Lockout

Purpose

The purpose of this procedure is to ensure that all WMU employees are protected from unintended machine motion or unintended release of energy which could cause injury when they set up, adjust, repair, service, install, or perform maintenance work on equipment or machinery.

Management Responsibilities

1. The Division of Environmental Health and Safety shall provide initial training and annual refresher/updates as necessary for all employees who are required to participate in the Lockout Program.
2. Each supervisor shall effectively enforce compliance of this Lockout Procedure. Failure to comply shall result in a violation as per Western Michigan University Human Resources Rules of Conduct, Section 1F.
3. The Division of Environmental Health and Safety shall issue tags and safety locks to every employee participating in the Lockout Program. Environmental Health and Safety will advise the participating departments in the purchase of various lockout devices.
4. Prior to setting up, adjusting, repairing, servicing, installing, or performing maintenance work on unfamiliar equipment or machinery, the individual in charge of the area (that is, the supervisor of the Authorized Employee(s)) is responsible for instructing the employees of the steps to be taken to ensure they will not be exposed to injury due to unintended motion or release of energy.
5. Whenever outside servicing personnel (contractors, etc.) are to be engaged in activities covered by the scope and application of the lockout standard, WMU and the outside employer shall inform each other of their respective lockout or tagout procedures.
6. WMU shall ensure that the University’s employees understand and comply with the restrictions and prohibitions of the outside employer’s energy control program.

Employee Responsibilities

1. Employees shall comply with the Lockout Procedures. Failure to comply shall result in a violation per Western Michigan University Human Resources Rules of Conduct Section 1F.
2. Employees shall consult with their supervisor or other appropriate knowledgeable management personnel whenever there are any questions regarding the lockout of equipment or the lockout procedure.
3. Employees shall care for their safety locks and other devices required to comply with the lockout procedure.

General

1. When any equipment, machine, or process is to be set up, adjusted, repaired, serviced, installed, or maintenance work performed and unintended motion or release of energy from the equipment, machine, or process would cause personal injury, the power source must be locked out by each authorized employee doing the work. Sources of energy, such as springs, air, hydraulic, and steam shall be evaluated in advance to determine
how to relieve the pressure prior to starting the work. Fluid lines must be separated, blanked, or double blocked and bled.

2. Safety locks are for the personal protection of the worker and are only to be used for locking out equipment or processes. Personal locks shall not be used as safety locks or for locking out equipment.

3. If the employee leaves the job before its completion, such as a job reassignment, which requires they lock out at the new job, the employee shall take his/her safety lock, adapter, and tag to the new job.

4. If an employee is required to take his/her safety lock to a new job, but the old job should remain locked out, an equipment lock and adapter may be used at the old job site to replace the employee’s safety lock. Some departments have a supply pool of safety locks that can be used for this purpose. In addition, the employee will prepare and attach a Danger Tag indicating the reason the equipment is locked out. (Should more than one employee be assigned to the job, the last employee removing his/her lock will be responsible for affixing the equipment lock, adapter, and the Danger Tag.) These equipment locks are not to be used as a substitute for the employee’s safety lock when he/she is working on the equipment.

5. It is important to note that only one key will be issued for every lock used in the lockout program. This key shall be retained by the employee to whom the lock was issued.

Locking Out and Isolating Power Sources

1. Electrical equipment, or a machine main disconnect switch shall be turned off (opened) and locked in the off (open) position only after the electrical power is shut off at the point of operational control. Failure to follow this procedure may cause arcing and possibly an explosion.

2. A machine connected to a 110 volt source by a plug in cord shall have a locking device applied to the plug end of the cord to ensure the machine cannot be reenergized via the plug and cord.

3. After locking out the power source, the employee shall try the equipment, machine, or process controls to ensure no unintended motion or release of energy will occur, or a qualified person shall test the equipment or machine by use of the appropriate test equipment to determine that the energy isolation has been effective.

4. When two or more employees work on the same equipment, machine, or process each is responsible for attaching his/her lock. Safety locks, adapters, and danger tags are to be fixed on levers, switches, valves, etc. in the nonoperative (off) position.

5. An authorized employee who is assigned to a job and, upon arrival, finds a lock, adapter, and danger tag affixed to the given equipment shall take the following actions:
   A. Affix his/her safety lock and danger tag to the equipment adapter.
   B. Notify the other authorized employee(s) that he/she will begin work on this equipment.
   C. Try the operational controls, after seeing that the area is clear, to ensure that no unintended motion or release of energy will occur before starting work. If possible, the equipment or machine shall be tested by a qualified person with the appropriate test equipment to determine whether the energy isolation has been effective.
   D. When die or safety blocks are required they shall be used in conjunction with the lockout procedure, not as a substitute.

Removal of Locks and Restoring Power Sources

1. Power may be turned on when it is required to perform tests or adjustments. All of the rules pertaining to removing locks and restoring power shall be followed. The equipment, machine, or process shall again be locked out if it is necessary to continue work after completing the tests or adjustments.

2. Upon completion of the work, each authorized employee will remove his/her lock.
3. The employee responsible for removing the last lock shall ensure that all employees are kept at a safe distance, guards have been replaced, the equipment, machine, or process is cleared for operation, the appropriate personnel have been notified that the power is being restored, and shall test for safe operation.

Emergency Safety Lock Removal Procedure

1. When an authorized employee who applied a lockout is not available to remove the lock, then the emergency safety lock removal procedure shall be used. The supervisor or acting supervisor will apply the following procedure:
   o Verify that the authorized employee who applied the device is not at the facility;
   o Make all reasonable efforts to contact the authorized employee to inform he/she that his/her lockout or tagout device has been removed;
   o Ensure that the authorized employee has this knowledge before he/she resumes work. This can be accomplished by meeting with the employee prior to that employee beginning work activities upon their earliest return to work. A note attached to their time card is also warranted as an additional safety precaution;
   o Complete a safe lock removal form and submit to the Department of Public Safety in order to obtain the master key.

2. The master key to all employees’ safety locks shall be stored at the Police Station and at Environmental Health and Safety and shall be issued only when the EMERGENCY SAFE LOCK REMOVAL FORM has been filled out. Under no circumstances shall the key be administered to unauthorized personnel. No key will be issued without proper signatures and no substitutes are permitted to sign the form.

3. The signatures of the following two individuals are required on the form:
   o The supervisor or acting supervisor of the absent authorized employee.
   o The manager or acting manager of Maintenance Services or Environmental Health and Safety.

Revised on 10/2012