

# Clarksville-Montgomery County School System LOCKOUT/TAGOUT/VERIFICATION PROGRAM

OSHA Standard - [29 CFR 1910.147](#)

## 1.0 **PURPOSE**

This program establishes requirements for the Lockout/Tagout/Verification of energy isolation. It must be used to ensure that the machine or equipment is isolated from all potentially hazardous energy sources (see definition). Before employees perform any servicing or maintenance activities where unexpected energization, start-up or release of energy could cause injury, the equipment must be locked out, tagged out, and verified.

Lockout/Tagout/Verification Procedures is considered to be among the most important safety control measures at Clarksville-Montgomery County Schools System (CMCSS). Failure of any employees to follow these procedures shall be considered a major and serious infraction of safety policy and can result in disciplinary action up to and including termination.

Lockout/Tagout/Verification Program applies to all CMCSS employees, as well as contractors and contracted employees.

Each department shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees.

The Safety and Health Director is responsible for the implementation of a review and revision process for this program. This entire program must be reviewed, at least annually, to ensure continuous and effective compliance with all applicable codes and regulations.

## 2.0 **DEFINITIONS**

*The following definitions apply to the Lockout/Tagout/Verification Program.*

**Affected Employee-** One whose job requires him/ her to **operate or use** a machine or piece of equipment on which servicing or maintenance is being performed using lockout/ tagout/ verification procedures. This also pertains to employees whose job would require them to **work in an area** where servicing and maintenance work is being performed under lockout/ tagout/ verification procedures. (Examples of this could be Operators, Utility Attendants, etc.)

**Authorized Employee-** A person who locks out or tags out machines or equipment in order to perform service or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing service or maintenance.

**Capable of Being Locked Out-** An **energy isolation device** will be considered to be **capable of being locked out** either if it is designed with a hasp or other attachment or integral part of which, or through which a lock can be safely affixed, or if it has a locking mechanism built into it. Other energy isolation devices will be considered capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolation device or permanently alter its energy control capability.

**Departmental Locks-** A group or series of the approved locks which may be individually keyed or keyed alike and are assigned to a specific department.

**Designated Authorized Supervisor-** A qualified maintenance technician or department supervisor that initiates, locks, tags, verifies, assures continuity of protection, documents and is responsible for group lockout or extended shutdown. Written transfer of this responsibility to another qualified maintenance technician or department supervisor is permissible. Qualified maintenance technicians are available 24 hours per day, 7 days a week, including holidays.

**Energized-** When the equipment and/ or machinery is still connected to an energy source or contains residual pressure or stored energy.

**Energy Isolation Device-** A mechanical device that physically prevents the transmission or release of energy. (Examples include a manually operated electrical circuit breaker, a disconnect switch, slide gates, valves, blocks, and blind flanges.) This term does not include push buttons, selector switches, and other types of control circuit devices.

**Energy Source-**Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gas, water, steam, air, stored energy including gravity, or any other form of energy.

**Extended Shutdown-** Any job that is expected to extend longer than a shift and may involve multiple energy sources; many employees's and/ or groups performing service or maintenance work.

**Gang/ Crew Locks-**A unique set of departmental locks that may be temporarily assigned to individuals as personal locks. Documentation must be maintained to log assignment and return.

**Group Lockout-** Special lockout procedure which normally involves many energy sources and/ or many persons in a servicing/ maintenance assignment, which usually requires less than one shift to accomplish. Normally includes the use of departmental locks and lock boxes.

**Hot Tap-**A procedure used in repair, maintenance and service activities which involves welding on a piece of equipment (pipelines, vessels or tanks) under pressure, in order 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. NOT PERMITTED at CMCSS.

**Information Tag-**This tag is solely to be used to provide additional information or clarity to any given situation and is never to be used for equipment or personal protection

**Lockbox-** A durable, secure, tamper resistant box that is able to accept multiple locks, large enough to store key(s) visibly and with an externally mounted visible and/ or accessible document holder. This box can be portable or stationary.

**Lockout-** is the placement of a lock and tag on an energy isolation device that ensures that the equipment being controlled cannot be re-energized until the locking device is removed.

**Lockout Device-** A device that is capable of holding an energy isolation device in a safe position.

**Outage Lockout Coordinator-** the Designated Authorized Supervisor responsible for control of the outage and the master lockbox when using Option C for an extended shutdown.

