

## HEALTH SAFETY ENVIRONMENTAL



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## **Breaking Containment**

When dealing with breaking containment it is very import to follow requirements to control hazardous energy. Any condition or action that has the potential for an unplanned release of, or unwanted contact with, an energy source that may result in harm or injury to people, property, or the environment should be considered hazardous.

Hazardous energy can include:

- Mechanical
- Electrical
- Pressure
- Temperature
- Chemical
- Biological
- Radiation
- Sound
- Gravity
- Motion

Recently a subcontracted employee was breaking into a tubing line that was not isolated, and contained pressurized fluid. Prior to the start of work, instructions were given for all to stand down until the permit could be reviewed with everyone and a walk down of the piping be performed for proper identification. After questioning, the supervisor identified a line that he thought was correct and the gage read zero. He then instructed the crew to begin work. The employee was not injured but was sprayed by fluid when he broke into the line. The line that was broken into, was not the line that was identified on the permit.

The control of hazardous energy during installation, servicing and / or maintenance of machines, equipment or processes involving energy sources is very important. Lock Out / Tag Out (LO/TO) is an essential step towards protecting workers from injury and possible fatality.

LO/TO involves proper identification of hazardous energy and then applying physical barriers in the form of a lock and / or tag to prevent the unexpected release of harmful energy sources. When performing LO/TO, you must be certain that "ALL" energy sources within the work space or equipment are identified and isolated.

## What to Look for:

- Ensure that the proper energy sources have been identified and de-energized.
- Confirm that tags are legible, made of durable material, and are securely fastened.
- Use energy isolation devices such as locks, blinds, double blinds, and blocks in accordance with established procedures to prevent transmission or release of energy.
- Review drawings and schematics to determine all possible energy sources.
- Confirm that all controls, valves, or mechanisms are in their off or safest position.

