

Richland County School District One

Lockout & Tagout Program
(29 CFR PART 1910.147)

Hazardous Energy Control Program for Richland County School District One

Purpose

The purpose of this and other safety programs is to provide employees the procedures needed for a safe and healthy workplace.

All equipment must be locked out or tagged out when any servicing or maintenance is being performed to prevent unexpected energization, start-up or release of energy which could cause injury. There should be no attempts to operate any switch, valve or other energy isolating device (mechanical device which prevents energy release) when it is locked or tagged out.

Lock Out /Tag out Procedure

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where unexpected energization or start-up of the machine or equipment or released of stored energy could cause injury.

Compliance with This Procedure.

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employee(s) are required to perform lockout in accordance with this procedure. All employees, upon seeing 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. Any willful, or habitual deviation from this procedure is subject to disciplinary action and could be considered as cause for dismissal.

Training

Authorized employees (employees who lockout/tagout equipment prior to service or maintenance) will be trained in recognizing the hazards, the type and magnitude of the energy risk, and the appropriate safety procedures. Affected employees (employees who work in the service or maintenance area) will be trained on the policy of this program prior to any service or maintenance in their area. All other employees who could be in the lockout/tagout area will be trained on the policy. (See Appendix C).

Re-Training

Whenever there is a change in job assignments, a change in machines, equipment or processes that present a new hazard or a procedural change, authorized and affected employees will be retrained. Training will be done at least annually.

Locks, Blocks and Tags

Each worker must have his/her own lock and the only key to that lock. The lock should be substantial and durable, and should have the name of the employee on it. In addition, locks can be color-coded to indicate different shifts or types of crafts. When more than one worker is servicing a piece of equipment that must be locked out, a lockout adapter can be used which allows all the workers to place their locks on the disconnecting means. After the work is completed, each worker removes his/her lock and the machine is then returned to service. (See group lockout.)

Machinery and Equipment Identification

Richland County School District One identifies all machinery and equipment and their energy sources. Each one has an energy isolating device that can be locked out. Each one that has different and/or multiple energy sources have an energy isolating device for each energy source. Cord and plug equipment is not covered by this OSHA standard and does not require lockout/tagout. (See Appendix E).

Shutdown Preparation

Authorized employees should locate all sources of energy and make certain appropriate lockout devices are on hand. Allow only trained authorized and affected employees in the area.

Sequence of Lockout

See the below steps for the lockout sequence.

(1) Notify all affected personnel lockout is going to be used.

Names Job titles of Authorized Employees	Names Job titles of Affected Employees	Method of Notifying Affected Employees	Specific or Type Machine/Equipment
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(2) The authorized employee shall refer to the District procedure to identify the type and magnitude of the energy that the machine or equipment utilizes and shall understand the hazards of the energy and know how to control the energy.

SPECIFIC OR TYPE MACHINE/ EQUIPMENT	TYPE ENERGY UTILIZED	MAGNITUDE OF ENERGY USED	HAZARDS INVOLVED	METHOD OF ENERGY CONTROL
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

(3) If the machine or equipment is operating, shut it down by the normal stopping procedure (e.g. depress the stop button, open switch, close valve, etc.).

SPECIFIC OR TYPE MACHINE / EQUIPMENT	TYPE OF MACHINE /EQUIPMENT CONTROLS	LOCATION OF MACHINE/EQUIPMENT CONTROLS
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(4) De-Activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source.

SPECIFIC OR TYPE MACHINE / EQUIPMENT	TYPE OF ENERGY ISOLATING DEVICE	LOCATION OF ENERGY ISOLATING DEVICE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(5) Lock out the energy isolating device(s) with individual locks.

(6) Stored or residual energy (such as that in capacitors, 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 grounding, repositioning, blocking, bleeding down, etc.

SPECIFIC OR TYPE MACHINE / EQUIPMENT	TYPE OF STORED ENERGY	METHOD TO DISSIPATE OR RESTRAIN
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(7) Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment **will not operate**.

CAUTION: Return the operating control(s) to neutral or “off” position after verifying the isolation of the machine or equipment.

SPECIFIC OR TYPE
MACHINE/EQUIPMENT

METHOD OF VERIFYING
ISOLATION OF EQUIPMENT

(8) The machine or equipment has now been locked out.

