Bloomsburg University of Pennsylvania
The Control of Hazardous Energy (Lockout/Tagout) Program
Effective Date: February 2, 2015

A. General Overview
1. It is the policy of Bloomsburg University (BU) that any individual engaging in the maintenance, repairing, cleaning, servicing, or adjusting of prime movers, machinery, or equipment on our property will abide by the procedures outlined in this document. These procedures are designed to meet or exceed applicable OSHA standards for safe work practices.

B. Definitions
1. Affected employee – An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
2. Activation/Energization – To set machinery into motion by starting, switching, pushing, moving, or otherwise engaging power sources for such equipment. To provide a flow of electricity or complete a circuit that is the main power source for the machinery/equipment.
3. Authorized employee – A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on those machines or equipment. An affected employee becomes an authorized employee when that employee’s duties include performing servicing or maintenance covered under this program.
4. Energy control Procedures – Use of lockout/tagout equipment to ensure safe work practices.
5. Energy Source – Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.
6. Hazardous Motion - Motion of equipment under mechanical stress or gravity that may result even after power sources are disconnected. Examples are coiled springs, raised hydraulic equipment, and any sources of potential energy that may cause injury.
7. Lockout – The practice of using keyed or combination security devices (“locks”) to prevent the unwanted activation of mechanical or electrical equipment.
8. Other Employee – An employee whose work operations are or may be in an area where energy control procedures may be utilized.
10. Tagout – The practice of using tags in conjunction with locks to increase the visibility and awareness that equipment is not to be energized or activated until such devices are removed.
C. Responsibilities

1. Employees
   a. Adhere to Specific Procedures as outlined in this document for all tasks that require the use of lockout/tagout procedures as defined.
   b. Maintain lockout/tagout supplies in maintenance vehicles.

2. Supervisors
   a. Conduct surveys to identify equipment, machinery and processes that require the use of lockout/tagout and complete a Lockout/Tagout Equipment or Process Specific Procedure Form (see Appendix A). Forward the completed forms to the Office of Workplace Safety.
   b. Ensure that each employee engaging in work requiring locking/tagging out of energy sources understands and adheres to this program.
   c. Assure that employees have received training in energy control procedures prior to operating the machinery or equipment.
   d. Provide and maintain necessary equipment and resources, including accident prevention signs, tags, padlocks, seals and/or other similarly effective means.
   e. Notify employees of new or revised equipment, machinery, or operations that require the use of lockout/tagout devices during servicing, maintenance, or repair.

3. Office of Workplace Safety
   a. Ensure that the lockout/tagout procedures are in compliance with OSHA requirements.
   b. Provide training to employees affected by lockout/tagout procedures.
   c. Inspect energy control procedures and practices at least annually to ensure that general and specific lockout/tagout procedures are being followed.
      ii. Inspections must be carried out by persons other than those employees directly utilizing energy control procedures.
      iii. Inspections will include a review between the inspector and each authorized employee, of that employee’s responsibilities under the energy control procedure being inspected.
      iv. Certify that periodic inspections have been performed (see Appendix B, Lockout/Tagout Inspection Form).
   d. Maintain a file of BU equipment, machinery, and processes that require the use of lockout/tagout procedures. The file will include the location, description, power source, and primary hazards of equipment/ machinery, a list of the primary operators/maintenance personnel, and a list of lockout/tagout equipment that is used and maintained on site.
e. Will provide each contractor engaging in work requiring locking/tagging out of energy sources a copy of this program.

D. Specific Procedures

1. Preparation for Lockout/Tagout
   a. Conduct a survey to locate and identify all isolating devices to be certain which switch(es), valve(s), or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, stored energy, or others) may be involved.

2. Sequence of Lockout or tagout system procedure
   a. Notify affected employees that a lockout or tagout system is going to be utilized and the reason. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards.
   b. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
   c. Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
   d. Lockout/Tagout the energy isolating devices with assigned individual lock(s) and tag(s).
   e. After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating control(s) to neutral or off position after the test.
   f. The equipment is now locked out or tagged out.

3. Restoring Machines or equipment to normal operations
   a. After the servicing and/or maintenance is complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.
   b. After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Operate the energy isolating devices to restore energy to the machine or equipment.

4. Procedure involving more than one person
   a. In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place his/her own personal lockout/tagout device on the energy isolation device(s). When an energy isolating device cannot accept multiple lockout or tag out device (hasp) may be used. If lockout box or cabinet allows the
use of multiple locks to secure it, each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet.

5. Temporary removal of lockout/tagout devices
   a. In situations where lockout/tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions will be followed:
      i. Remove non-essential items and ensure that machine or equipment components are operationally intact.
      ii. Notify affected employees that lockout/tagout devices have been removed and ensure that all employees have been safely positioned or removed from the area.
      iii. Have employees who applied the lock/tagout devices remove the lockout/tagout devices.
      iv. Energize and proceed with testing or positioning.
      v. De-energize all systems and reapply energy control measures in accordance with section D2 of these procedures.

6. Maintenance requiring undisrupted energy supply
   a. Where maintenance, repairing, cleaning, servicing, adjusting, or setting up operations cannot be accomplished with the prime mover or energy source disconnected, such operations may only be performed under the following conditions:
      i. The operating station (e.g. external control panel) where the machine may be activated must at all times be under the control of a qualified operator.
      ii. All participants must be in clear view of the operator or in positive communication with each other.
      iii. All participants must be beyond the reach of machine elements which may move rapidly and present a hazard.
      iv. Where machine configuration or size requires that the operator leave the control station to install tools, and where there are machine elements which may move rapidly, if activated, such elements must be separately locked out.
      v. During repair procedures where mechanical components are being adjusted or replaced, the machine shall be de-energized or disconnected from its power source.
7. Alternative Release from Lockout or Tagout
   a. If the authorized employee who applied the lockout or tagout device is not available to remove it, that device may be removed under the direction of a supervisor provided that;
      i. Verification by the supervisor that the authorized employee who applied the device is not at the facility,
      ii. Equipment is safe to start,
      iii. All reasonable efforts are made to contact the authorized employee to inform him/her that his/her lockout or tagout device has been removed, and
      iv. The authorized employee is notified of the above before he/she resumes work at the facility.

E. Employee training
   1. The Office of Workplace Safety will conduct the required general training sessions for authorized, affected, and other employees.
   2. Supervisors will conduct the training on specific energy control procedures for specific machines, equipment and processes.
   3. Re-training is required annually, whenever there is a change in job assignments, a change in machines, equipment, or processes that present a new hazard, or when there is a change in the energy control practice. Additional training is also required whenever a periodic inspection reveals, or whenever there is reason to believe, that there are deviations from, or inadequacies in, the energy control procedures. The purpose of re-training is to reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.
Appendix B
Bloomsburg University
Lockout / Tagout Inspection Form

1. Inspection Date: ____________________________

2. Inspector (Printed Name / Signature): ______________ / ______________

3. Employee(s) Inspected (Printed / Signature: ______________ / ______________
   ______________ / ______________
   ______________ / ______________
   ______________ / ______________

4. Machine / equipment on which the energy control procedure was being utilized:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

   Does employee have access to adequate lockout/tagout devices?

   Has employee tested the effectiveness of his/her lockout/tagout devices?

   Has employee received CPR and lockout/tagout training in the last year?

   If this is an outside contractor, has a BU supervisor informed him/her
   of the necessity for adhering to these procedures?

   Have all procedures been followed?

   Were tagouts legible and clearly displayed?

5. Comments / Observations: ____________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________