**Qualified-** One familiar with the function and operation of specific equipment and the hazards involved. This person must be able to effectively identify, isolate and verify removal of all energy sources through training, education, experience, written procedures, technical knowledge or with the assistance and skill of other individuals.

**Servicing and/or Maintenance-**Servicing and/ or Maintenance refers to the everyday activities that are required to keep equipment and machinery in operation. Some of these activities may include such tasks as trouble-shooting, adjusting, inspecting, setting up, installing, constructing, and maintaining equipment and machinery. Job activities may include such things as lubricating, cleaning, aligning rolls, un-jamming machinery and/ or equipment, or other tasks which require an employee to by-pass a safety device and/ or place themselves in a point of operation. In performing these activities, the employees working in the area of the particular piece of equipment may become exposed to the unexpected energization or start-up of the equipment, or to the release of hazardous energy.

**Setting Up-** Work that is performed to prepare a machine or equipment to perform its normal operation.

**Tagout-** The placement of a tagout device on an energy isolation device, in accordance with an established procedure, to indicate that the energy isolation device and the equipment being controlled shall not be operated until the tagout device is removed.

**Tagout Device-** A tag used as a warning device normally attached with a lock to indicate that the energy isolation device and the equipment being controlled shall not be operated. In the event that an energy isolation device is not capable of safely accepting a lock, or when Equipment Danger Tags are applied, tags shall be attached with wire ties.

White Tag - Personal Danger Tag  
Red Tag - Extended Shutdown Tag

**Transfer Log-** A standardized form that is required to transfer responsibilities from one designated authorized supervisor to another designated authorized supervisor during a group lockout or extended shutdown.

**Trouble-Shooting-** Trouble-shooting normally refers to the activity of assessing problems with equipment for purposes of maintenance or repair when this activity requires an employee to bypass a safety device and/ or enters a point of operation, special established precautionary techniques should be used. ( Ref. CFR [1910.301](#) and CFR [1910.269](#))

**Verification-** Confirmation by an authorized employee(s) that de-energization, isolation, and control of energy for a machine or specified equipment have been accomplished prior to starting work on machines or equipment that have been locked out and/ or tagged out.

**Wire Ties (Ty-Rap) -** A piece of hardware used to attach tags when an energy isolation device is not capable of being safely locked or when tags do not accept a lock.

**Zero Energy State-** A state in which all energy sources are eliminated and/ or controlled (electrical, mechanical, hydraulic, pneumatic, fluids, gases and stored).

### 3.0 **RESPONSIBILITY**

#### **Department Supervisor Responsibilities:**

- Training personnel in the recognition, evaluation and control of the sources of hazardous energy within the department.
- Deliver and document training for all affected employees.
- Develop, document and maintain Lockout/Tagout/Verification Procedures for all energy sources identified on each piece of equipment or machinery.
- Identification and documentation of employees who will apply lockout/ tagout in your area. (where is this documented?)
- Deliver and document specific authorized employee training for each, appropriate Lockout/Tagout/Verification Procedure; provide “qualified” personnel to verify zero energy state.
- Maintain a continuous tracking system for proper use of Equipment Danger Tags.
- Furnishing locks, tags, chains, wedges, pins, etc. for isolation, securing, blocking, and controlling release of energy.
- Train all employees that pulling fuses is not allowed as a substitute for proper Lockout/Tagout/Verification procedures.
- Maintain records of Personal and Departmental lock assignments and the completion of this form. (what form is this?)
- Implement the Lockout/Tagout/Verification Program.

## **Employee(s) Responsibilities:**

- Question all aspects of the job, expected or unexpected, during the evaluation phase of a job.
- Evaluate the potential for hazardous energy contact or exposure, the need for additional personal protection, and other safety precautions before beginning work of any kind.
- Inspect and test all safety equipment before use. Assure that any prescribed inspection by others is current, and inspect before use, as required.
- Participate in a group review of safety instructions for correct interpretation on major jobs or jobs where specific concerns exist. Check with supervisor, project engineer, task coordinator, or leader if questions remain.
- Stop work immediately and resolve unusual or unexpected situations at the moment they arise.

## **4.0 LOCKOUT/ TAGOUT/ VERIFICATION PROCEDURES**

**Internal audits-** performed by the department supervisor/maintenance supervisor (Includes the completion of the Lockout/Tagout/Verification Checklist and develop a tracking system to insure corrections are implemented).

