

San Diego Community College District Risk Management Office

Control of Hazardous Energy Program (Lockout/Tagout)



PROGRAM AUTHORIZATION

Char	ncellor
Trustee	Trustee
Trustee	Trustee
Trustee	
Vice Chancellor, Facilities	Vice Chancellor, Human Resources
Risk Manager	
Date:	



REVISION RECORD

Revision Date	Revision #	Initials	Contents of Revision
12/10/15			New
12/10/10	1706	TAW	Program update
1/19/2025	2501	MFC	Comprehensive Review:



Table of Contents

I.	PURPOSE	1
II.	REGULATORY CITATIONS	1
III.	DISTRICT POLICIES AND PROCEDURES	1
IV.	AUTHORITY	1
Α.	Chancellor's Designees	1
В.	Risk Management Office	2
C.	Facilities Services	2
D.	Supervisors	2
E.	Employees	3
V.	DEFINITIONS	3
VI.	GENERAL PROVISIONS	3
Α.	Required Isolation	4
В.	Exceptions	4
C.	Points of Isolation	4
D.	Tags	5
E.	Locks	6
F.	Multiple Employees Error! Bookmark not defined	J.
G.	Outside Contractors	7
VII.	LOCKOUT/TAGOUT	7
Α.	Pre-process	7
В.	Procedure	8
C.	Shift or Personnel Changes	9
VIII.	REPETITIVE PROCESS MACHINES	9
IX.	PROGRAM REVIEW	0
Α.	Internal Inspections1	1
В.	External Inspections	2
C.	Program Review Error! Bookmark not defined	J.
Х.		
	TRAINING1	2
Α.	TRAINING 1 Authorized Employees 1	2 2
А. В.	TRAINING 12 Authorized Employees 12 Affected Employees 12	2 2 2
А. В. Арре	TRAINING 1 Authorized Employees 1 Affected Employees 1 endix A: Equipment Lockout/Tagout Form 1	2 2 2 1
А. В. Арре	TRAINING 1 Authorized Employees 1 Affected Employees 1 endix A: Equipment Lockout/Tagout Form 1 endix B: Abandoned Lock Removal Authorization Form 1	2 2 1 1
A. B. Appe Appe Appe	TRAINING 1 Authorized Employees 1 Affected Employees 1 endix A: Equipment Lockout/Tagout Form 1 endix B: Abandoned Lock Removal Authorization Form 1 endix C: Hazardous Energies Control Procedure Form 1	2 2 1 1

SAN DIEGO Community College District	Lockout/Tagout Program	F
-----------------------------------------	------------------------	---

NING RECORD	. 2

I. PURPOSE

SAN DIEGO

Community College District

The San Diego Community College District, recognizing that the health, safety, and wellbeing of its employees are of paramount importance in the management of the District, affirms its commitment to create and maintain a safe and healthful working environment.

The San Diego Community College District's *Control of Hazardous Energy Program (Lockout/Tagout)* (LOTO) is designed to protect employees from hazardous energies in the work environment. Hazardous energies include, but are not limited to, electricity, compressed gases, fluids under pressure, springs, and gravity.

This *Program* is designed to provide protection to employees who engage in cleaning, repairing, servicing, or adjusting machines or systems that incorporate hazardous energy where the unexpected startup of the system or release of the energy could cause harm to the employee.

II. REGULATORY CITATIONS

California Code of Regulations, Title 8, § 2320.3-2320.6 California Code of Regulations, Title 8, § 3314 Code of Federal Regulations, Title 29, § 1910.147

III. DISTRICT POLICIES AND PROCEDURES

SDCCD Board Policy 6800

IV. AUTHORITY

The Chancellor has ultimate authority and responsibility for the health and safety programs within the District. Creating broad-based safety accountability is the responsibility of the Chancellor and District leadership.

The Chancellor has designated the Vice Presidents of Administrative Services and the Regional Facilities Officers to act as the *LOTO Program* administrators at each College within the District. At the District Office, the designees are the Risk Manager and District Architect while at the District Facilities Service Center; it is the Director of Facilities.

