

Policy: **Lockout/Tagout**

Responsible for Policy: Environmental Health & Safety

Policy Number: **F-7**

Most recent approval date: April 2019

Policy Statement

Finger Lakes Community College requires that all departments within the College establish and fulfill requirements for affixing the appropriate Lockout/Tagout signage and locks to energy isolating devices, and to otherwise disable machines, equipment or processes to prevent unexpected energizing, start-up, or the release of stored electrical, hydraulic, pneumatic, chemical, thermal, or other energy.

Reason for Policy

This policy is specifically intended to prevent injuries to employees and contractors engaged in service and/or maintenance activities on machines, equipment, or processes where the release of stored energy may put them at serious risk. This policy is intended to ensure the College's compliance with Occupational Safety and Health Administration (OSHA) standards.

Applicability of the Policy

This policy applies to all employees and contractors who work with or near the servicing and/or maintenance of machines and equipment in which the unexpected energization or startup of the machines or equipment, or release of stored energy, could harm employees. All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. Authorized employees are required to perform the lockout in accordance with FLCC procedures. Employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize or use that machine or equipment.

If contractors are to conduct work in FLCC spaces requiring lockout/tagout of equipment, they must present evidence of compliance with a lockout/tagout program that meets or exceeds the requirements of 29 CFR 1910.147.

Definitions

Affected Employee: an employee whose job requires the operation or use a machine or equipment on which servicing and/or maintenance is being performed under Lockout or Tagout, or whose job requires work in an area in which such servicing and/or maintenance is being performed

Authorized Employee: an employee who locks out or tags out machines or equipment to perform servicing and/or maintenance on that machine or equipment. An Affected Employee becomes an Authorized Employee when that employee's duties include performing servicing and/or maintenance on machines or equipment covered under this policy.

Energy Isolating Device: a mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: a manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.

Hot Tap: a procedure used in repair, maintenance, and service activities that involves welding a piece of equipment (pipelines, vessels or tanks) under pressure to install connections or appurtenances (it is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems).

Lockout: the placement of a Lockout Device on an Energy Isolating Device according to an established procedure; this ensures that the Energy Isolating Device and the equipment being controlled cannot be operated until the Lockout Device is removed.

Lockout Device: a device that uses positive means such as a lock, either key or combination type, to hold an Energy Isolating Device in a safe position and prevent the energizing of a machine or other equipment; included are blank flanges and bolted slip blinds.

Normal Operations: the utilization of a machine or other equipment to perform its intended function.

OSHA: Occupational Safety and Health Administration

Servicing and/or Maintenance: workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or other equipment. These activities include lubrication, cleaning or unjamming of machines or other equipment and making adjustments or tool changes, where the employee/user may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

Tagout: the placement of a Tagout Device on an Energy Isolating Device, according to an established procedure, to indicate that the Energy Isolating Device and the equipment being controlled may not be operated until the Tagout Device is removed.

Tagout Device: a prominent warning device such as a tag and a means of attachment, which can be securely fastened to an Energy Isolating Device according to an established procedure, to indicate that the Energy Isolating Device and the equipment being controlled may not be operated until the Tagout Device is removed.

Related Documents

- Applicable provisions of OSHA Standards - 29 CFR 1910.147

Review date/action taken:

- September 2011: original approval date
- September 2012: revisions to policy
- July 2015: no revisions
- 2018: revisions to policy

Procedures

Scope of This Policy

The following situations are not subject to the procedures outlined in this document:

Work on plug and cord type electrical equipment, for which exposure to the hazards of unexpected energizing, start up, or the release of stored energy of the equipment is effectively controlled by the unplugging of the equipment from the energy sources and by the plug being under the exclusive control of the employee/user performing the Servicing and/or Maintenance;

Hot Tap operations involving transmission and distribution systems for substances such as gas, steam, water, or petroleum products when they are performed on pressurized pipelines provided that it is clear that continuity of service is essential, shutdown of the system is impractical, and documented procedures are followed and special equipment is used which will provide proven and effective protection for employees/users;

Service and/or Maintenance that takes place during normal operations, such as lubricating, cleaning, and making minor adjustments and simple tool changes, except when an employee/user is required to place any body part into an area on a machine or piece of equipment where work is actually performed upon the materials being processed (i.e., point of operation) or where an associated danger zone exists during a machine operating cycle. Each department is responsible for the development of specific energy control procedures for each machine or other equipment within its respective areas of responsibility.