- Shall certify annually that a periodic inspection has been performed, for each of the three procedures (Personal Lockout, Group Lockout, Extended Shutdown ), if applicable, in each area.
- Establish engineering and maintenance practices, which insure that lockable energy isolation devices, standardized device nomenclature and identification, and written safe procedures are integral functions within each department.
- Involve appropriate employees in the planning for large-scale shutdowns to include review of energy control procedures, tasks to be performed, available drawings, and any other pertinent information to the scope of work.
- When feasible, simplify Lockout/Tagout/Verification Procedures for complex equipment and processes by utilizing effective engineering design and maintenance.

## **5.0 ENERGY CONTROL DEVICES**

An **ENERGY ISOLATION DEVICE** is a mechanical device that physically prevents the transmission or release of energy. These devices are secured by locks and other hardware, to ensure a zero energy state during servicing and maintenance activities. **Push buttons, E-stops, toggle switches, etc. may not be used as isolation devices for lockout purposes.**

## **6.0 LOCKS**

Locks for use in Lockout/Tagout/Verification/Procedures shall be standardized within the department in at least one of the following criteria: color, shape, or size. This standardized lock is the only lock that may be used for lockout/ tagout and shall not be used for other purposes (i.e. toolboxes, lockers, etc.).

## **7.0 OTHER LOCKOUT DEVICES**

Other lockout devices used in conjunction with locks and tags are chains, wedges, key blocks, adapter pins, self-locking fasteners, circuit breaker locking devices, or other hardware for isolating, securing, or blocking of machines or equipment from energy sources.

## 8.0 TAGS

- **Personal Danger Tag** - is used by each department for personal protection.
- **Extended Shutdown Tag** - is used for group lockout and extended shutdown situations.
- **Equipment Danger Tag** - used to designate equipment/ vehicles in need of repair – **This tag is not to be used for personal protection.**

***NOTE: In certain situations, where special circumstances exist or where detailed startup procedures may be necessary to protect the equipment, use of this tag could be required.***

***Upon removal of this tag and equipment return to service, additional communication may be needed.***

- **Information Tag** – Used to inform others as to the status of the equipment or to give specific instructions. This tag is not to be used for personal protection, but can be used in conjunction with a lock and tag.

### Personal Danger Tags

**DANGER**

**Work  
In Progress  
DO NOT  
OPERATE**

Signed By \_\_\_\_\_

Dept. \_\_\_\_\_ Date \_\_\_\_\_

**DANGER**

**DO NOT OPERATE  
OR REMOVE THIS  
TAG.  
ANYONE DOING  
SO WITHOUT  
AUTHORITY IS  
SUBJECT TO  
DISCIPLINARY  
ACTION.**

**SEE OTHER SIDE**

1. Used to provide individual personal protection; each employee is responsible for the placement and removal of his/her own lock and tag.
2. Used in conjunction with a lock every time an individual performs a lockout.
3. Must be dated and signed at the time it is applied.
4. Attached to the lock by inserting the lock shank through the eye of the tag.
5. The personal lock and tag must be removed when the task is completed or at the end of their respective shift, whichever comes first.

## 9.0 LOCKOUT

### **Preparation for Shutdown:**

- When appropriate, review proposed work with supervisor in charge of equipment to reach agreement on potential operating interference. If an immediate shutdown is required to protect employees or equipment, use necessary emergency shutdown procedures.
- Affected employees, that is, those working in the immediate area of the machinery or equipment involved, shall be notified prior to application of energy controls.

#### **Shutdown:**

- Use normal stop or shutdown procedures to shutdown equipment (depress stop button, shift lever, operate valve, etc.)

#### **Isolation:**

- ELECTRICIANS SHALL OPERATE ALL DISCONNECT SWITCHES FOR LOCKOUT/ TAGOUT PURPOSES, WHEN VISUAL VERIFICATION OF BLADE OPENING AND/ OR VOLTAGE CHECKS ARE REQUIRED.
- Operate switch, valve, or other energy isolation device(s) so that the equipment is isolated from its energy source(s).

***Note 1: Push buttons, E-stops, toggle switches, etc. may not be used as isolation devices for lockout purposes.***

***Note 2: Except for emergency situations, all open faced disconnects and all switches larger than 100 amps may only be operated by electricians or other qualified electrical personnel. No switch should be pulled under a load.***

- Stored energy must be controlled as necessary to assure zero energy state at all times until work is completed. For example, blocking hydraulic systems, bleeding airlines or blanking steam lines to prevent re-accumulation of stored energy.