To ensure effective implementation of this *Program*, all personnel with designated specific responsibilities are expected to understand and implement the procedures outlined in this document, together with the specific contents of this *LOTO Program* for their assigned facility.

A. <u>Chancellor's Designees</u>

The Vice Presidents of Administrative Services and Facility Directors have the authority and are responsible for the implementation and maintenance of this program, including:

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 1
------------	------------------------------------------------------------	--------------	--------



- 1. Identifying those employees who will be authorized to initiate LOTO processes
- 2. Identifying equipment that fall under the scope of this program during cleaning, maintenance, servicing, or adjustment operations
- 3. Providing proper and appropriate lock and tag devices as required by this *Program*
- 4. Providing for training to those employees who fall under the scope of this *Program*, including affected employees
- 5. Recommending to the College Safety Committee any additions or changes to the *Program*
- 6. Developing or adopting the necessary policies and programs to adequately maintain a safe and healthful work and learning environment at the facilities of their responsibility
- 7. Assigning designees to fulfill all aspects of this Program.

B. <u>Risk Management Office</u>

The District Risk Management Office is responsible for the oversight and maintenance of this *Program*, including:

- 1. Reviewing the *Program* annually and updating, as necessary
- 2. Evaluating the adequacy and consistency of LOTO training in the District
- 3. Providing technical expertise to all Chancellor's Designees, as requested and required
- 4. Monitoring Cal/OSHA standards for relevant regulatory changes
- 5. Conducting periodic program audits and inspections at District facilities to evaluate compliance with all Federal, State, County, District, and College regulations
- 6. Reviewing site-specific programs drafted by the independent Colleges and Facilities to ensure compliance and consistency with regulations, this *Program*, and District policy.

C. <u>Facilities Services</u>

The Facilities Services Department is responsible for the implementation of this program, including:

- 1. Planning, organizing, and coordinating LOTO training
- 2. Developing the required equipment-specific LOTO procedures
- 3. Maintaining a list of authorized employees
- 4. Conducting required audits of the Program
- 5. Provide training for Authorized and Affected LOTO employees
- 6. Designating a LOTO Coordinator
- 7. Maintaining the records of inspections, hazard abatements, and training.

D. <u>Supervisors</u>

POL-RM-015 All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 2
-----------------------------------------------------------------------	--------------	--------

Supervisors are responsible for implementing and enforcing the provisions of this program, including:

- 1. Enforcing all provisions of this *Program*
- 2. Ensuring employees receive proper training regarding implementation of locks and tags prior to conducting operations
- 3. Ensuring that installation of new equipment and facilities allow for the provisions of this *Program*
- 4. Conducting periodic audits of the *Program*
- 5. Identifying the equipment in their area of responsibility that require LOTO procedures
- 6. Providing and replacing, as necessary, appropriate locks and tags
- 7. Documenting and removing abandoned LOTO measures
- 8. Notifying the Dean or Director of any changes in work processes that could impact this *Program*
- 9. Ensuring an annual audit of the *Program* is conducted and properly documented

E. <u>Employees</u>

SAN DIEGO

Community College District

Employees are responsible for

- 1. Completing all necessary training
- 2. Complying with all aspects of the LOTO Program
- 3. Using appropriate locks and tags
- 4. Respecting and not removing locks and tags
- 5. Reporting any equipment deficiencies or damages to the supervisor immediately
- 6. Reporting any *Program* deficiencies to their supervisor or the Risk Management Office.

V. DEFINITIONS

- 1. *Affected employee*: employees who use equipment that requires lockout or tagout or who work in the area of equipment that falls under this *Program;*
- 2. Authorized employee: a person who is qualified to lock out or tag out equipment under this *Program*;
- 3. *Hazardous Energy*: any form of mechanical, electrical, or other type of energy that, when released, could cause injury to an employee; hazardous energies include, but are not limited to, gravity (e.g., vehicle lifts), electrical panels, kinetic energy (spring-loaded devices), compressed gases, chemical energy (e.g., reactions in progress), low pressure (e.g., evacuated vessels), and compressible fluids (e.g., hydraulic fluid); electrical energy not only refers to energies within a circuit but the effect it has on initiating the operation of machinery, such as presses, fan blades, and gear assemblies.

