

**Loss Control Bulletin #9**



*Three men were doing maintenance work on an asphalt mixer. One employee was still inside when the power was turned back on, thereby starting the mixer. He was killed instantly. Cause: Failure to disconnect power source and lock out.*

The failure to lock out and/or block out machinery prior to service or repair work is a major cause of serious injuries and deaths in California. Lockout/Blockout means that all energy sources, or any other source that may cause unexpected movement, must be disengaged and locked before work can begin. But even a locked-out machine may not be completely safe if it has parts that are not blocked to prevent inadvertent movement of suspended parts subject to gravity.

"...Every employer shall implement and maintain an accident prevention program..." states General Industry Safety Order 3203. To be effective, your lockout/blockout program should include:

- An equipment survey by authorized persons to determine which machines should be locked and blocked out.
- Identification and labeling of lockout devices.
- Selection and use of locks, tags and blocks.
- Detailed written energy control procedures.

**A lockout/blockout procedure, at minimum, must require the following:**

- All maintenance personnel must be provided with suitable locks. The locks must have the worker's name and other identification on it. **Each worker should have the only key to the lock.**
- Before turning off power to equipment, the worker must check to see that no one is operating the machine.
- Equipment operators must be informed before power is turned off.
- Steam, air and other pressurized lines should be purged completely.
- Suspended parts subject to gravity or mechanisms under pressure, such as springs, should be released and blocked.
- Each person working on a locked out machine must place one of their own personal locks on the machine's lock-out device. After work is completed, each person who placed a lock should personally remove his lock.
- **ALL** energy sources that could activate the machine being worked on must be identified and must be locked out.
- The main electrical disconnect or valve must be tested to ensure that all power to the machine is off.
- Electrical circuits must be checked with proper testing equipment to make certain all stored energy has

been discharged. **Caution: after each test, the disconnects and operating controls must be returned to the off position.**

- Attach lockout tags that indicate the reason for placing the tag, the name of the person placing the tag, how he/she may be contacted, and the date and time the tag was placed. **No one must be allowed to remove the lock without proper authority.**

Additional information regarding lockout/blockout may be obtained by contacting your Republic Indemnity loss control consultant or by contacting the Division of Occupational Safety and Health.

The guidelines provided in this bulletin are only intended to provide an overview of some of the more important steps that can be taken by management to establish a safe workplace. The guidelines are not considered exhaustive of all measures and controls that can be implemented by management to address all potential loss or injury producing causes. Ultimately it is the responsibility of management to take the necessary steps to provide for employee and customer safety.