General Provisions

The head of each department is responsible for the implementation of these procedures to ensure the safety of the employees. These procedures apply to the control of energy sources during service, installation, removal, or maintenance of machines or equipment.

Additional requirements

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of a Lockout Device. Authorized Employees are further required to perform the Lockout according to requirements in the Lockout/Tagout Policy's "Departmental Written Procedures" segment of this procedure.
- All employees, upon observing a machine or piece of equipment that is locked out to perform service and/or maintenance, must not attempt to start, energize, or use that machine or equipment.
- Violators should immediately be reported to the appropriate administrative head of each department.

Sequence of Lockout or Tagout System Procedures

1. When Servicing and/or maintaining an activity that requires or causes a utility interruption, notify Facilities for coordination with appropriate utilities procedures.
2. When activating a life safety system, e.g., fire suppression or fire alarm, notify Environmental Health & Safety.
3. Notify all Affected Employees that a Lockout or Tagout system is going to be utilized and give the reason for that utilization including the type and magnitude of energy that the machine or equipment uses and be able to explain the hazards involved.

4. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).

5. Operate the switch, valve or other Energy Isolating Device(s) so that the equipment is disconnected 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.

Caution: Substations must be racked down and locked out in case of high voltage electrical distribution systems. At the building end of the feeder, the incoming breaker or switch must also be racked down or opened and locked out. This prevents a back feed on the system through a local buss tie breaker.

6. Attach the Lockout Devices to secure the Energy Isolating Devices in the “safe” or “off” position.

7. Verify that no personnel are exposed, that energy sources have been disconnected, and stored or residual energy has been dissipated by checking the normal operating controls.

Caution: Return operating controls to their “neutral” or “off” positions after verification.

8. When the use of Lockout procedures is impossible, clearly place a Tagout Device to indicate that the operation or movement of Energy Isolating Devices from the “safe” or “off” position is prohibited.

9. When possible, place the tags at the same point at which a Lockout would have been attached. If this is not feasible, locate the tag as closely as safety allows to the device in a position that will be immediately obvious to anyone who attempts to operate the device.

Caution: Tags may promote a false sense of security.

10. The equipment is now locked out or tagged out. Do not attempt to operate any switch, valve, or other energy isolating device where it is locked out or tagged out.

11. All locked out equipment must be reported to the shift supervisor when locked out and when returned to normal service.

Restoring Machines or Equipment to Normal Operations

When servicing and/or maintenance is completed and equipment is ready to be returned to normal operating condition, take the following steps:

1. Check the equipment and area to ensure that all nonessential items and tools have been removed and that the equipment is operationally intact.

2. Check to ensure that all employees/users have been safely positioned or removed from the area.

3. Verify that the controls are in neutral.

4. Remove the Lockout Devices and re-energize.

Caution: Some types of blocking may require re-energization of the equipment before the blocking material may be removed safely.

5. Report to the shift supervisor when the equipment is returned to normal service.

Acquiring New or Modifying Old Equipment

- When replacing, repairing, renovating or modifying a machine or other equipment, or when installing new machines or equipment, ensure those machines and equipment are designed to accept a Lockout Device.
- Purchase of equipment that is covered by this policy, whether through contract or the College's Purchasing Department, must comply with the requirements for Energy Isolating Devices.

When More Than One Person is Involved

- When more than one person is required to Lockout or Tagout equipment, each must place his/her own personal Lockout Device or Tagout Device on the Energy Isolating Device(s).
- When an Energy Isolating Device cannot accept multiple locks or tags, use a Lockout or Tagout Device (hasp) which can accept multiple locks to secure it.
- Each employee must apply a Lockout device to the hasp. When the employee no longer needs to maintain Lockout protection, that employee will remove the Lockout device from the hasp.