VI. GENERAL PROVISIONS

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 3
------------	------------------------------------------------------------	--------------	--------

A. <u>Required Isolation</u>

Community College District

SAN DIEGO

- 1. Isolation of hazardous energy is required whenever
 - a. Operations require removing or bypassing machine guards or other safety devices.
 - b. The employee must place a part of their body in contact with or near the point of operation of a piece of equipment, such as blades or circuits.
 - c. The employee must place a part of their body near parts that are in motion during normal operation of the equipment, such as belts, gears, pulleys, and motors.
- 2. Means of isolation include
 - a. Disconnecting electrical power locally or globally
 - b. Blanking and blocking fluid and gas piping
 - c. Securing valves with a lock or chain
 - d. Releasing spring energy
 - e. Draining or bleeding hydraulic and pneumatic lines
 - f. Lowering elevated parts or platforms
 - g. Cooling or stopping chemical reactions.

B. <u>Exceptions</u>

- 1. Plug-based Equipment
 - a. Lockout/tagout provisions typically do not apply to equipment that has a cord or plug.
 - b. Equipment with cords or plugs shall be unplugged prior to any cleaning, servicing, adjusting, or repairing.
 - c. The cord shall remain under the exclusive control of the employee performing the work on the equipment.
 - d. Tags may be placed on cords for equipment that is being serviced.
- 2. Minor Changes/Adjustments
 - a. Changes or adjustments that are part of normal production operations, such as changing bits, that can be performed without removing or disabling safety devices do not require LOTO procedures.
 - b. Changes or adjustments that do not require exposing the employee to hazardous energies, such as leveling or setting guides, do not require LOTO procedures.
- 3. Low-voltage equipment
 - a. The provisions of this *Program* do not apply to equipment or systems that operate at thirty (30) volts direct current or less.

C. <u>Points of Isolation</u>

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 4
------------	------------------------------------------------------------	--------------	--------



- 1. All energy isolating devices must have labels identifying the equipment supplied and the magnitude of the energy, if applicable.
- 2. All equipment should have the capability to secure or isolate the hazardous energy including, but not limited to
 - a. Power switches that are lockable in the 'off' position
 - b. Fluid or gas control valves that can be locked in the 'closed' position
 - c. Fluid lines that can be 'blanked' by way of installing physical barriers to prevent the flow of liquid
 - d. Pins or stops to prevent the movement of parts.
- 3. Energy isolation devices for each piece of equipment should be clearly identified.
 - a. Some systems may have multiple energy sources that must be isolated prior to servicing.
 - b. Building schematics may not depict accurate location of isolation points or the equipment they service.
 - c. Each system being shutoff shall be verified prior to initiating any activities.
- 4. If the equipment is not designed with a lockable isolation device, a tag shall be used in lieu of a lock.
 - a. For the purposes of this *Program*, tags shall be treated as if they were locks by affected and authorized employees.
- 5. All pieces of equipment that shall be serviced and fall under this *Program* shall be evaluated for energy isolation using an *Equipment Lockout/Tagout Form* (Appendix A).
 - a. The form may be completed by a supervisor or an authorized employee.
 - b. The form must be signed by a supervisor.
 - c. The form must be retained by the supervisor
 - 1) Until the equipment is removed from the College or Facility, or
 - 2) Modifications to energy isolation controls are made.
 - a) If modifications are made to the equipment, a new form must be completed and retained as noted above.

