

HEALTH AND SAFETY

September 1, 2018

In this book you will find Element Elevators's official Environment Health and Safety Policies. We ask that you please read each section carefully and sign off on the back sheet of the booklet. In doing so, you are acknowledging that as an employee of Element Elevators, you have read and understand the policies provided.

If you have any questions regarding any of our official policies, please contact our office at (416) 728-0468.

Sincerely,

Lucy Rus President

President's Message

Health and Safety in the workplace are essential elements to operating a productive and efficient work environment. Your assistance, input and cooperation are essential if we are to achieve success. Our accident prevention efforts are always evolving in order to keep up with the latest developments in technology and procedures.

It is the policy of Element Elevators that all work will be performed in the safest manner possible, consistent with good construction, service and maintenance practices.

As a company, we recognize our responsibility to protect the life, health and safety of all of our employees on job sites. Moreover, we expect that our employees are highly familiar with our official health and safety policies, and are fully committed to our company standards and expectations. All employees present at Element Elevators will comply with our safety policy and its rules and regulations. Element Elevators dedicates itself to providing a safe and healthy workplace by implementing and supporting programs that promote occupational health and safety and protection of the environment. Furthermore, we are committed to maintain standards that meet, or exceed, existing occupational health and safety regulations.

Sincerely,

Lucy Rus President

Acknowledgement

We, the undersigned, have received and read the information in this safety policy. I agree to abide by the guidelines set out in the policy and the occupational Health and Safety Act. I understand that health and safety practices are part of my job and I will work towards preventing accidents on the job in order to protect my own well-being, as well as the well-being of my fellow employees.

Element Elevators

Print Name:	Signature:	Date:

Objectives

- To ensure the safety of all personnel, the protection of the environment and protection of physical assets of all sites is of the utmost importance in the conduct of our operations.
- Management is responsible for providing a safe working environment and for ensuring that work is performed to accepted standards.
- Each employee is responsible for understanding all health and safety policies, and for working safely with equal concern for safety of all co-workers.
- A safe working environment can be achieved through careful planning, support and active participation of every member of Element Elevators.

Standards and Procedures

The objectives of the health and safety program can be attained or measured by following certain standards and procedures.

These are as follows:

- 1. Minimizing accidents/incidents to reduce lost time injuries.
- 2. Advising workers of present or potential job hazards.
- 3. Ensure Workers' Compensation Claims Management program is followed.
- 4. Ensure that workers wear protective devices, equipment or clothing that the company requires.
- 5. Workers do not use any tools; operate any equipment or devices that are in faulty or unsafe condition.
- 6. Both planned and unplanned regular safety inspections will be conducted in the workplace.
- 7. All inspection reports will be made available to all workers.

Training Programs & Periodic Review

Management's commitment to the health and safety program is to ensure that all workers have an opportunity to participate in various safety training programs on a regular basis. Periodic reviews and updates are completed to ensure all information is current.

Training Programs/Periodic Reviews (and not limited to):

- 1. W.H.M.I.S. (Workplace Hazardous Materials Information System) (Annual Update)
- 2. Corporate Safety Policy/Health & Safety Program (Annual Review)
- 3. Chainfalls/Rigging Equipment (Chainfall Certification Annually)
- 4. Lock & Tag Out (Annual Review)
- 5. Safe use of Jumpers (Annual Review)
- 6. Oil Loss Monitoring (Annual Review)

Worker Training and Supervision

To assist you in the areas of health and safety, we have prepared this policy, which we ask you to read thoroughly. At times, you may find yourself in a position in which you must complete a certain job duty or task with which you are not entirely familiar. In this case, please contact your immediate supervisor for instructions and assistance.

This Occupational Health and Safety Act is the standard we follow and the regulations provide us with our minimum procedural standards. We require all employees to understand all of these requirements and work in compliance with the legislation. A copy of the act and regulation is available to all employees for this purpose.

Supervision of work is mandatory when there are 5 or more workers on a project. You have access to supervision at all times during the working day, so please make yourself aware of your immediate supervisor's name and where he or she can be

reached (in the event that they are temporarily away from the work area). The supervisors at this company have full authority to enforce not only this safety policy, but also the act and regulation. They will not tolerate breaches of policy or safe work practices, so we encourage you to make use of their expertise.

Assigned Responsibilities

Various responsibilities within the workplace can be assigned to workplace parties through cooperation with the health and safety program.

