

HAZARDOUS ENERGY CONTROL (LOCKOUT) PROGRAM

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1.0 PURPOSE

This program establishes requirements for controlling potentially hazardous energy associated with machines or equipment when performing installation, maintenance, or repair operations. When left uncontrolled, these various forms of energy can cause serious injury or fatality. The objectives of this program are to comply with applicable regulations, establish methods to achieve a zero-energy state, and prevent inadvertent operation or energization of equipment or processes to protect workers.

2.0 SCOPE

Equipment, machines or processes must be designed, built and installed to accept a lockout device and have controls capable of dissipating hazardous energy. This includes replacement of parts, major repair, renovation, or modifications to equipment or processes. This program applies to equipment or processes involving tasks such as, but not limited to:

- Erecting
- Installing
- Constructing
- Repairing
- Adjusting
- Inspecting
- Servicing/
maintaining
- Removing jam
ups
- Setting up
- Troubleshooting
- Testing
- Cleaning
- Dismantling

Table 1 lists the different forms of hazardous energy and provides examples of each.

Table 1: Hazardous energy forms (Information from Workplace Safety & Prevention Services)

Energy form	Example
Electrical	Machine power cords, motors, solenoids, capacitors
Hydraulic	Hydraulic systems, presses, rams
Pneumatic (Pressure)	Pressure reservoirs, accumulators, tanks
Kinetic (Motion)	Blades, flywheels
Potential (Gravity)	Springs, actuators, counterweights, raised loads
Thermal (Temperature)	Supply lines, storage tanks, vessels, steam
Radiation	Lasers, x-rays, radioactive waste
Chemical	Explosive, combustible, corrosive, flammable chemicals, silica, wood dust, toxics

3.0 DEFINITIONS

Affected individuals

These people are not directly involved in the work requiring hazardous energy control but are/may be located in the work area.

Authorized individual

A person who is qualified to engage in hazardous energy control because of knowledge, training, and experience. Authorized individuals are assigned to engage in such control by a supervisor.

Blank out

An action taken using a device called a “blank”, to prevent the possibility of hazardous materials or energy from flowing in a piped system.

Block out

This refers to using a device to “block” the movement of equipment/machinery when there is a possibility of the release of stored energy (e.g. hydraulic, pneumatic, gravitational, etc.).

De-energized

Disconnected from all energy sources and does not contain residual or stored energy.

Energized

Connected to an energy supply or containing residual or stored energy.

Energy isolating device

A mechanical device that prevents the transmission or release of energy, including but not limited to: 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; a line valve; a block; and other devices used to block or isolate energy. Push-button selector switches and other control-type devices are not energy-isolating devices.

Hazardous energy

Any electrical, mechanical, hydraulic, pneumatic, chemical, radiation, thermal, compressed air, stored energy, or potential energy from suspended parts (gravity) or other energy that can cause harm.

Lockout

The placement of a lockout device on an energy-isolating device in accordance with an established procedure to ensure that the energy-isolating device and equipment being controlled cannot be operated until the lockout is removed.

Lockout is a procedure that prevents the release of hazardous energy. It often involves workers using a padlock to keep a switch in the “off” position, or to isolate the energy of moving parts. This prevents electric shock, sudden movement of components, chemical combustion, falling counterweights, and other actions that can endanger lives. Lockout is a physical way to ensure that the energy source is de-energized, deactivated, or otherwise inoperable.

Lockout device

A mechanical means of locking that uses an individually keyed lock to secure an energy-isolating device in a position preventing energization of a machine, equipment, or process.

Operator

A person responsible for operating a machine, equipment, or process (including operation during maintenance).

Primary authorized individual

A person assigned as the lead to apply and coordinate removal of the lockout of equipment, machinery, or processes on which work will be performed.

Risk assessment

A comprehensive evaluation of the likelihood and degree of possible injury or damage to health in a hazardous situation, undertaken to select appropriate safeguards.

Supervisor

A person who has charge of a workplace or authority over a worker. In general, "charge of a workplace" refers to broad control over the planning of work and how it is carried out, while "authority over a worker" can be seen as a more specific power to ensure a worker's compliance with directions.

Tag out

A warning tag attached to equipment or machinery warning employees of an existing or potential hazard. The tag includes the name of the person who applied for the tag. Tagging tells others that the device is locked out, who has locked it out, and why. Tagged devices and systems must not be re-energized without the authority of those named on the tag.