Requirements for Lockout/Tagout Devices

- Lockout and Tagout Devices must be standardized throughout the College. Each Lockout and Tagout Device must indicate the identity of the Authorized Employee using the device and must warn against the re-energizing of the equipment. The only acceptable Lockout and Tagout Devices are those provided by the College available at the appropriate Lockout Station Sign Out Board.
- Departments must supply all of their Authorized Employees/users with an adequate number of Lockout and Tagout Devices for their areas of responsibility.
- Employees must Lockout and/or Tagout the Energy Isolating Devices with assigned lock(s) or tag(s).
- The Lockout/Tagout Device must be readily identifiable and must not be used for any purpose other than energy control.
- The following conditions must also be met:
 - Locks must be individually keyed.
 - The key must remain in the possession of the Authorized Employee. Only the employee who applied the Lockout Device shall remove the device. All employees/users must remove their Lockout Device upon completion of a job and before leaving the campus.
 - In case of a dire emergency condition, after every reasonable attempt has been made to contact the Authorized Employee, the supervisor may remove the Lockout Device after it has been established that all safety precautions for removal of the Lockout Device have been observed.
 - Current key assignments will be maintained at each respective Lockout Station Sign out Board.
 - Blocking tags must be provided for those disconnect means where no locking ring is available.
 - The Authorized Employee's name and the date when placed will be put on each tag.

Training

Environmental, Health & Safety must provide training to all Authorized Employees/users to ensure that the purpose and function of the energy control procedures are understood. The training must provide employees/users the knowledge and skills necessary for the safe application, usage, and removal of the energy controls that are required.

1. Each department head must forward a list of Authorized Employees/users that are to receive hazardous energy control training to Environmental, Health & Safety.

2. Each department head must forward a list of designated responsible contact persons to Environmental, Health & Safety.

3. Facilities and Environmental, Health & Safety must ensure that Authorized Employees are familiar with the applicable hazardous energy sources and the methods of isolation or control.

4. Departments with Affected Employees must provide specific training for their respective areas of responsibility. They must also provide the following:

- Retraining of Authorized Employees/users whenever there is a change in energy control procedures, assignments, equipment or a new hazard is encountered;
- Annual job specific retraining of Authorized Employees/users;
- Instruction to Affected Employees/users in the purpose and procedure of energy control;
- Instruction of all other employees/users who work in the area in the procedure and the prohibitions for attempting to restart equipment that has been locked out and/or tagged out;
- Instruction of all other employees/users in the use and limitations of the Tagout system.

Enforcement

Environmental Health & Safety must conduct periodic inspections of the Lockout/Tagout Policy procedures during building inspections to ensure that the energy control procedures and requirements are being followed. Additionally, Environmental Health & Safety must address any inadequacies in and/or deviations from the procedure noted during periodic inspection.

- Each department head must respond to Environmental Health & Safety within a reasonable amount of time that the problem has been corrected.
- The success of the correction must be ascertained by the inspector during a review with the authorized and Affected Employees/users.
- Enforcement of this procedure must be in accordance with disciplinary procedures established by the Human Resource Department.

Departmental Written Procedures

Each affected department is responsible for developing, maintaining and following specific energy control procedures for each machine or other equipment within its respective areas of responsibility when any of the following conditions exist:

- The machine or other equipment has more than one energy source;

- The machine or other equipment has a single energy source and cannot be isolated from that energy source and completely de-energized and de-activated by locking out that single source;
- The Lockout Device is not under the exclusive control of the Authorized Employee/user performing the Service and/or Maintenance;
- There has been an accident involving the unexpected activation or re-energization of the machine or equipment during Servicing and/or Maintenance.
- Departments must update these procedures whenever there are equipment changes.

Forms/Online Processes

- None

Appendix

- None

Review date/action taken:

- September 2011: original effective date
- September 2012: revisions to procedures
- July 2015: no revisions
- 2018: revisions to procedures