

Communication — The Heart of Safe Operations

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▲ Flowmeters require periodic calibration. Be sure to always follow proper safety procedures.

An inexperienced operator was running a process that involved regular transfers of flammable solvents. Part of the operation was shut down to allow maintenance to remove a flowmeter for repair and calibration in the shop. The rest of the operation continued. The flowmeter was reinstalled, and the maintenance person left the area. The operator assumed that it was ready for operation and began a solvent transfer. One flange was not properly tightened, and the operator was sprayed with solvent. He used the safety shower and was not injured. The solvent spill was cleaned up without incident.

At the time of incident, many of the process safety systems we use now were not yet in place. Lockout/tagout (LOTO) was very informal and used only tags rather than locks and tags. In addition, no work permit system or formal communication method was in place for maintenance work.

Deeper review shows that the operator may have been anxious to get the process back in operation and did not verify that the work was complete. Perhaps the technician needed another gasket. The technician did not communicate the flowmeter status to the operator before leaving the process area. The absence of a tag on the solvent isolation valve was interpreted as 'work complete.'

Did You Know?

- Many safety systems we use today are the result of incidents that occurred in the past. Safety systems are intended to prevent those errors from reoccurring.
- Communication is always important, but even more so when several work groups are involved. As the number of groups increases, the need for formal communication also increases.
- Many companies use a work permit system to ensure communication before, during, and after the approved work. The work permit usually includes a safety or hazard review, work area inspection, and approval by an authorized person.
- Work permits are not just a formality; they are a tool to ensure that the work scope is well-defined, all groups know what will be done, and any additional permits (e.g., LOTO, hot work, or confined space) are used properly. They also provide a way to verify that all actions are completed and the work can proceed safely.
- The scope of work can change as it progresses. All groups involved should communicate changes and evaluate how to continue work safely. This may mean shutting the work down until it can be reviewed, revised, and approved.

What Can You Do?

- Develop a good understanding of how your company's permit systems work.
- Actively participate in hazard reviews for permitted work. You may be the only one who knows about a particular situation or hazard.
- Know your role when nonstandard work is performed in your area. Ensure that you understand the work and what is necessary to resume operation.
- Follow the work plan to restart the process. If something is not correct, stop and ask before proceeding. A minor delay is much better than an incident or near-miss.
- Make sure that the area is cleared of work debris and tools so that the process can operate safely. Any process materials that were collected require proper labeling and disposal.

If you are not sure if equipment is ready after maintenance — ask!