Restoring Equipment to Service

When servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps must be taken.

- (1) Check the machine or equipment and the immediate area around the machine to ensure that non-essential items have been removed and that the machine or equipment components are operationally intact.
- (2) Check the work area to ensure that all employees have been safely positioned or removed from the area.
- (3) Verify that the controls are in neutral.
- (4) Remove the lockout device(s) and re-energize the machine or equipment.

NOTE: The removal of some forms of blocking may require re-energizing the machine before safe removal.

- (5) It is the Supervisor's responsibility to have all affected employees notified that the servicing or maintenance is completed and the machine or equipment is ready to use.

Procedure Involving More Than One Person

In the preceding steps, if one or more than one individual is required to lock out or tag out equipment, each must place his/her own personal lockout device or tag out device on the energy isolating devices(s). When an energy isolating device cannot accept multiple locks or tags, a multiple lockout or tag out device (hasp) may be used. If lockout is used, a single lock may be used to lock out the machine or equipment with the key being placed in a lockout box or cabinet which 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/her own lockout protection, that person will remove his/her lock from the box or cabinet.

Employees Authorized For Group Lockout/Tagout

NAME

JOB TITLE

_____	_____
_____	_____
_____	_____

Shift or Personnel Changes

Specific procedures shall be utilized during shift or personnel changes to ensure the continuity of lockout tag out protection, including provision for the orderly transfer of lockout or tag out device protection between off-going and oncoming employees, to minimize exposure to hazards from the unexpected energization or start up of the machine or equipment, or the release of stored energy. The supervisor of the personnel leaving will place the supervisor's lock on the machinery. All the other workers will remove their locks. The supervisor of the oncoming personnel will place that supervisor's lock on the device, which may be removed after all the oncoming authorized employees have placed their locks on the machine.

Work Lapse

The authorized employees' locks or a supervisor's lock must be on the machine at all times when work is not being done. The locks must have identification tags.

Removal by Management

Under the direction of and designated by the department or division head, an authorized employee can remove another person's lock. Before the lock is removed the following must be completed.

- (1) Verify with certainty that the authorized employee who applied the device is not in the facility (e.g., by questioning all employees in the workplace).
- (2) Attempt to locate the employee, including attempting to contact the employee at home to inform him/her that his/her lockout/tag out device has been removed, and the employee's supervisor at home.
- (3) Ensure that the authorized employee has this knowledge before he/she resumes work at the facility.

Vendors

Outside contractors will be informed that Richland County School District One requires lockout/tagout procedures and safety rules. The vendor will submit proof to Richland County School District One of its procedures upon request of the School District One. Contractors failing to adhere to Richland County School District One safety rules and procedures and to the provisions of the OSHA Hazardous Energy Control Standard will be informed to terminate their work until their program is brought into compliance. (See Appendix D).

Standardization

All lockout and tagout devices must indicate the identity of the employee using it. All will be standardized in at least one of these criteria: color, shape or size. All tagout devices will be standardized for print and format.

Lock Out Equipment

All lockout devices must be substantial enough to prevent unauthorized removal by normal force and techniques.

Tag Out Equipment

All attachments must be equivalent to a one-piece, all environment tolerant, 50 pounds strength nylon cable ties and incapable of being removed accidentally. The attachment must be non-reusable, hand attachable, self-locking and non-releasable. All tagouts must warn of the hazardous conditions if the machine or equipment is energized, and they must warn "**Do Not Operate.**"

Periodic Inspections

Management (or a supervisor designated by management) must conduct a periodic inspection of the energy control procedures at least annually to ensure the OSHA procedure and requirements are being followed. (See Appendix A).

The periodic inspection will be conducted by an authorized (e.g., manager) employee other than the one(s) utilizing the energy control procedure(s) being utilized.

The manager or authorized employee will review with each authorized (e.g., manager) employee that employee's lockout and tagout responsibilities. See Appendix B.

The manager or authorized employee must certify that the periodic inspection has been performed. The certification will identify the machine or equipment on which the energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

Tagout

Tagout should not be used when lockout can be accomplished. Tagout requires the following additional training.

- (1) Tag protection is physically inferior to lockout protection and may provide a false sense of security.
- (2) Only the authorized person can remove it, and it cannot be bypassed or ignored.
- (3) When the tag cannot be attached directly to the energy isolating device, it must be located as closely as is safely possible and must be immediately obvious to anyone attempting operation.
- (4) Tag standardization must be taught. (See above).