D. <u>Tags</u>

- 1. Tags must have a means to be attached to the equipment
 - a. Such means can include zip ties, wire, chain, or string.
 - b. Such means must not be able to open without deliberate action.
- 2. Tags shall be reused if designed as such and all information from prior use has been completely removed.
- 3. Tags must be marked with:
 - a. Name of person placing the tag
 - b. Date tag was placed
 - c. Time tag was placed
 - d. Process or procedure being performed.
- 4. Adhesive style seals can be used in place of tags if they
 - a. Have adequate adhesion to not fall off of the surface they are attached to
 - b. Are weather-resistant
 - c. Are of adequate size to cover the equipment's activating mechanism
 - d. Are labeled with

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 5
------------	------------------------------------------------------------	--------------	--------

- 1) Name of person placing the seal
- 2) Date seal was placed
- 3) Time seal was placed
- 4) Process or procedure being performed.
- e. Are labeled or marked in such a way as to notify a reasonable person of their intent.

E. Locks

SAN DIEGO

Community College District

- 1. Locks must have appropriate means, such as a shackle, to be attached to the equipment they are to lockout.
- 2. The shackle must be of appropriate size so that the equipment may not be energized while the lock is in place.
 - a. The shackle must be able to fit through the loop of any equipment that it is being used to secure.
 - b. The shackle must be able to be closed while the lock is in place.
- 3. Locks must be in good condition and functional.
- 4. Locks used for this program shall be key-operated, only.
 - a. Locks fitted with master keys are not allowed for use in this Program.
 - b. Each key shall open only one lock.
 - c. Each lock shall have only two (2) keys
 - 1) Copies of keys may not be made.
- 5. Locks shall not open without the use of a key.
- 6. Keys to the lock shall only be available to
 - a. The authorized employee who placed the lock
 - b. Their immediate supervisor.
- 7. Locks shall be identifiable to the authorized employee who placed it by way of a label or tag that include
 - a. Name of person placing the lock
 - b. Date lock was placed
 - c. Time lock was placed
 - d. Process or procedure being performed.
 - e. If locks are personalized by way of color-coding or other means, labels are not required.
- 8. Locks shall only be removed by the individual who placed the lock.
 - a. In the event of the absence of an authorized employee who placed a lock and all required work on the equipment has been completed and it is imperative to the necessary functioning of the College or Facility that the equipment be returned to operational status immediately, the following shall occur and shall be documented on the *Abandoned Lock Removal Authorization Form,* found in Appendix B:
 - 1) The supervisor shall contact the authorized individual by phone in the presence of another authorized employee.
 - 2) The supervisor shall ask the individual who placed the lock for permission to remove the lock.
 - 3) The supervisor shall notify the authorized individual that the lock will be removed.

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 6
------------	------------------------------------------------------------	--------------	--------



- 4) The supervisor shall use their key to remove the lock.
- 5) The lock shall be removed from use under this *Program* by the supervisor until such time as the authorized employee returns their key.
 - a) Upon return of the authorized employee, they shall return their key to the supervisor and the lock shall be put back into circulation.
- b. In the event an authorized employee loses a key to a lock
 - 1) The individual shall notify the supervisor of the loss.
 - 2) The supervisor shall remove the lock only in the presence of the employee who placed the lock.
 - 3) The lock shall be removed from the collection of devices used in this *Program* and shall no longer be used to lockout equipment.
- c. In the event a key to a lock is lost such that only one key remains, the lock shall be removed from the collection of devices used under this *Program* and shall no longer be used to lockout equipment.

F. <u>Multiple Employees</u>

- 1. If a group of employees are performing similar work under a single supervisor, a single lock or tag is allowed under the following conditions.
 - a. One authorized employee is designated to control the lockout/tagout device.
 - b. Prior to removing the device, the authorized employee shall verbally and visually verify that all employees are finished, have removed their equipment and materials, and are clear of the equipment.
- 2. If multiple groups (e.g., electricians and machinists) are working on the same equipment, each group must place a unique lockout/tagout device on the equipment.
 - a. Multiple locks or tags may be applied by way of
 - 1) Hasps
 - 2) Lockbox
 - 3) Adequate space on the loop for multiple locks.

G. <u>Outside Contractors</u>

- 1. Outside contractors are required to adhere to the provisions of this Program.
- 2. Outside contractors may use their own locks in adherence with this *Program*.
 - a. Coordination of the lockout/tagout procedures shall be overseen by the District representative responsible for overseeing the work.