Zero-energy state

An energy level that is not harmful to any individual. Note – methods to achieve a zero-energy state include de-energization of electrical sources and discharging of capacitive and inductive elements (absence of voltage and current), release of mechanical energy by blocking (kinetic or potential) and dissipating thermal or chemical energy.

4.0 ROLES AND RESPONSIBILITIES

Management commitment at all levels is critical for providing leadership, vision and the resources required to implement an effective ergonomics program within the overall Health, Safety and Environment Management System (HSEMS).

4.1 DIRECTORS/DEANS/CHAIRS

- When appointing a supervisor, appoint a competent person.
- Ensure the training and resources required to maintain an effective lockout is adhered to.
- Ensure only authorized persons trained in lockout procedures are permitted to service and maintain machinery or equipment.
- When necessary, take corrective disciplinary measures (as per Human Resources guidelines) to ensure compliance with the Hazardous Energy Control (Lockout) Program.
- Ensure outside contractors are prequalified before performing work on university premises.
- Ensure measures are in place for equipment to be maintained, capable of being locked out, and that lockout hardware is provided. If non-compliant equipment is purchased, it shall be upgraded to permit lockout. Refer to CSA Z460:20 clause 7 for more guidance.
- Audit and review work practices and written procedures/placards to ensure they comply with the control of hazardous energy program and applicable legislative requirements.
- Ensure the appropriate resources are applied for the purpose of risk control.
- Incorporate any new hazards identified by incident investigations into the annual departmental Hazard Register.
- Consult and communicate within the department all risk control changes resulting from investigation of incidents as appropriate.

4.2 SUPERVISORS

- Actively support the Hazardous Energy Control (Lockout) Program requirements through regular supervision of workers authorized to perform lockouts.
- Ensure only competent and authorized individuals trained in lockout procedures, are permitted to work on equipment or machinery that may contain or produce hazardous energy.
- Identify potential sources of hazardous energy and provide written equipment-specific procedures/placards that are validated and reviewed regularly following any changes to equipment or processes.
- Distribute approved lockout tag out equipment and hardware (E.g., locks, tags, multiple lock holders etc.) to those authorized to perform lockouts.
- Maintain a log or registry of hardware and instances of lockout.

- Confirm lockout procedures are understood and followed by all authorized workers and use disciplinary measures when there is non-conformance.
- Ensure control of hazardous energy when work is being performed on equipment and machinery on all University premises.
- Communicate procedures for control of hazardous energy to contractors working on university equipment or processes.
- Follow the provisions of this Program if an abandoned padlock and tag need to be forcibly removed.
- Ensure outside contractors who work on university equipment are aware of the Contractor Program.

4.3 SAFETY OFFICE

- Maintain the Hazardous Energy Control (Lockout) Program and review per the schedule.
- Review specific lockout procedures upon request.
- Maintain records of related training as provided by managers and supervisors.
- Investigate near misses and incidents or injuries occurring when hazardous energy control measures are not followed.

4.4 JOINT HEALTH & SAFETY COMMITTEE (JHSC)

- Conduct a scheduled review of the Hazardous Energy Control (Lockout) Program.
- When requested, witness the removal of a lockout device and information tag if a supervisor-authorized removal is undertaken.

4.5 PLANT OPERATIONS

- Whenever replacement or major repair, renovation, modification, or installation of a machine, equipment or process is performed, the equipment shall be designed to have energy-isolating devices that may be locked out to secure them in a zero-energy state.

Note: CSA Z460:20 clause 5, “Design of machines equipment and processes” outlines these requirements.

- Ensure outside contractors are prequalified before performing work on university premises.

4.6 AUTHORIZED WORKERS

Workers authorized by their supervisor to perform hazardous energy control procedures when maintaining machinery or equipment shall:

- Complete required training. Do not attempt to lock out any machine, equipment or process unless you have been trained.
- Work in compliance with associated legislation, this program and follow documented lockout procedures set out by their department.
- Maintain security of their assigned personal locking device. Ensure locking device is in good working condition.
- Not remove lockout devices that were applied by another worker.
- Ensure relevant information is shown on the lockout tag (reason for lockout, date of lockout, name, after hours contact information).
- Participate in the development and review of procedures for controlling hazardous energy on equipment and processes they work with. Report to their supervisor if equipment can't be locked out.
- Report to their supervisor whenever they are aware that a provision or requirement of this program is not being or cannot be followed for any reason. Immediately report all near misses, unsafe conditions and incidents to their supervisor.