#### **Lock and Tag:**

- Lock and tag the isolation device(s) in the safe position.
- If more than one individual is required to lockout/ tagout/ verify equipment, each shall place his/ her own personal lock on the energy isolation device. When an energy isolation device cannot accept multiple locks and tags, a multiple lockout device such as a gang hasp shall be used.

#### **Verification:**

- Prior to starting work on machines or equipment that have been locked or tagged out; the authorized employees shall verify that isolation and de-energization of the machine or equipment have been accomplished.
- Verification shall include all of the appropriate, following practices that are necessary to confirm removal and control of hazardous energy sources. Additional procedures may be required.
  1. Check the disconnect or switch handle after lockout/ tagout to make certain it cannot be moved to the "on" position.
  2. Only electricians or other electrically qualified ([29 CFR 1910.399](#) definitions) personnel shall perform the following before any work will begin:

\* **Note: On services greater than 100 Amperes or before beginning any work on electrical conductors or electrically energized parts. Visual verification of blade opening and testing for voltage, phase-to-phase and phase-to-ground, is always required.**

a.) **Verification of blade opening visually, when other physical verification procedures are not feasible.**

b.) **Voltage checks, phase-to-phase and phase-to-ground, shall always be made, when neither confirmation of blade opening nor other physical means of verification are possible.**

- Try the machine “start” controls after lockout/ tagout to make sure that the equipment does not operate. **(Trying machine start controls MAY NOT be used as the sole means of verification for: equipment which is fed by larger than a 100 Amp. switch; complex processes or equipment with multiple energy sources; or other equipment for which written procedures require additional means of verification.)**
- Try, test and inspect for stored air, gas, steam, hydraulic fluid, etc., that remains under pressure in piping, accumulators, and cylinders.
- Try to operate enough combinations of controls to insure elimination of stored energy.
- Confirm that energy stored in springs or elevated devices are at zero energy state.
- Check for leaking valves.
- Confirm that all necessary caps, blanks, or blinds are in place and lines containing potential hazardous energy sources are disconnected.
- Determine if system components have been bled or purged. (Lock and Tag bleed valves in the open position.)
- Assure that upstream and downstream pressures adjacent to control valves have been relieved.
- For plug-connected equipment, ascertain that equipment is unplugged and that the plug is under the exclusive control of the employee(s) performing service or maintenance.

**NOTE: RETURN CONTROLS (push buttons, selector switches, valves, levers, etc.) TO NEUTRAL, OFF, OR SAFE POSITION BEFORE BEGINNING WORK, REMEMBER THE LAST FUNCTION TRIED MAY OCCUR UPON RE-ENERGIZATION.**

## **10.0 RELEASE FROM LOCKOUT**

Inspect the work area to make sure that nonessential items have been cleared.

- After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout/ tagout devices.
- Notify all affected employees in the area that the lockout devices have been removed and that the equipment is about to be re-energized.

- In situations where the lockout must be temporarily removed for testing, trouble-shooting, or repositioning, steps outlined above must be followed with the exception of reinstalling guards. After completing the testing, trouble-shooting, or repositioning, de-energize all systems and reapply energy control devices. Once the energy control devices have been reapplied, the lockout process needs to be re-verified before resuming work.

## 11.0 GROUP LOCKOUT PROCEDURES

When a maintenance or service event takes place, planned or unplanned, and a large number of isolation devices and/ or employees from a crew, craft, department, or other group of personnel are involved, a large number of personal locks would be needed. It will be more efficient to perform a group lockout procedure using a lockbox. Group lockout procedures shall afford employees a level of protection equivalent to that provided by individual implementation of personal lockout and tagout devices.

- A designated authorized maintenance technician or department supervisor shall initiate the Transfer Log and place a departmental lock and a signed extended shutdown tag on each energy isolation device after de-energization. The Transfer Log shall be used to specify isolation points, if a separate list is not available.
- The designated authorized maintenance technician or department supervisor shall follow the verification procedures to insure the removal or control of hazardous energy sources.
- The designated authorized maintenance technician or department supervisor places the key(s) to the departmental locks in the lockbox, and then locks the box with another separately keyed departmental lock and an extended shutdown tag. The key to this lock may then be transferred as necessary. The Transfer Log, which remains with the lockbox, shall be used for this purpose. Only one individual may have control of the key at any time. At time of transfer, the new designated authorized supervisor shall employ all necessary means to assure continuity of protection. This does not relieve individual responsibilities for some form of verification as it pertains to their personal safety.
- A list of isolation points shall also remain with the lockbox.
- Each employee assigned to the job affixes his or her own personal lock and tag to the lockbox.
- Each authorized employee, affixing a personal lock and danger tag, shall verify that the equipment to be serviced and all associated hazardous energy have been rendered safe. As a minimum, the employee must review the lockout/ tagout process with the designated authorized supervisor.