VII. LOCKOUT/TAGOUT

A. <u>Preparation</u>

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 7
------------	------------------------------------------------------------	--------------	--------

- 1. Employees shall be thoroughly trained in the operation of any equipment they are to service.
- 2. Authorized employees shall identify all appropriate local and global energy sources.
 - a. For the purposes of this *Program*, 'global' can refer to the room, building section, building, area of the College or Facility, or the College or Facility as a whole.
- 3. Authorized employees shall identify all means of isolating all identified local and global energy sources.
- 4. Authorized employees shall identify the locations that require locks, tags, or seals to safely isolate all local and global energy sources.
 - a. The *Hazardous Energies Control Procedure Form* shall be used during this process (refer to Appendix C).

B. <u>Procedure</u>

SAN DIEGO

Community College District

- 1. The equipment process shall be halted, including removing any feedstock or scrap material.
- 2. All affected employees shall be verbally notified of the equipment or system shutdown.
- 3. Equipment or processes shall be shut down in the normal manner and be allowed to come to a complete stop prior to de-energizing or disengagement.
 - a. If possible, lift equipment or other raised platforms shall be completely lowered.
- 4. Authorized employees shall ensure that all movable parts that an authorized employee may come into contact with or that may present a hazard shall be blocked or otherwise prevented from moving.
 - a. The means used to block the equipment shall be of sufficient strength to prevent the equipment from moving.
- 5. All sources of hazardous energy shall be removed, isolated, or otherwise secured to prevent energizing the system.
- 6. Equipment with lockable energy controls or that can be made lockable shall be locked or otherwise positively placed in the 'off' position.
 - a. The 'off' position must be obvious in relation to the 'on' position.
- 7. If equipment cannot be locked, the energy source shall be disengaged, deenergized, or disconnected.
 - a. After the power source has been disengaged or disconnected, the unit shall be turned 'on' to release any residual energy prior to beginning operations.
 - b. After turning 'on,' the controls shall be turned off' before tags or seals, if used, are put in place.
 - 1) Seals or tags shall be
 - a) Attached in such a way that they require deliberate action to remove
 - b) Be attached to the energy control by the authorized employee performing the work
 - c) Only be removed by the individual who placed the seal or

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 8
------------	------------------------------------------------------------	--------------	--------

tag.

SAN DIEGO

Community College District

- 8. The effectiveness of all isolation points must be verified prior to servicing the equipment by way of voltage meters, pressure gauge readings, or cycling the equipment to verify the equipment has been de-energized.
 - a. If cycling will cause damage to the equipment or if portions of the system must remain under pressure to avoid equipment damage or prevent movement, then other means of verifying the isolation of hazardous energy must be used.
- 9. Authorized employees shall place a highly visible sign on or near the system controls indicating that service is being performed.
- 10. If movement of the equipment is required to perform the operation, the equipment shall remain energized with an authorized employee constantly stationed at the equipment controls.
 - a. Extension tools which remove the employee from the danger zone or point of operation shall be used whenever possible.
 - b. Employees controlling the movement shall be in constant visual or verbal contact with the authorized employees during equipment movement.
- 11. After the procedure is completed, the authorized employee shall verify all tools and materials are removed from the equipment, all blocks and locks have been removed, all panels have been closed, and all employees are clear.
- 12. The authorized person shall verify that all protective devices have been properly reinstalled or reactivated.
- 13. The lock, tag, seal, and sign shall be removed only by the authorized employee who placed it.
 - a. Used seals and non-reusable tags shall be disposed of.
- 14. When all locks, tags, and seals have been removed, the equipment or system shall be re-energized.
- 15. Affected employees shall be notified that the equipment or system is ready for use.

