ACCESSING SAFETY KNOWLEDGE (ASK) SHEET:  
LOCKOUT/TAGOUT (LOTO)

The lockout/tagout standard requires the adoption and implementation of practices and procedures to shut down equipment, isolate it from its energy source(s), and prevent the release of potentially hazardous energy while maintenance and servicing activities are being performed. It contains minimum performance requirements, and definitive criteria for establishing an effective program for the control of hazardous energy. However, employers have the flexibility to develop lockout/tagout programs that are suitable for their respective facilities.

Approximately 3 million workers service equipment and face the greatest risk of injury if lockout/tagout is not properly implemented. Workers injured on the job from exposure to hazardous energy lose an average of 24 workdays for recuperation.

**Lockout device:** any device that uses positive means, such as a lock, blank flanges and bolted slip blinds, to hold an energy-isolating device in a safe position, thereby preventing the energizing of machinery or equipment. **Lockout devices** are used to hold an energy-isolating device in a safe position and to prevent the start-up of machinery or equipment. Whenever possible a lockout device must be used along with a tagout device. An example of this is when you lockout a electrical disconnect, you must attach the warning tag to the lock shackle and then attach both the lock and tag to the disconnect. Never remove a lockout that does not belong to you. Each lockout/tagout devise and lock must have only one key. The person applying the lockout/tagout should have the only key to remove the lockout/tagout lock once the job is completed and equipment is safe to use.

**Checklist for Lockout/Tagout:** The best practice is a checklist be provided for the employee who is going to use lockout/tagout procedure. It is very important that all areas are covered when using LO/TO procedures. A checklist ensures that nothing should be missed or forgotten. Lives depend on it, especially your own.

**Case Study:** A 26 year old, male recycling packer died after being crushed in a paper recycling bin by a recycling ram (crushing device) that exerts 118 tons of force. The company had no effective lockout/tagout procedures.

**LO/TO Tip:** Establish lockout/tagout procedures to insure that all required caution and danger signs are posted. When using Lockout tags and locks, in addition to normal training required for all employees, employees must be trained in the following limitations of tags and locks:

- Lockout Tags are essentially warning devices and do not provide the physical restraint of a lock.
- Locks should always be used with the tags.
- The person applying the LO/TO tag and lock should be the only person with the key to remove the lock from the tag.
- **Lockout Tags** must be legible and understandable by all employees.
- When a tag is attached to an isolating means, it is not to be removed except by the person who applied it, and it is never to be bypassed, or ignored.
- Make sure all stored energy has been bleed down. To ensure stored energy has been released, turn on equipment or machinery to make sure it does not turn on. Return back to the off or neutral position.
- Tags and their attachments must be made of materials that will withstand the environmental conditions encountered in the workplace.
- Tags may evoke a false sense of security. They are only one part of an overall energy control program.
- Tags must be securely attached to the energy-isolating devices so that they cannot be detached accidentally during use.
- Ensure that new or overhauled equipment is capable of being lock and tagged out.
- Lock Out/Tag Out procedures must be inspected annually to ensure process is updated.

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