

ADMINISTRATIVE PROCEDURES

SUBJECT: Lockout Procedures - Hazardous Energy Control

The Lambton Kent District School Board strives to ensure a safe and healthy work environment for all staff. The purpose of this procedure is to provide techniques for all staff to follow to prevent injury from inadvertent release of hazardous energy when working on machines, systems and/or devices. Release of hazardous energy can include any motion, energization, start-up or release of stored energy. Lockout is recognized as the primary method of hazardous energy control.

Responsibilities:

The Lambton Kent District School Board is responsible to ensure a lockout program is in place in each school / work site and it will ensure that all personnel with the potential to be affected by hazardous energy are adequately trained.

In addition, the Lambton Kent District School Board shall ensure all equipment materials and devices are provided and take every precaution reasonable in the circumstances to protect workers and students.

School Principals and Supervisors will ensure that the lockout program is implemented and used by all their workers. The Principal / Supervisor is responsible to take every precaution reasonable under the circumstances to protect workers and students.

All workers (i.e. Teachers / Building Services Staff, etc.) are required to comply with the Occupational Health and Safety Act and the Lambton-Kent District School Board's policy and procedures. Workers are required to report any deficiencies in equipment or procedures to their School Principal / Supervisor.

General Lockout Procedures:

These procedures must be completed in order listed.

1. Whenever work is required to be done on a machine, system or device whereby accidental start up could result in injury to a worker or other person, it is required to be lock out by the worker(s) performing the work.

2. The worker(s) performing the lockout must inform their School Principal and/or their Supervisor, along with any other workers that may be affected by the lockout. Where the equipment belongs to a particular school program (i.e. Technology, etc.), the Curriculum Leader of that Program must also be notified.
3. Prior to performing any lockout, the machine, system or device to be locked out must be examined in its entirety to ensure all switches, power sources, controls, interlocks and any other potential sources of energy have been identified and that a plan is in place to properly lock out each of these potential sources of energy. The plan must ensure that there is no potential for any inadvertent energy to be released once the machine is fully locked out. Machines with more than one source of energy should be labeled indicating as such.
4. When locking out a machine, it must be checked to ensure no release of energy. This includes:
 - a. placing all energy isolating devices and switches from the active position to the safe position so that the transmission or release of any hazardous energy is not permitted;
 - b. locking off air, gas, steam or other valves at the source of power and opening any required valves to release any residual pressure or stored energy;
 - c. draining or bleeding off hydraulic lines;
 - d. blocking up or otherwise immobilizing gravity devices such as rams or flywheels;
 - e. Neutralizing/blocking spring-loaded equipment to prevent movement.
5. Only Board Skilled Trades or properly trained staff are authorized to lock out equipment at the disconnect switch. The disconnect switch feeding the piece of equipment shall be turned off. The disconnect box shall be opened (when applicable) to make sure internal contacts are disengaged. Fuses must be removed with an approved fuse puller. The switch shall then be locked out with the disconnect in the “off” position.
6. A lockout device is to be applied on each energy source to ensure that it can “**NOT**” be moved to an active position by the person in charge of the equipment. A lockout device will include both a lock and a tag. The tag will be used to record the name of the person who installed the lockout device, and the date and the reason for the lockout.
7. Where there are multiple workers working on a machine, each will place their own individually-keyed lock and tag on that machine in addition to the one placed by the person in charge of the equipment. The keys to each lock are not to be keyed alike and shall remain with the person who placed the lock on the equipment. A multi lock device will be required for multiple locks.
8. Once all the locking devices are in place and prior to performing work on the machine, it must be verified that all energy has been isolated and that the machine is at zero energy.

Interlocking or dependent systems, which would electrically or mechanically feed into the system being isolated, must also be verified. Only after zero energy has been verified work can proceed on machine, system or device.

9. Once the work that was required to be performed that resulted in the lockout is completed, the machine, device or system must be reviewed prior to removing the lockout devices to ensure that all components are operationally intact and that the machine is capable of operating in a normal and safe manner.
10. Once it is determined that the machine, system or device can be operated safely, each worker can then proceed with removing their own lockout device and tag. Each lockout device and tag is the responsibility of the worker who placed it and should only be removed by that worker. The removal of the lock can not be delegated or transferred to another worker. In the event of a lost key or the departure of a worker from the worksite without removal of their lockout device, the person in charge shall contact the School Principal and/or Worker's Supervisor. The person in charge of the equipment will arrange for the machine, system or device to be properly reviewed by a competent person to ensure that it can be operated in a safe manner prior to giving authorization to having the lock cut off. No worker shall cut off a lock from a machine without proper authorization from the supervisor of the person who originally placed the lock on.
11. Once all locking devices have been removed from the machine, the worker should operate the machine, system or device to ensure that it is functioning properly and upon verification notify the person in charge of the equipment that the machine is back in service and ready for regular use. This includes checking to ensure that all guards are in place; that any braces pins, chains, blocks have been removed; that all valves are in the correct position; all lines reconnected; .and that the stop/start switch is in the off position.
12. If a machine is to be taken out of service, it shall be locked out during the entire period it is out of service. For regular machine maintenance of instructional equipment, if the machine is to be out of service overnight, it shall be locked out and tagged with information regarding who tagged it, the reason why, date and state of repairs.
13. At no time, shall the machine be left in an unsafe to operate condition. If work is not complete at the end of the day, each worker shall report the status of the work to their Principal/Supervisor. Lockout devices and tags shall not be removed until all work is complete and a check has been made that the machine or device is safe to operate.

Additional Notes:

1. The School Principal is responsible to ensure that all employees under their supervision (i.e. Technology Staff, etc.) who may be required to perform lockout procedures as part of their job are familiar with this document and have been trained on appropriate lockout techniques. The Board's Health & Safety Department should be contacted to arrange for this training.

2. Building Services Supervisor and Maintenance Supervisors are responsible to ensure that all employees under their supervision who may be required to perform lockout procedures are familiar with this document and have been trained on appropriate lockout techniques. The Board's Health & Safety Department should be contacted to arrange for this training.
3. Schools are responsible for the purchasing of lock out equipment and tags to be used by Teaching / Program staff. Building Services is responsible for the purchasing of lock out equipment and tags to be used by their staff.
4. Schools must work with the Board's Purchasing Department when ordering lockout equipment.

Implementation: May 1, 2012

Reference: Occupational Health & Safety Act R.S.O 1990 c. 0.1
Industrial Establishment Regulation 851
CAN/CSA Z460-05 (R2010) - Control of Hazardous Energy & Other
Lockout Methods