

**MONMOUTH UNIVERSITY
POLICIES AND PROCEDURES**

Policy: Lockout/Tagout

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I. POLICY

The OSHA Standard for the Control of Hazardous Energy (Lockout/Tagout), 29 CFR 1910.147, addresses the practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy while employees perform servicing and maintenance activities. This Program is suited to the needs of the University and outlines the steps and training to ensure safety for all.

II. DEFINITIONS AND EXEMPTIONS

A. Definitions

1. “Affected Employees”: are any employees who operate or use equipment on which lockout/tagout procedures are performed; or any employees who work in the area where the servicing is performed.
2. “Authorized Employees” are those who can implement the lockout/tagout. These are Facilities Management Employees (Auto Mechanics, Electricians, Plumbers, HVAC Staff, Mechanics and Fire and Safety Personnel).
3. “Energized”: means connected to any source of stored or live energy of electrical, mechanical, hydraulic, pneumatic, chemical or thermal natures.
4. “Lockout”: means to lock the only means to re-energize equipment prior to servicing or maintenance.
5. “Tagout”: similar to lockout, above, except tagging the equipment in such a way that the tag must be removed to re-energize.

B. Exemptions:

1. ~~Cord and plug equipment are exempt if the servicing employee can keep the plug under direct control.~~
2. Normal production activities, minor tool changes and servicing are exempt. Carpenter changes of grinding wheels, belts, and blades are not covered under this plan.

III. RESPONSIBILITIES

A. The following personnel shall be considered affected employees:

1. Carpenters
2. Supervisors in public areas

B. The following personnel shall be considered affected and authorized employees:

1. Electricians
2. Auto Mechanics
3. HVAC Staff
4. Mechanics
5. Plumbers
6. Fire and Safety Personnel

C. Coordinator of Lockout/Tagout Program:

1. The Supervisor of Electrical and Fire and Safety Supervisor at the University shall be in charge of the Lockout/Tagout Program and ensure that all procedures are implemented.

D. Coordinator with Outside Contractors – Lockout/Tagout Program:

1. The Associate Vice President for Campus Planning and Construction shall be responsible for ensuring outside contractors engaged in campus projects follow proper procedures concerning lockout/tagout.

IV. LIST OF ENERGY ISOLATING DEVICES

<u>EQUIPMENT</u>	<u>TYPE OF ISOLATING DEVICE</u>	<u>LOCATION</u>
Forklift	tag	outside MAC
Forklift	tag	outside Fac. Mgmt.
Front end loader	tag	outside Fac. Mgmt.
Main transformer	lock	outside
In-house transformers		
Howard	lock	
Science	lock	
Rebecca Stafford Student Center	lock	
Circuit breakers	lock	all buildings
Fan motors	lock	all buildings
Pump motors	lock	all buildings
Dimmer systems	lock	all buildings
Pool room motors	lock	
Elevator sump pumps	lock out power plus lock out elevator	
Circulators	tags	
Mechanical room	lock	auditorium
Main switching room	lock	Wilson Hall
Power tools	plug locks	Facilities Management
Lifts	lock	mechanics bay

(Notes: Hydraulic lift(s) in auto mechanics bay deactivated; elevators will either have operator present at panel or be locked out; main switching room in Wilson has exposed high power buss bars that cannot be locked out; only electricians allowed in this area at any time.)

V. SEQUENCE OF LOCKOUT/TAGOUT PROCEDURE

- A. The following procedures shall be followed in the event lockout/tagout becomes necessary:
 1. No employee shall begin the lockout/tagout procedure unless:
 - a. They are an “authorized employee” and have completed training; and
 - b. They know the type, magnitude, and hazards of the machinery involved.
 2. The Supervisor of Electrical and Fire and Safety shall be notified of all lockout/tagouts implemented. Additionally, all affected

employees shall be notified. This includes everyone who uses the equipment being serviced, and everyone in the area of the isolating device being utilized for the lockout.