4.7 CONTRACTORS/SUBCONTRACTORS

- Obtain instructions from Plant Operations staff on specific requirements when locking out University equipment and processes.
- Are made aware by management and supervisors in Plant Operations of specific standard operating procedures for lockout prior to any work performed on buildings, equipment, or grounds at the University.
- Provide their own locks and tags. Refer to section 6.0 Specific Lockout Situations.
- Work in compliance with all applicable regulations and the University's Contractor Program.

4.8 OTHERS

Affected individuals are responsible for awareness and compliance with lockout procedures. Operators who work in the area where lockout procedures are used must be informed of the purpose of de-energization by supervisors and are prohibited from attempting to restart equipment, machines or processes that are locked out.

5.0 PROCEDURES

5.1 PROCEDURE SEQUENCE

5.1.1 APPLICATION OF CONTROL OF HAZARDOUS ENERGY (LOCKOUT)

- All personnel must comply with the lockout program and supervisors must enforce the use of personnel locks and tags to ensure protection where

unexpected energization can occur. Standardized locks and tags are not to be used for any other purpose other than lockout.

- Individual locks and tags must be applied and removed by each person exposed to possible hazardous energy except when in special situations where procedures have been developed.
- Where equipment is not lockable, a risk assessment and special hazardous energy control procedures must be implemented to reduce risk of injury. CSA Z460:20 Annex B provides an example of a risk assessment and risk reduction procedure.
- Energy isolating devices must be clearly labelled to indicate their function, in accordance with identification used in documented procedures.
- The lockout of electrical energy sources must occur at the circuit disconnect switch. The use of electrical control circuitry to accomplish lockout is prohibited because it does not ensure protection from hazardous energy. Some examples are:
 - Vibration or switch component failure
 - Remote or interlocked switches not affected by control circuitry

Ensure that all moving parts have come to a complete stop and equipment, or processes are in a zero-energy state.

5.2 APPLICATION OF LOCKOUT

Step 1: Preparation for shutdown

- Employees authorized to lockout must identify the exact machines, equipment, or process to be isolated. These individuals must also know the hazards associated with the equipment, the types and amounts of hazardous energies they must control, acquire the necessary lockout hardware as well as understand the workplace-specific procedures to be followed.
- Workers affected by the pending lockout must be informed that the machine, equipment, or process will be shutdown.

Step 2: Machine, equipment, or process shutdown

- The machine, equipment, or process must be shut down by following established shutdown procedures whereby all moving parts come to a complete stop. Specific shutdown sequences may be required to avoid additional hazards because of the stoppage.

Step 3: Machine, equipment, or process isolation

- Energy isolating devices required to control hazardous energy shall be located and operated in a way that isolates the machine, equipment, or process from the source.

- If adjacent equipment or machinery can pose a risk, additional safety measures are required.

Step 4: Stored energy (de-energization)

- All potentially hazardous stored or residual energy must be relieved, blocked, bled, restrained, or otherwise controlled by the authorised individuals involved in the work.
- Additional steps may be required to prevent the re-accumulation of hazardous energy.

Step 5: Application of lockout devices

- Each employee working on the machine, equipment, or process is responsible for attaching their personal locks and tags in accordance with the workplace-specific procedures. Each energy source must be locked out to ensure the system cannot be inadvertently re-energized or restarted.
- If more than one worker is locking out a machine or process, the group lockout procedure in section 6.3 must be followed.

Step 6: Verification of isolation

- Before starting work (i.e., after isolation and de-energization and application of lockout), an authorized individual shall verify that the isolation and de-energization have been established. There are many ways to verify isolation, and these measures should be identified in workplace specific procedures and/or equipment placards.

Step 7: Release from lockout control

- Before restoring energy to the machine, equipment, or process, the authorized person shall inspect the work area to ensure that non-essential items (tools, spare parts, etc.) have been removed and confirm that the machine, equipment, or process is operationally intact. Ensure no hazard is created by lockout removal.
- Before the machine, equipment, or process is re-started, other workers should be informed. The area must be clear of other people; only then may the locks be removed, and the system energized.
- Restart equipment according to manufacturer's instructions and safe work procedures.

See Appendix A: Lockout Sequence Flowchart, for more information.