Responsibilities can include (and not limited to):

Management/Supervisor:

- 1. Provide various safety training programs for workers.
- 2. Provide workers with proper/safe tools and equipment.
- 3. Provide information, instruction and competent supervision.
- 4. Provide workers the opportunity to participate in safety awareness through involvement on joint health and safety committees.
- 5. Provide workers with a modified duties program to enhance workers compensation claims

Workers:

- 1. Participate in various safety training programs.
- 2. Inform management of any faulty or unsafe tools/equipment.
- 3. Inform management of workplace hazardous or unsafe conditions.
- 4. Participate in joint health and safety committee meetings.
- 5. Participate in modified duties/claims management program.
- 6. Participate in workplace health and safety inspections.

Management's Responsibilities

Management fully supports the company safety policy and program, and will work diligently to implement these standards. We strive to foster a safe and healthy work environment by ensuring that all employees are familiar with the contents of this policy and the responsibilities of the OHS Act and Regulations.

Management will ensure that:

- 1. The measures and procedures prescribed by the OHS Act and Regulations are carried out at all times.
- 2. The equipment, materials and protective devices prescribed are provided and maintained in good condition.
- 3. Workers are aware of any actual or potential hazards present in the workplace.
- 4. It provides information, instruction and competent supervision to protect the workers' health and safety.
- 5. Accidents are investigated immediately and all information is carefully documented.

- 6. Every precaution reasonable in the circumstances is taken for the protection of the worker.
- 7. Enforcement of the safety policy is strictly adhered to. Violations may require disciplinary action.

Supervisory Responsibilities

The Supervisor will ensure that:

- 1. A worker works in a manner and with the protective devices, measures and procedures required by the OHS Act and Regulations.
- 2. A worker uses or wears the equipment, protective devices or clothing that the employer requires.
- 3. A worker is advised of the existence of any potential or actual danger to the health and safety of the worker of which the supervisor is aware.
- 4. Where so prescribed, a worker is provided with written instructions, information and training as required.
- 5. Every precaution reasonable in the circumstances is taken for the protection of the worker.
- 6. All issues relating to health and safety are documented in writing (i.e. safety meetings).
- 7. Accidents requiring medical attention must be fully investigated and a written report submitted within 24 hours.

Worker Responsibilities

The Workers will ensure that:

- 1. They work in compliance with the provisions of the OHS Act and Regulations, and the company safety policy and program.
- 2. They use or wear the equipment, protective devices or clothing that the employer requires to be used or worn.
- 3. They report to the employer or the supervisor the absence of or defect in any equipment or protective device of which they are aware that may endanger themselves or another worker.
- 4. They report to the employer or supervisor any contravention of the act or the regulations or the existence of any hazard of which they know.
- 5. They do not remove or make ineffective any protective device required by the regulations or by the employer, without providing an adequate temporary protective device. When the need for moving or making ineffective the protective device has ceased, the protective device shall be replaced immediately.

- 6. They do not use or operate any equipment, machine, device or thing or work in a manner that may endanger themselves or any other worker.
- 7. They report all accidents, regardless or severity, to the supervisor immediately.

Hazard Identification and Reporting

Consistent and competent management of workplace hazards is the most effective way that workplace health and safety can be improved.

Safe Work Procedures:

- 1. Recognize and identify potential or actual hazards to be managed.
- 2. Evaluate all the risks associated with it.
- 3. <u>Control</u> the hazard by the best approach to be able to proceed with work in a safe manner.

Report all hazards to the supervisor so that the hazard can be eliminated and the situation rectified immediately.

Safety Inspections/Audits

Regular safety inspections/audits are key to improved safety performance. Auditing can identify unsafe acts and practices before an accident happens, and helps promote the company safety policy and program.

It is recommended that safety inspections/audits be conducted at least monthly to identify any programs. All findings/information must be recorded in writing.

Safety Committees and Representatives

To promote accident prevention and company safety program objectives, the company endorses the formation of a Joint Health and Safety Committee (JH&SC).

The following are workplace requirements:

# of Workers Employed:	General Requirements:
6 to 19	H&S Rep.
20 to 49	JH&SC (2 Reps.)
50 & over	JH&SC (4 Reps., 2 are
	certified)

Refer to OH&S Act for specific details on the powers, duties, frequency of meetings, etc.

Accident Investigation and Reporting

All accidents are considered a serious matter and must be reported immediately at the place of work, by the injured worker or witness, prior to leaving work.