C. Shift or Personnel Changes

- 1. If work extends across multiple shifts or if a change in personnel is required, one of the following must be followed to ensure continuity of energy isolation
 - a. Outgoing employees may transfer their key to the incoming employees as long as names on the seals, tags, and locks are updated.
 - b. Outgoing employees may remove their lockout/tagout device, and the incoming employee shall install their device.
- 2. Incoming personnel shall verify that all isolation devices are in place, the equipment is in the 'off' position, and that there is no residual energy in the system prior to beginning work.
 - a. Incoming personnel shall complete a separate *Hazardous Energies Control Procedure Form* (Appendix C).

VIII. REPETITIVE PROCESS MACHINES

Machines that require power to maintain indexing where the value would be lost if the

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 9
------------	------------------------------------------------------------	--------------	--------

power source was disrupted can be serviced without disconnecting power.

A. <u>Procedure</u>

- 1. A qualified operator must be at the controls while the service is being conducted.
 - a. The authorized employee must be in constant visual contact or have another form of direct communication with the operator.
 - b. All service personnel must remain out of the point of operation or danger zone while servicing the equipment.
- 2. If the operator must leave the controls, the hazardous elements of the machine must be blocked or locked.
- 3. If the hazardous elements must be adjusted or replaced, the machine shall be de-energized.

IX. SPECIAL SITUATIONS

A. <u>Vehicles, Motors, and Engines</u>

Vehicles, motors, and engines contain multiple types of stored energy, including pressurized fluids, chemicals, electricity, and moving parts, many of which are initiated by the ignition mechanism. This section applies to all activities, including student instruction, that involve motors and engines.

- 1. If engine or motor repair will be part of student instruction, students will need to be informed of
 - a. The LOTO process that will be used
 - b. How and when to apply LOTO devices or other means of isolating energy
 - c. How to properly fill out LOTO devices
 - d. Who is allowed to remove LOTO devices
 - e. Hazards associated with energized systems they will be working with
 - f. Not removing or starting engines, motors, or equipment that has tags or seals in place
 - g. Procedures to ensure all affected persons are clear of a vehicle, motor, or engine that is to be started
 - h. Procedures for clearing equipment that will be running while being serviced.
- 2. Any employee or student who will work on an engine of a vehicle shall remove the key from the ignition, if present, and retain exclusive control of the key.
 - a. If a key is not required to start the engine, then a tag or seal with the student or employee name shall be placed on the device that starts the motor or engine.
- 3. If multiple individuals will work in the same compartment, the key shall be given to the instructor or placed in a lockbox to prevent the inadvertent starting of the engine or motor.
- 4. If running the motor is required as part of the diagnostic, instructional, or maintenance activity, the individual who is responsible for initiating the engine or motor shall verbally and visually verify that all individuals have cleared the energy

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 10
------------	------------------------------------------------------------	--------------	---------



devices of the vehicle.

- a. All caps, seals, and clamps shall be installed, as appropriate, to prevent the ejection of pressurized or heated fluids prior to starting the motor or engine.
- b. A verbal warning shall be given by the responsible person that is loud enough for all in the vicinity to hear prior to starting the engine or motor.
- c. All employees or students in the vicinity of the engine shall verbally acknowledge that they are clear.
 - 1) Such a communication system could be a "clear"/"all clear" exchange.
- 5. Energy systems that do not require the engine to be running, such as the electrical system and hydraulic system shall be subject to the appropriate lockout/tagout provisions of this *Program*.

B. <u>Chemical Reactions</u>

Chemical reactions, particularly those that produce energy or gas, are also considered sources of hazardous energy. Isolating energy from chemical reactions shall be overseen by a competent chemist or faculty member.

- 1. Reactions that are proceeding by way of a heat source shall have the heat source removed, unplugged, or otherwise turned off.
 - a. Cooling mechanisms or ice baths may be used to reduce the system temperature.
- 2. Plug-in equipment, such as rotary pumps, shall be unplugged and the hazardous energy removed, such as slow venting to equilibrate the pressure in an evacuated vessel.
- 3. Reactions shall be placed and kept in functioning fume hoods until the evidence of active reaction has ceased.
 - a. Open top vessels may then be capped, corked, or otherwise closed off from the atmosphere as long as it safe to do so.