6.0 SPECIFIC LOCKOUT SITUATIONS

6.1 LOCKOUT INTERRUPTION (ENERGIZED TESTING)

In some situations, lockout devices may need to be temporarily removed from fully or partially energized equipment or process in order to conduct specific tasks, including

troubleshooting, inspecting, testing, and system adjusting. In these cases, only those parts on the machinery or equipment vital to perform such specific tasks may be energized.

Work on energized machinery or equipment must only be performed by workers who:

- Are qualified to perform the work.
- Have been authorized by supervisors to perform the work.
- Have been provided with and follow written safe work procedures (including appropriate personal protective equipment).

The following action sequence shall be performed:

1. **Notification of personnel**

All associated with the lockout shall be notified of the intent to fully or partially re-energize the equipment or process.

2. **Assessment of equipment or process**

The state of the maintenance work shall be assessed to ensure it is safe to re-energize the equipment or process.

- Ensure equipment or process components are operationally intact and temporary de-energization devices removed.
- Ensure tools/materials are cleared and guards have been reinstalled.

3. **Approval to re-energize**

Approval from all personnel associated with the lockout must be obtained, all personal locks removed and there is communication with all involved to stay clear of equipment or process while it is being fully or partially energized for testing to occur.

4. **Re-establishment of energy control**

When testing is complete, the steps for application of lockout are repeated to ensure control of all hazardous energy.

Note: The following sections of Ont. Reg. 851 Industrial Establishments outline when locking out is not required:

Section 42 Machine Guarding, sub (3) and (4)

(3) Locking out is not required,

(a) If the conductors are adequately grounded with a visible grounding mechanism; or

(b) If the voltage is less than 300 volts and there is no locking device for the circuit breakers or fuses and procedures are in place adequate to ensure that the circuit is not inadvertently energized.

(4) If locking out is not required for the reason set out in clause (3) (b), the employer shall ensure that the procedures required by that clause are carried out.

Section 42.1 Maintenance and Repairs, sub (1, 2, 3, 4)

(1) This section applies, and section 42 does not apply if it is not practical to disconnect electrical installations, equipment or conductors from the power supply before working on, or near, live exposed parts of the installations, equipment or conductors.

(2) The worker shall use rubber gloves, mats, shields and other protective equipment and procedures adequate to ensure protection from electrical shock and burns while performing the work.

(3) If the installation, equipment or conductor is operating at a nominal voltage of 300 volts or more, a suitably equipped competent person who is able to recognize the hazards and perform rescue operations, including artificial respiration, shall be available and able to see the worker who is performing the work.

(4) Subsection (3) does not apply to equipment testing and trouble-shooting operations.

6.2 LOCKOUT AND TAG REMOVAL WHEN PERSON WHO APPLIED THE LOCK IS ABSENT

Supervisors must establish procedures for safe removal of locks and tags inadvertently left in place by an authorized individual who has left the workplace. This procedure must identify one or more individuals who are authorized to remove abandoned locks and must include the following:

- Verify that the authorized individual who placed the lockout devices and tags has left the workplace.
- Attempt to contact the person who placed the lockout devices and tags directly.
- If contacted, the authorized individual that placed the lockout devices and tags should be made aware of the situation and asked to come back into the workplace to remove their own locks and tags.

If the authorized individual assigned the lockout cannot be contacted or is not reasonably available to return to the workplace, the appropriate authorized supervisory personnel may permit removal of the lock and tag.

If a supervisor-authorized removal is undertaken, the following steps must be taken:

1. The status and condition of the machine, equipment, or process is assessed and verified by the supervisor and is in a state that will allow for the safe removal of the lockout device.

2. Provisions are made to ensure that the authorized individual will be notified that their lock or tag has been removed before returning to work at the workplace.
3. The appropriate supervisor completes a Lockout Device and Information Tag Removal Report (See Appendix B: Lockout Device and Information Tag Removal Report) and Notification to Employee Report (See Appendix C: Notification to Employee Report) after it has been determined that it is safe to remove the lock and tag.
4. The lockout device and information tag are removed with a witness present (preferably a member of the Joint Health and Safety Committee or a Safety Office representative) and secured by the appropriate supervisory personnel.
5. A copy of the Notification to Employee Report must be given to the person who applied the lockout device and tag before the start of their next working shift.