**Caution: The part of verification that involves “ONLY” visual inspection of lockout devices may be done with employees in the work area.**

**Warning: Operation of controls for verification purposes requires that the work area is to be clear of all employees.**

***Note 1: Anyone not part of the original group who wishes to work in the area isolated by a group lockout procedure must contact the designated authorized supervisor and review the lockout/ tagout/ verification process before placing a personal lock and tag on the lockbox and proceeding with servicing or maintenance.***

## 12.0 EXTENDED SHUTDOWN



When work on equipment is projected to extend for more than one shift and may involve multiple energy sources or many employees, an Extended Shutdown lockout/ tagout/ verification procedure should be used.

- The “**Initial Designated Authorized Maintenance Tech or Shift Supervisor**” must be a second level or higher supervisor who is responsible for coordination of the extended shutdown, and is accountable for determination of isolation points and safe shutdown/ startup procedures. He/ she shall provide a departmental lock(s) with a signed Extended Shutdown Tag(s) for each isolation device and the lockbox, and shall initiate the Transfer Log. The responsibility for de-energization followed by actual placement of locks and Extended Shutdown Tags may be held by a qualified supervisor, along with Extended Shutdown responsibility, on the Transfer Log. Responsibility for the Extended Shutdown may then be transferred to the next designated authorized supervisor, as necessary, utilizing the Transfer Log, which remains with the lockbox, along with the list of isolation points. The Transfer Log shall be used to specify isolation points, if a separate list is not available. Only one designated authorized supervisor is allowed at any given time.
- The current designated authorized supervisor places the key(s) to the department locks in the lockbox, and then locks the box with another separately keyed departmental lock and an extended shutdown tag. The key to this lock may then be transferred, as necessary, for as long as there is an extended shutdown. The Transfer Log shall be used for this purpose. Only one individual may have control of the key at any time. At time of transfer, the new designated authorized supervisor shall employ all necessary means to assure continuity of protection. This does not relieve individual responsibilities for some form of verification as it pertains to their personal safety.

One of the following options may be used in conjunction with requirements of paragraphs above:

**Option A:** If the job involves multiple groups (e.g. contractor), each group will have their own designated authorized supervisor that will affix their own departmental locks and tags on the isolation devices and then place the keys in the respective lockbox for their group.

**Option B:** If the job involves multiple groups, a single designated authorized supervisor is assigned overall job-associated lockout/ tagout/ verification responsibilities, including application of departmental locks and tags on the isolation devices, for all persons engaged in or affected by the servicing or maintenance activity. Only one lockbox is used for all authorized employees.

**Option C:** If the job involves multiple shifts and any combination of multiple groups, various shifts, multiple tasks, many individuals or numerous isolation devices, a single designated authorized supervisor is assigned as an Outage Lockout Coordinator. This individual is responsible for all normal duties associated with a designated authorized supervisor including placement of departmental locks and extended shutdown tags on all isolation devices. The key(s) to these locks shall be placed in a lockbox, which shall be defined as the master lockbox for this outage. Each group shall have their own designated authorized supervisor who will apply a departmental lock and an extended shutdown tag to the master lock box instead of on individual isolation devices. This key will be placed in their own group lock box. A second separately keyed departmental lock and extended shutdown tag is applied to this lock box. Verification of isolation of all energy sources must be completed by the group designated authorized supervisor. Each group's designated authorized supervisor shall keep the Outage Lockout Coordinator informed of changes in personnel or tasks being performed.

***Note 1: Anyone not part of the original group who wishes to work in the area isolated by a group lockout procedure must contact the designated authorized supervisor and review the lockout/ tagout/ verification process before placing a personal lock and tag on the lockbox and proceeding with servicing or maintenance.***

- Each authorized employee assigned to the task places his/ her personal danger tag and lock on the respective lockbox for his/ her group.
- Each authorized employee, affixing a personal lock and danger tag, shall verify that the equipment to be serviced and all associated hazardous energy have been rendered safe. As a minimum, the employee must review the lockout/ tagout process with the designated authorized supervisor.