X. PROGRAM REVIEW

A *Hazardous Energy Control Procedure Inspection Checklist* (Appendix D) can be used for internal and external inspections.

A. Internal Inspections

- 1. The supervisor shall conduct a program review at least annually.
 - a. The supervisor may designate an authorized person to conduct the program review.
- 2. The inspection shall include
 - a. Reviewing with authorized employees their responsibilities under this *Program*
 - b. Observing the LOTO process on a piece of equipment.
- 3. Records of the inspection shall include

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 11
------------	------------------------------------------------------------	--------------	---------



- a. Identification of system or process that was observed, including location and unique identifier, if appropriate
- b. Date
- c. Employees observed
- d. Inspector.
- 4. Records of the inspections shall be retained by the supervisor for three (3) years.

B. <u>External Inspections</u>

1. Inspections and review of this program may be conducted by Risk Management personnel.

XI. TRAINING

Training is available for both Authorized and Affected Employees using Keenan SafeColleges training portal.

A. <u>Authorized Employees</u>

- 1. Authorized employees shall be trained on:
 - a. Types of hazardous energy
 - b. Means of isolating hazardous energy
 - c. Use and requirements of seals, tags, and locks
 - d. LOTO procedures
 - e. Abandoned lock procedure.
- 2. Prior to working on a piece of equipment, authorized employees shall be trained on:
 - a. Engaging and disengaging the power source
 - b. Function and proper use of the controls
 - c. Operation of the machine or process
 - d. Work cycle of the machine or process
 - e. Product inputs of the equipment, including insertion locations
 - f. Product outputs of the equipment, including ejection locations
 - g. Location of the danger zone(s) or point(s) of operation.
- 3. Employees shall be trained prior to assignment and bi-annually, thereafter.

B. <u>Affected Employees</u>

- 1. Affected employees shall be trained on:
 - a. Where LOTO procedures may be used
 - b. Prohibition on removing LOTO devices
 - c. Prohibition on restarting LOTO equipment
- 2. Affected employees shall be trained prior to assignment and bi-annually thereafter.

POL-RM-015 All printed copies are un Print date: 4/21/	25 Rev: 25	Page 12
-----------------------------------------------------------	---------------	---------



C. <u>Retraining</u>

- 1. Employees must be retrained when there is a
 - a. Change in their job responsibilities especially when going from an Affected Employee to an Authorized Employee
 - b. Change in equipment or processes
 - c. Reason to believe the employee needs to be retrained (i.e. near-miss)

D. <u>Training Records</u>

1. Records of training shall be retained by the supervisor for at least three (3) years.

POL-RM-015	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 13
------------	------------------------------------------------------------	--------------	---------

Appendix A: Equipment Lockout/Tagout Form

Facility/College: _____ Equipment: _____

Building/Location:

Serial #: _____

Hazardous Energies

Energy form	Degree of hazard	Isolation possible	Isolation location	Device*
Electrical	V	□ YES □ NO		ΤL
Pressure (gas fluid)	psi	□ YES □ NO		TL
Temperature	F	□ YES □ NO		TL
Mechanical (crush, pinch, cut)	N/A	□ YES □ NO		ΤL
Gravity (platform/lift)	ft high	□ YES □ NO		ΤL
Radiation (laser, light)		□ YES □ NO		TL
Other				TL

Draw a line through the rows that are not applicable to the equipment. *'tag' or 'lock'

Blocking/Locking

Mechanisms to be blocked:

Guards/Safety Devices

Guards/Safety devices: VES	Able to be removed/disabled: \Box VES	
Guards/Salety devices. $\Box T \equiv S \Box$		

Other information relevant to LOTO:

Supervisor:

Authorized Employee:

Date

Keep on file until equipment is replaced or upgraded.