6.3 GROUP LOCKOUT

For all work that requires a crew or group of individuals, a system that affords employees a level of protection equivalent to that provided by personal lockout must be in place. A multi-hasp is an appliance that can be used to accommodate one or more locks to secure an energy-isolating device during a group lockout. When multiple energy-isolating devices are protecting multiple authorized individuals, each energy-isolating device shall be secured by a single lockout in accordance with the following steps:

1. A University primary authorized individual is assigned responsibility for the lockout of each energy isolating device according to the lockout sequence with a university supplied lock. The primary authorized individual verifies that every energy isolation device has been properly operated to isolate the energy source.
2. A lockable device such as a lock box that is locked by the primary authorized individual controls the keys for all lockout devices.
3. Once the lockout is applied, a verification procedure is used to determine the effectiveness of the energy isolation.
4. Before authorized individuals start work, they must familiarize themselves with the energy-isolating devices used and assess their adequacy for work to be performed.
5. Authorized individuals then apply their personal lock and tag to the lockable device and request at the time of lockout that isolation be verified in their presence. Work progresses only after all authorized individuals have applied their personal lock and tag and are confident that all hazardous energy is isolated and locked out.
6. Authorized individuals complete their work and remove all non-essential items from the work site. When they are sure that they have no reason to return, they remove their personal lock and tag from the lockable device.

7. When all locks and tags are removed from the lockable device, and work is complete and before the equipment or process is re-energized, the primary authorized individual assigned responsibility for the lockout must complete the following:
 - Ensure lockout devices and energy-isolating devices have been returned to normal operating positions.
 - The equipment must be operationally intact.
 - All necessary guards must be re-installed.
 - All tools used for the maintenance must be removed.
 - Ensure all maintenance personnel involved are clear and have been informed that the equipment is ready to be re-energized.
 - Restart of machine, equipment, or process can be done.

Standard operating procedures shall be established and documented when a group lockout includes shift or personnel changes to ensure the continuity of lockout is maintained.

Note: CSA Z460:20 Annex G provides samples of group lockout procedures.

6.4 OUTSIDE SERVICE OR CONTRACTOR WORK

When work is being done by outside contractors where lockout is required:

1. A University supervisor (or authorized designate) and outside contractor representative shall meet to determine responsibilities and obligations with regards to hazardous energy control before the outside service or contract work starts.
2. A University supervisor (or authorized designate) shall inform the outside contractor's designate of any special or unique hazards related to the machines, equipment, or process for which the outside contractor workers could be exposed.
3. Contractors are responsible for maintaining their own Hazardous Energy Program, worker training and procedures that meet the Occupational Health and Safety Act, applicable regulations, and CSA Z460:2020.
4. When there is an integration of job tasks, there shall be coordination of outside contractor's programs with university lockout procedures. Communication is a key element between both parties and clear lock and tag identity with assigned responsibilities is important. Before and during the course of work, University supervisors (or authorized designate) and outside contractors shall keep each other informed of activities or conditions that could adversely affect the application of hazardous energy control.

6.5 SHIFT CHANGE

When there is a shift change, and work has not yet been completed, it is important to ensure the continuity of the lockout. When work has not been completed on the first shift, the next authorized worker will install their lock and tag before the first authorized worker removes the original lock and tag. Departments must develop standard operating procedures to accommodate situations where it is necessary to continue lockout of equipment or processes into subsequent shifts.

6.6 ELECTRICAL WORK

All electrical work must follow the requirements of the Electrical Safety Program.

7.0 LOCKS AND TAGS

Locks issued to authorized workers shall be provided with one copy of the corresponding key only and they should:

- Be specific for lockout applications only and be color coded to distinguish between university work groups, supervisors, or outside contractors.
- Be designed so that removal by other means requires excessive force and possess individual keying capability.

Authorized workers shall not work under another worker's padlock. Their individual padlock and tag must be installed on the equipment's energy isolating device, and the corresponding key shall remain in the possession of the authorized worker at all times.

- Employee tags must accompany locks used for personal protection.
- Caution tags may accompany locks used to protect against hazards.
- An employee tag used with a lock, must be distinguishable from caution tags, and include a legend “Do Not Start” or “Do Not Operate”.
- Caution tags may be provided to preserve the integrity of employee tag; they do not indicate that the applier is exposed to the unexpected release of energy.
- Some hazardous energy sources can require additional protective safeguards or procedures.

