

Lockout/Tagout Expected to Become Most-Cited Standard

An increase in serious injuries and fatalities as a result of electrical contact has brought increased attention to lockout/tagout procedures across Minnesota.

Lockout/tagout is expected to be the most cited general-industry standard in Minnesota in 2005, an increase from 17th most cited in 2002. Records show that the five main causes of lockout/tagout injuries are:

- Failure to stop equipment
- Failure to disconnect the power source
- Failure to dissipate (bleed, neutralize) residual or stored energy
- Accidental restarting of equipment
- Work areas not cleared before restarting

Procedures provide the key

Although requirements for lockout/tagout have been in place for about 15 years, Minnesota OSHA reports that there's still confusion about it. Minnesota OSHA inspector James Krueger presented a popular session on this topic at the Minnesota Safety & Health Conference. He focused in particular on the requirements in 1910.147(c)(4) for energy control procedures, and on OSHA directive #STD 1-7.3, which establishes policy and provides for consistency in enforcement.

Procedures:

- Must be written
- Need to incorporate specific elements
- Must be detailed
- Must be specific to the machine

"A common deficiency is to focus on controlling only electrical energy," said Krueger. "The standard applies to all types of hazardous energy, including electrical, hydraulic, pneumatic, thermal, chemical, kinetic, potential/stored, gravity, etc."

Attempting to start the machine can be an ineffective means to test/verify. For example, in the case of 3-phase electrical systems, only one phase used for control voltage is being tested. The other two phases may still be energized. Also, other energy sources can still be present. Procedures should outline a positive testing/verification means to establish zero energy for all sources.

Training and Communication

Training on lockout/tagout needs to cover authorized employees, affected employees and other employees. Training must ensure that the purpose and function of the energy control program is understood. Employees must acquire the knowledge and skills required for safe application, usage and removal of controls.

This article can be found in the Summer 2005 Issue of "Memo to Members" published by the Minnesota Safety Council.