All printed copies are uncontrolled Rev: FORM-RM-024 Page 1 Print date: 4/21/25 2501





Appendix B: Abandoned Lock Removal Authorization Form					
Date:	Building/Locatio	n:			
Equipment:	Jnique Identifie	:			
Name of Person whose lock must be remove	d:				
Why is it critical to remove this lock now?					
Has an attempt been made to contact emplo verified by:	yee?	□ YES	□ NO		
Was employee contacted? verified by:		□ YES			
Did employee authorize removal of abandon verified by:	ed lock?	□ YES	□ NO		
Was the employee's key obtained? Date:		□ YES			
Is it safe to remove this lock? \Box YES \Box N	0				
Supervisor's Name					
Supervisor's Signature					
Date					

Appendix C: Hazardous Energies Control Procedure Form

Date:	Task:	•••••••••••		
Equipment ID: Mfgr/Model #/ID _				
Equipment Location(s):				
Authorized Employee(s):				
Energy Isolation				

1) Affected employees notified:

2) Equipment shut down; feedstock and scrap removed:

3) Hazardous energies identified, isolation located, energy isolated, LOTO installed as noted below:

Energy form	Degree of hazard	Isolation possible	Isolation location	LOTO	Device
Electrical	V	□ YES □ NO		□ YES	ΤL
Pressure (gas fluid)	psi	□ YES □ NO		□ YES	ΤL
Temperature	F	□ YES □ NO		□ YES	ΤL
Mechanical (crush, pinch, cut)	N/A	□ YES □ NO		□ YES	ΤL
Gravity (platform/lift)	ft high	□ YES □ NO		□ YES	ΤL
Radiation (laser, light)		□ YES □ NO		□ YES	ΤL
Other		□ YES □ NO		□ YES	ΤL
Draw and initial a l	line through the row	ws that are not ap	pplicable to the equipm	ent being	serviced.
4) Stored energy r	eleased by cycling	machine:			

4) Stored energy released by cycling machine:

5) Controls in 'off' position, sign placed on controls:

6) Energy isolation verified:

|--|

|--|

Method:

FORM-RM-026	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 1	
-------------	------------------------------------------------------------	--------------	--------	--

Equipment Startup

1) Employees, tools, materials clear of equipment:	
2) Blocks removed, panels closed:	N/A: □
3) Guards/safety devices reinstalled/reactivated:	N/A: □
4) LOTO devices removed:	
5) Equipment re-energized:	
6) Affected employees notified LOTO has been cleared	

FORM-RM-026	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 2
-------------	------------------------------------------------------------	--------------	--------

Appendix D:

Hazardous Energy Control Procedure Inspection Checklist

Date of Inspection: College/Facility:

- Has an Equipment Lockout/Tagout Form been completed for each piece of serviceable equipment and is available? □ Yes □ No
- Does the Regional Facilities Officer have a current list of Authorized Employees? ٠ \square Yes \square No
- Have all Authorized Employees undergone appropriate training? \Box Yes \Box No
- Are the locks used for lockout uniquely identified, uniquely keyed, and only used for the purpose of lockout? □ Yes □ No
- Does the tag used with the lock identify the worker who placed the lock? ٠ \Box Yes \Box No
- Do Authorized Employees know where they can access the LOTO procedures? • \Box Yes \Box No
- Are Affected Employees notified of the LOTO? • \square Yes \square No
- Has a Hazardous Energies Control Procedure Form been completed for the process? □ Yes □ No
- Can each Authorized Employee describe their responsibilities during each part of the lockout process to include verification that all types of stored energy have been identified, identification of the energy control point(s), the reason for the unique lockout hardware, the required steps after the lock is applied (e.g., block, lock blocking in place, dissipate, test or try to restart, warning of "Affected Persons", etc.), and the proper safe steps to restore the equipment to operation?

 \Box Yes \Box No

Name(s) of Authorized Lockout/Tagout Employee(s) Interviewed:

Name of Reviewer: Department:

FORM-RM-027	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 1
-------------	------------------------------------------------------------	--------------	--------



Subject: _____

TRAINING RECORD

_Facility: _____

Date	Time		Instructor	
Name (prin	nt)	Signature	Department	Supervisor
		04		

FORM-RM-001	All printed copies are uncontrolled Print date: 4/21/25	Rev: 2501	Page 2
-------------	------------------------------------------------------------	-----------	--------