Lockout - Your Life and Limbs Depend on

Recent Accidents

A worker was killed when he was crushed to death in a chipper machine. Someone started the conveyor at the operator's console after the worker, who was completing repairs on the machine, had descended into the conveyor to retrieve a tool.

A worker amputated two fingers and part of his left hand when another worker turned on the saw from which he was removing debris.

A worker required 14 stitches to his right hand after he reactivated a bending machine while changing the die. He accidentally touched the foot pedal, which activated the machine, and the die lowered on his right hand.

Recommended Preventive Action

1. **Equipment:** Employers shall ensure that a machine has a properly identified, lockable means of isolating the energy source, in a location familiar to all employees. The employer shall also provide a safety lock and key to employees who may have to lock out a machine.

2. **Procedure:** An employer shall establish a written lockout procedure specific to each machine being cleaned, maintained, adjusted or repaired. Each procedure must contain the following:
   a) No employee can work on the machine until a competent person has put the machine in a zero energy state (see Zero Energy State – Safety Considerations, below).
   b) Each employee working on the machine must: verify that all potential energy sources have been made inoperative; lock out the machine using the safety lock and key provided by the employer; and attach a tag to the lock.
   c) Only the person who installed the lockout device or tag on a machine may remove it, except in an emergency, or where attempts have been made to contact the original installer.

3. **Training:** Employers shall ensure that an employee who may have to lock out a machine has been adequately trained to do so and is acquainted with the hazards associated with the task.

4. **Code of Practice:** Where lockout is inappropriate, the employer must establish a code of practice in consultation with the joint health and safety committee or health and safety representative (if any), to carry out the work safely.

Zero Energy State – Safety Considerations

A lockout procedure or code of practice should take into consideration more than just power sources for a given machine. Anything that could cause the machine to spontaneously or unexpectedly move is a risk to workers, including:

- Pressurized fluids and air.
- Potential mechanical energy.
- Accumulators and air surge tanks.
- Kinetic energy of machine members.
- Loose or freely moveable machine members.
- Moveable material or work pieces that are supported, retained or controlled by a machine and that could move or cause the machine to move.

For more information about lockout, see sections 239 to 240 of *General Regulation 91-191*, under the *Occupational Health and Safety Act* of New Brunswick.

May 2009