**Caution: The part of verification that involves “ONLY” visual inspection of lockout devices may be done with employees in the work area.**

**Warning: Operation of controls for verification purposes requires that the work area is to be clear of all employees.**

- Responsibility for an extended shutdown may be transferred from one designated authorized electrician to another.
- At shift change or upon completion of an individual's task, each employee shall remove his/ her personal lock and danger tag from the lockbox. All incoming authorized employees shall place their personal locks and danger tags on their group's respective lockbox. The locks and extended shutdown tags are never removed from the energy isolation devices or lockbox at shift change.
- Upon completion of the job and after all personal danger locks and tags have been removed from the lockbox, only the current designated authorized person (as determined by the transfer log) shall unlock the lockbox, remove the keys, and supervise the unlocking of the isolation devices.

### **13.0 MOBILE EQUIPMENT ISOLATION**

When ever mobile equipment is found in need of repair the ignition key will be removed and a properly completed machine tag using a plastic wire tie will be attached to the steering wheel or the controls to warn all employees not to operate that piece of mobile equipment. In the event the mobile equipment does not have an ignition key, the vehicle will be disabled.

### **14.0 HOT TAP GUIDELINES**

Clarksville-Montgomery County Schools System (CMCSS) and the Occupational Safety and Health Administration (OSHA) provides provisions in their Lockout/Tagout Program for the use of a TAG-ONLY/Tagout system for energy isolation. Clarksville-Montgomery County Schools System believes that this method of isolating energy sources does not provide the same level of protection as the use of Lockout in conjunction with Tagout. The CMCSS policy concerning TAG-ONLY/Tagout is outlined below:

**Clarksville-Montgomery County Schools System will not HOT TAP (A procedure used in repair, maintenance and service activities which involves welding on a piece of equipment (pipelines, vessels or tanks) under pressure, in order to install connections or appurtenances.) under any circumstances. All pipelines, vessels and tanks will be properly Locked and Tagged Out, bled and purged before any type work will begins.**

### **15.0 SPECIAL LOCK/TAG REMOVAL PROCEDURES**

- These procedures are designed to safely remove a lock/ tag when it becomes necessary to do so and when the whereabouts of the individual is unknown.
- Verification must be made to confirm that the authorized employee who applied the lock/ tag is not in the department site.
- All reasonable efforts must be made to contact the authorized employee, to inform him/ her that his/ her lock/ tag need to be removed.

- The authorized employee “**must be**” informed of the lock/ tag removal before he/she resumes work.
- **The lock and tag being removed must be cut off and destroyed.**

## 16.0 **Training Requirements**

### **Initial Training shall include:**

- All employees shall be instructed regarding the purpose and use of this program, energy control methods, and about the prohibition relating to attempts to restart or re-energize machines or equipment which are locked out or tagged out.
- Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of energy available in the work area, and the methods and means necessary for energy isolation and control.
- Train all employees that pulling fuses is not allowed as a substitute for proper Lockout/Tagout/Verification procedures.
- Employees shall also be trained in the following limitations of tags, especially when used in “Tag-Only” situations:
  - ⇒ Tags are essentially warning devices affixed to energy isolation devices, and do not provide the level of physical restraint that is provided by a lock.
  - ⇒ When a tag is attached to an energy isolation device, it is not to be removed without permission of the authorized person responsible for its placement. Tags used in this manner for personal protection shall never be bypassed, ignored or otherwise defeated.
  - ⇒ In order to be effective, tags must be legible and understandable by all employees in the work area, including those affected and authorized.
  - ⇒ Tags and their means of attachment must be made of materials that will withstand environmental conditions encountered in the work area.
  - ⇒ Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.
  - ⇒ Tags must be securely attached to energy isolation devices so that they cannot be inadvertently or accidentally detached during use.

### **Employee Retraining:**

- Retraining shall be provided, by the department supervisor, for all authorized and affected employees whenever there is a change in their job assignments, a change occurs in machines, equipment, or processes that present a new hazard, or when there is a revision to the Lockout/Tagout/Verification Program or specific energy control procedures.
- Additional retraining shall be conducted when results of periodic inspections, audits, observations, accident experience, individual needs, or any other source of information reveals or generates reason to believe that there is inadequate employee knowledge or deviations in their use of energy control procedures.

- The retraining shall reestablish employee proficiency and introduce updates to the Lockout/Tagout/Verification Program and cover revised energy control methods and procedures, as necessary.

Associated Documents: none