8.0 TRAINING REQUIREMENTS

As with all safety programs, supervision, training and periodic reviews are required to ensure consistent observance of routine safe procedures. Authorized individuals who provide maintenance or service to equipment and machinery shall be trained in specific lockout procedures. Training must be reviewed every three years, documented (name, training date, material covered), and include the following:

- A description of roles and responsibilities as outlined in this program.

- Written standard operating procedures required for each type of equipment/machinery, as well as for group lockout. Authorized individuals must demonstrate their knowledge of lockout requirements, their understanding of hazardous energy types, and how to use of appropriate energy control procedures.
- Training includes both an in-class written test and practical testing with a supervisor. Those who do not demonstrate this knowledge must be retrained.

Training should include:

- The importance of and legal requirements for lockouts as per CSA Z460:20.
- Information on University of Waterloo Policy 34 and the Control of Hazardous Energy (Lockout) program.
- Knowledge of workplace energy forms, hazards and procedures (administrative and work related) that must be followed.
- Lockout errors to be avoided such as assuming the equipment is inoperable or that the task is too minor to warrant a lockout.
- Use and care of PPE, tools, locks, tags.

Affected individuals shall have awareness training on the purpose and function of a hazardous energy control program that is appropriate to the level of hazard exposure encountered.

Job specific retraining must be provided for all affected and authorized employees whenever there is a change of job responsibilities, a change in machines, equipment or processes that present a new hazard, a change in energy control procedures, or a deviation from or inadequate use of lockout procedures. Refresher training should be based on the known hazards and risk assessments for planned work. Supervisors must document all training.

The Safety Office maintains records of safety-related training. Details of training completed by outside providers should be provided to the Safety Office to be maintained and updated appropriately.

9.0 RISK ASSESSMENT

Many regulations made under Ontario's Occupational Health and Safety Act require compliance with standards published by the CSA Group, which define requirements for reducing the risk of workplace injuries. Using the CSA standards in combination with risk assessment supports due diligence and demonstrates the use of best practices. Find CSA standards at [Waterloo's Online Standards Subscriptions - Standards & Codes - Research guides at University of Waterloo](#).

The first step in developing hazardous energy control procedures is to systematically identify all possible hazardous situations such as mechanical, electrical, thermal,

pneumatic, hydraulic, radiation, residual or stored energy, motion, fuels, and human factors associated with each task. Identify tasks to be performed as well as all hazards associated with these tasks. Only when hazards are identified can steps be taken to eliminate or reduce the risks associated with them. A team approach should be used for hazard identification and risk assessment.