Authorized Employees

Listed below are the job titles of employees who service or maintain equipment. All these employees are to be trained in lockout tag out as authorized employees.

- Utilities Maintenance Technician
- Electrician Supervisor
- Master Electrician
- Assistant Electrician
- HVAC Mechanic
- Assistant HVAC Mechanic
- HVAC Worker
- Maintenance Mechanic
- Assistant Maintenance Mechanic

Plan Management

Risk Management is responsible for the development, review and modification of this plan and welcomes suggestions for the plan. A copy of the plan is available at Risk Management.

Reviewed 9.10.2021

Appendix A

Periodic Inspection of Energy Control Procedures

Richland School District One

Department _____ Building _____ Date _____

Department _____ Building _____ Date _____

Location/Area _____

Inspector:

Authorized Employee (s) involved:

Other Employees Affected:

Service/Maintenance Activities Requiring Lockout/Tag out:

TYPES OF ENERGY

- | | |
|----------------------|--------------------|
| _____ Electrical | _____ Hydraulic |
| _____ Pneumatic | _____ Chemical |
| _____ Thermal | _____ Natural Gas |
| _____ Compressed Air | _____ Steam |
| _____ Water | _____ Moving Parts |

Review current lockout/tag out procedures and indicate whether procedures are satisfactory. Any procedures marked no must be explained under Comments/Deficiencies

- | | | |
|--|---------------|--------------|
| a. Control Methods | Satisfactory? | ___yes ___no |
| b. Review of Responsibility/Procedure(s) | Satisfactory? | ___yes ___no |
| c. Energy Identification | Satisfactory? | ___yes ___no |
| d. Lockout Device | Satisfactory? | ___yes ___no |
| e. Energy Release Methods | Satisfactory? | ___yes ___no |

f. Lockout Steps

Satisfactory?

___yes ___no

g. Comments/Deficiencies:

Appendix B

CERTIFICATION OF EMPLOYEE KNOWLEDGE

The undersigned, who is a member of management authorized to make lockout inspections and who is not an employee utilizing the procedures which were inspected and verified as effective, certifies that he or she personally observed the following employees implementing the procedures. The undersigned verifies they knew their responsibilities and properly followed the lockout procedures.

Authorized Employee _____ Date of Inspection _____

The undersigned further certifies that he or she met with all the above and all other below employees authorized to lockout equipment prior to service or maintenance, and they demonstrated sufficient knowledge in the following:

Shutdown Preparation

Lockout Sequence

Testing

Group Work

Shift Change

Work Lags

Removal by Management

Restoration

Vendors

Standardization

Tagout Limitations

Inspection Certified by: _____

Print

Sign

The following employee(s) could not be certified and were sent for additional training:

Appendix D

Vendor / Outside Contractor Agreement

I, _____ serving as a representative
Print Name

of _____
Print Name

have read and understand the written safety rules and procedures of Richland School District One. I acknowledge that any deviation from or refusal to comply with said program guidelines can/will result in termination of work until it is brought into compliance. By my signature I affirm that I am authorized by the above vendor to sign this agreement.

Signature Date _____

Title

**** Note**** All contractors *must* have and follow their Lock Out/TagOut Program.

Appendix E

Machine Specific Procedures for Richland County School District One

Machine Name: _____

System Name: _____

Equipment ID # _____

Location: _____

Energy Sources Applicable to This Equipment:

_____ Electrical
_____ Thermal
_____ Hydraulic
_____ Pneumatic
_____ Mechanical
_____ Steam
_____ Compressed gas
_____ Chemical

Energy Control Devices Needed:

_____ Locks
_____ Tags
_____ Hasps
_____ Plug Cover Box
_____ Chain
_____ Block
_____ Other

Lockout/Tagout procedure:

Notify **all** affected employees and proceed as follows. Notify management in the event of any abnormal situation.

1. Equipment must be shut down by normal operating procedures.
2. Test controls to verify that all energy has been removed and equipment is in a zero energy state.
3. Complete work or task with caution and double check work or the adjustment completed.
4. Clear area of tools and equipment; notify all affected employees of impending re-start of equipment or machine.
5. Notify affected employees and supervisor of completion of work.