- Control systems that are by-passed can be more difficult to find. Some control systems can list which control loops are in by-pass, are deactivated or are out of service.

Temporary means Temporary