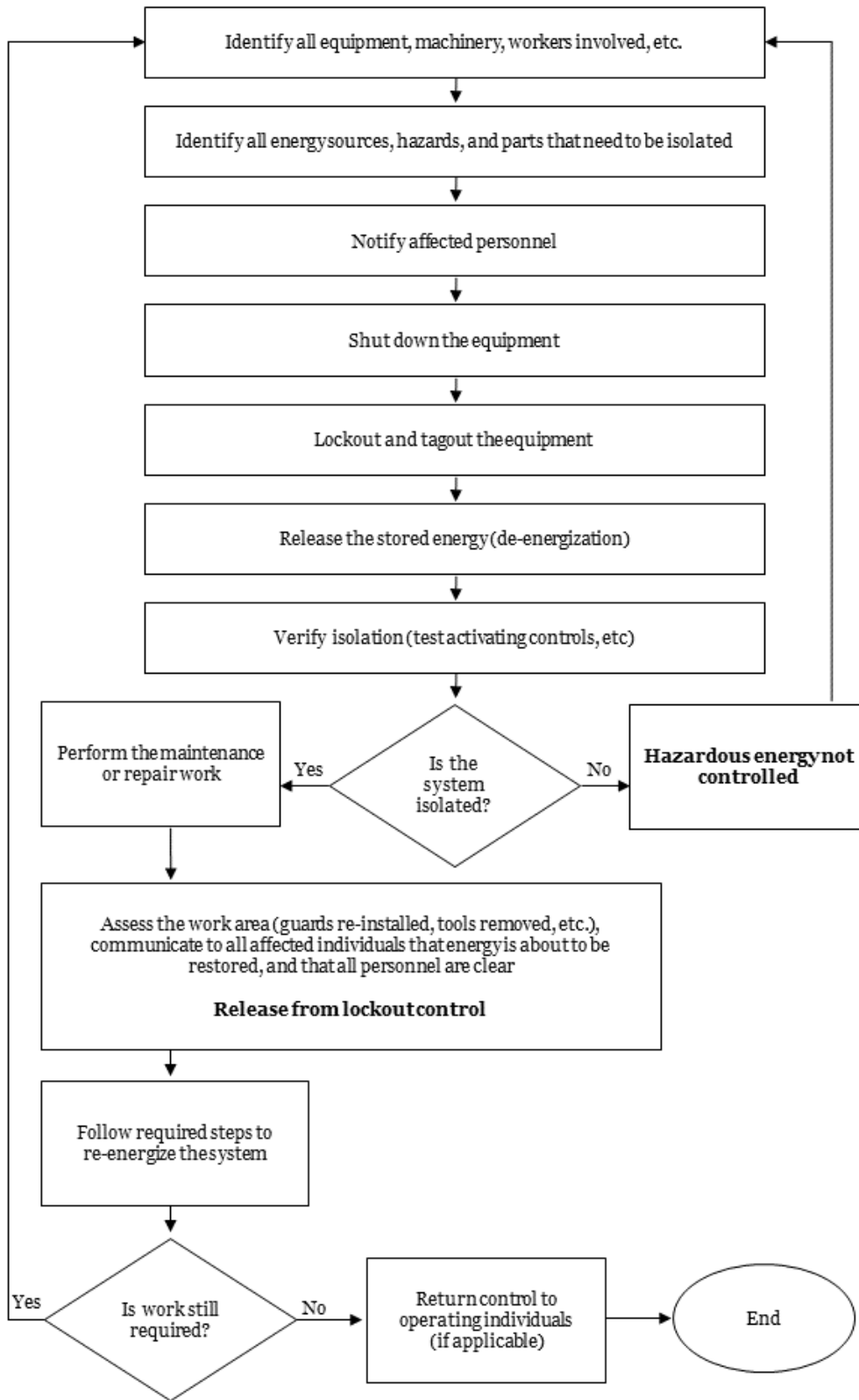
Assess all processes, machinery, energies and work activities to determine where lockouts are needed. List every machine, device or process that will require a lockout and determine the energy forms involved. This risk assessment can be used as a basis for developing specific hazardous energy control procedures, which must be written for all major equipment, machines, processes, components, utilities etc. CSA Z460:20 Annex D provides a sample general lockout procedure. CSA Z460:20 Annex A provides examples of hazards, hazardous situations and events.

An application and exposure survey must be conducted to determine if a machine, equipment, or process can be safely isolated:

- Determine whether energy-isolating devices are available, adequate and practically located. They should be clearly marked and documented standard operating procedures created to identify use. If there are deficiencies found, a plan must be developed to provide an interim alternative protection to make lockout effective until deficiencies have been corrected.

An exposure survey must be conducted to determine which tasks are being performed while equipment is energized. Each situation must be evaluated to determine whether the task can be done with power off or what additional measures need to be taken to reduce employee risk. Refer to the [Risk Assessment Program](#).

10.0 APPENDIX A: LOCKOUT SEQUENCE FLOWCHART



Adapted from "Electrical Construction and Maintenance Worker's Safety Manual", Construction Safety Association of Ontario

11.0 APPENDIX B: LOCKOUT DEVICE AND INFORMATION TAG REMOVAL REPORT

Department: _____ Shift: _____

Authorized Employee's Name: _____

Machine, Equipment or Process: _____

Date and Time Lockout device and information tag discovered to be left on:

Reason for Removal of Lock and Tag: _____

Confirmed that the Authorized employee has left the site and or facility?

Supervisory Initials: _____ Time and Date: _____

Attempts made to contact the authorized employee: Yes _____ No _____

Authorized employee has been contacted and is returning to the workplace to remove the lockout device(s) and information tags. Procedure ends, exit procedure, file form for future reference.

Supervisory Initials: _____ Time and Date: _____

Authorized employee cannot be contacted and or is unwilling to return to the Site and or Facility to remove their Lock and or Information Tag.

Supervisory personnel may authorize removal of the Lock and Tags once:

1. The status and condition of the machine, equipment or process is assessed and verified to be in a state that will allow for the safe removal of the Lockout device.

Supervisory Initials: _____ Time and Date: _____

2. Provisions are in place to prevent the authorized employee from resuming work at this facility without notification of the fact their lock or tag has been removed.