- a. Locking out shall be the preferred method applied to secure energy-isolating devices. When locking out is not feasible, tagging out shall be implemented instead. The term “lockout”, as used in this, means either lockout, or if necessary, tagout.
 - b. All authorized employees must obtain and complete a lockout procedure form from the Supervisor of Electrical and Fire and Safety. The completed form must be returned to the Supervisor of Electrical and Fire and Safety.
3. Stop all operations involving the machine.
 4. Turn off the machine. Release any stored energy (flywheels, pressure, etc.).
 5. Place a lockout device over the energy-isolating device so that it cannot be activated by any other individual without unlocking.
 6. Test the equipment by turning it back on to be sure it will not re-energize. (Make sure no employee is in a position to be injured if the switch does turn the machine back on.) **BE SURE TO TURN THE MACHINE BACK OFF.**
 7. If the particular machine requires further or additional safety measures, carry the necessary measures out at this time.
 8. Conduct service or maintenance.
 9. Ensure no one is around the equipment, or potentially exposed in the event of a release of energy.
 10. Remove all tools, reinstall guards, covers, etc.
 11. Remove lockout.
 12. Re-energize.
 13. Notify the Supervisor of Electrical and Fire and Safety of removal of lockout/ tagout.
- B. If more than one person is involved:
1. Each employee must lock the device with their own key (or other locking device) so that there is a separate lock for each worker. If this is not practical for the device, then the master lock must be placed in a box with multiple locks so that it shall not be possible for one employee to re-energize a device until each involved worker has removed their own lock.

VI. LOCKOUT/TAGOUT EQUIPMENT AND USE

The following devices and the location in which they are stored are listed below:

<u>DEVICE</u>	<u>USE FOR</u>	<u>STORED</u>
Yellow-coded locks; 3 and 6 key devices; tags-	electricians	equipment cage
Blue-coded locks; tags-	HVAC	equipment area
Red-coded locks; 3 and 6 key devices; tags-	Fire/Safety	carried on personnel at all times
Green-coded lock and Tags	Plumbers	equipment area
Black-coded locks; Tags	Auto Mechanics	Auto Shop office

VII. TRAINING

- A. All affected employees shall be trained regarding the purpose and use of the energy control procedure.
- B. All authorized employees shall be trained to recognize:
 - 1. Hazardous energy sources;
 - 2. Types and magnitudes of energy sources in the workplace; and
 - 3. Methods and means of control.
- C. Retraining shall be conducted whenever there are changes in the equipment, program, devices, or when inspection reveals a deficiency in employee knowledge, which shall be assessed by random, periodic inspections.
- D. Employees required to take lockout/tagout training are as follows:
 - a. Facilities Management:
 - i. Auto Mechanics
 - ii. Carpenters

- iii. Electricians
- iv. Fire & Safety Personnel
- v. General Maintenance Mechanics
- vi. HVAC
- vii. Plumbers
- viii. Directors (Construction, Operations, Special Events)
- b. Building/Campus Planning:
 - i. Associate Vice President
 - ii. Construction Manager

VIII. OUTSIDE CONTRACTORS

- A. The Associate Vice President for Campus Planning and Construction shall be responsible for meeting with any outside contractor involved with the servicing or maintenance of energized equipment, or conducting other work in the area where a lockout is involved.
- B. Prior to any work performed by an outside contractor, the University policy shall be described to the contractor and an explanation of the contractor's policy shall be obtained.
- C. Outside contractors shall not violate the University policy at any time.

APPENDIX A

Periodic Inspection of Energy Control Procedures

Monmouth University Lockout/Tagout Program

This form is used to inspect the energy control procedures for the following equipment/machine:

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Basic Information: (Complete/Compare with Existing Energy Control Procedures)

Department: _____ Building: _____ Date: _____

Location/Area: _____

Inspector: _____

Authorized Employees involved: _____

Other employees affected: _____

Service/maintenance activities requiring lockout/tagout: _____

Review the current lockout/tagout procedures and indicate whether procedures are satisfactory. Any procedures marked NO must be explained under Comments/Deficiencies below.

a. Control methods:	Satisfactory?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. General Review of Responsibilities and Procedures:	Satisfactory?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. Energy Identification:	Satisfactory?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d. Lockout Device:	Satisfactory?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e. Energy Release Methods:	Satisfactory?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f. Lockout Steps:	Satisfactory?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g. Comments/Deficiencies:			

Certification:

This energy control procedure is adequate (or modified as noted above). The inspector has reviewed appropriate responsibilities with the Authorized Employee(s). Tag limitations were inspected and appropriate Affected Employees included in this review where tagout devices are used.

Inspector's Signature: _____

Date: _____

Authorized Employee's Signature: _____

Date: _____