Supervisory Initials: _____ Time and Date: _____

Supervisory Personnel can now remove the Lockout device(s) and Information Tag.

Supervisory Initials: _____ Time and Date: _____

Witness: _____

12.0 APPENDIX C: NOTIFICATION TO EMPLOYEE REPORT

Notice to Employee

Employee Name: _____

Lockout device and tag removed

Location: _____

Please report to your immediate supervisor

Date: _____

13.0 APPENDIX D:

13.1 LEGISLATION

Ontario's Occupational Health and Safety Act (OHSA), enforced by the law, ensures the safety of all workers and sets out rights and responsibilities for all workplaces.

Occupational Health and Safety Act, R.S.O. 1990

The sections for each regulation listed below cover lockout requirements.

- Ont. Reg. 851 – Industrial Establishments s. 32, 42, 43, 44, 50, 74 75, 76, 78
- Ont. Reg. 213/91 – Construction Projects s. 21,22,23,24,25,182,183,190,191,193.
- Ont. Reg. 632/05 – Confined Spaces

13.2 APPLICABLE CODES, STANDARDS

- Ontario Electrical Safety Code (OESC) rule 2-007, 2-304,2-306,28-602,28-604(4)
- CSA Z460:20 Control of hazardous energy - Lockout and other methods
- CSA Z462:24 Workplace Electrical Safety

13.3 RELATED DOCUMENTS

- Workplace Safety and Prevention Services - Lockout
- Working Alone Guideline
- Confined Spaces Program
- Risk Assessment Program
- Contractor Safety Management Program
- Electrical Safety Program
- Health, Safety and Environment Management System | Safety Office | University of Waterloo

14.0 RECORD OF REVISIONS

Date	Author/Editor	Change	Version
March 2026	Elizabeth Ney	<ul style="list-style-type: none"> Updated frequency of review from annually to reflect program scheduled 3-year review frequency, and renamed as a program Added wording - Contractors are responsible for maintaining their own Hazardous Energy Program, worker training and procedures that meet the Occupational Health and Safety Act, applicable regulations, and CSA Z460:2020 Changed Section 6.6 and 13.3 to reference the Electrical Safety Program and Section 13.2 to include CSA Z462:24 Workplace Electrical Safety Added reference to Health, Safety and Environmental Management System (HSEMS) in Section 13.3 minor wording updates 	Hazardous Energy Control (Lockout) Program v.2.2 MAR2026
March 2023	Elizabeth Ney	<ul style="list-style-type: none"> Updated section 4.4 to align with the change from an annual review to the JHSC scheduled program review process 	Hazardous Energy Control (Lockout) Program v.2.1 MAR2023
March 2022	Elizabeth Ney	<ul style="list-style-type: none"> Changed title to reflect Hazardous Energy Control (Lockout) as a Program Added link to Health Safety and Environment Management Program section 4.0 Added wording to section 4.1 Directors/Deans/Chairs Roles and Responsibilities - Ensure measures are in place for equipment to be maintained, Added wording to section 4.4 Joint Health and Safety Committee – When requested, witness the removal of a lockout device and information tag if a supervisor-authorized removal is undertaken. Minor corrections and wording changes 	Hazardous Energy Control (Lockout) Program v.2.0 MAR2022
September 2021	Elizabeth Ney	<ul style="list-style-type: none"> Added reference to Contractor Safety Management Program 	Hazardous Energy Control (Lockout) Standard v.1.3 SEP2021
November 2020	Elizabeth Ney	<ul style="list-style-type: none"> Updated section 3.0 Definitions Updated section 4.1 Directors/Deans/Chairs Roles and Responsibilities Added reference to CSA 460:20 Annex D Updated reference to reflect the CSA Z460:20 	Hazardous Energy Control (Lockout) Standard v.1.2 NOV2020
September 2019	Elizabeth Ney	<ul style="list-style-type: none"> Added references to the CSA Z460-13 (R2018) Reaffirmed CSA throughout the program Added reference to CSA Z460-13 (R2018) Annex B Risk Assessment and Risk Reduction Procedure 	Hazardous Energy Control (Lockout) Standard v.1.1 SEP2019

		<ul style="list-style-type: none">• Added reference to CSA Z460-13 (R2018) clause 7 - If non-compliant equipment is purchased, it shall be upgraded to permit lockout• Added section 14.0 Record of Revisions	
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