The supervisor shall report all accidents or incidents in complete detail on the <u>Company Accident & Injury Report Forms</u>. All information must be received within 24 hours at Head Office, so the appropriate forms can be forwarded to either the WSIB or the MOL.

The investigation report will assess the occurrence as preventable or non-preventable, based on the following definitions:

- a) Preventable Where there is evidence of failure by individual(s) to observe regulations <u>or</u> the company safety policy <u>or</u> industry accepted safe work practices.
- b) Non-Preventable Where the company determines that individual(s) did everything that could be reasonably be expected to prevent the occurrence.

Where the accident is assessed as preventable, the <u>Company Accident & Injury Report</u> along with any disciplinary action taken shall form part of the responsible employee's record. In all cases, the investigation shall result in steps taken to prevent reoccurrence.

Company Accident & Injury Report



Please Print & submit this report to Head Office within 24 hours

Injured Person's Name:	Address:	
Hospital:	Doctor:	
Address:	Date of Accident:	mm dd yyyy
Time:	Date Reported:	mm dd yyyy
Accident Description & Injury:		
What caused the accident?:		
Accident witness (es):		
How could this situation be prevented?:		
Was anyone outside Element Elevators Inc. involved?	Yes O	No Please Check
If yes, please describe the situation:		
Todays Date: mm dd yyyy Supervisor:		
Signature:		

Critical Injuries – Defined (Ontario Reg. 834/90)

Critical Injury in the OH&S Act is defined as:

"An injury of serious nature that":

- 1. Places life in jeopardy;
- 2. Produces unconsciousness;
- 3. Results in a substantial loss of blood;
- 4. Involves the fracture of a leg or arm, but not a finger or toe;
- 5. Involves the amputation of a leg or arm, hand or foot, but not a finger or a toe;
- 6. Consists of burns to a major portion of the body;
- 7. Or causes the loss of sight in an eye.

We have included the following situation in the above:

"Any time an injured worker is taken by outside emergency services we will assume that the injury is critical in nature, until such time as we have information to confirm otherwise."

Critical Injury Reporting – Supervision

- 1. Assess the Situation and keep the injured person still and warm. Arrange and coordinate immediate emergency response.
- 2. Call an Ambulance at 911.
- 3. Call the Police at 911.
- 4. Call Head Office at 416-709-5857.
- 5. Notify the Health and Safety Committee/Representative and the Local Union Office (if applicable).
- 6. Head Office will notify the Ministry of Labour at 416-326-7770 or 1-800-268-8013.
- 7. Cooperate with all emergency response crews and officials from the Ministry of Labour.
- 8. Only after the injured person has been removed from the workplace shall we begin our investigation. A throughout written report of all findings is required.
- 9. Follow-up with Head Office as details become available.

The welfare of the injured person is our top priority!

Critical Injury Reporting - Management

A report to a Director of the Ministry of Labour shall be submitted within 48 hours providing the following information:

- 1. The name and address of the constructor and the employer, if the person involved is a worker.
- 2. The nature and the circumstances of the occurrence and the bodily injury sustained by the person.
- 3. A description of the machinery or equipment involved.
- 4. The time and place of the occurrence.
- 5. The name and address of the person involved.
- 6. The names and addresses of all witnesses to the occurrence.
- 7. The name and address of the physician or surgeon, if any, by whom the person was or is being attended for the injury.
- 8. The steps taken to prevent a recurrence.

This report will be signed by a member of Senior Management.

Personal Protective Equipment (P.P.E.)

Element Elevators is committed to compliance with all federal, provincial and local Health and Safety Regulations and Standards. It is mandatory that all workers comply with Personal Protective Equipment (P.P.E.) health and safety considerations associated with the manufacturing and servicing processes at Element Elevators. Element Elevators's policy requires hazard assessments be conducted and that P.P.E. be "provided, used and maintained in a sanitary and reliable condition whenever it is necessary" to prevent injury. This includes protection of the whole and any part of the body from hazards through absorption, inhalation or physical contact.

P.P.E. is not considered a substitute for control or elimination of hazards. Engineering, procedural changes and/or guarding of hazards are considered primary methods of elimination or control. Wherever a potential hazard to the worker exists, P.P.E. will be utilized after other hazard control methods have been applied and failed, and/or not practical.

- 1. All P.P.E. must be C.S.A. approved.
- 2. Hard hats (Class "B" or Class "E" as required) must be worn at all times on construction sites. Head protection must do two things: resist penetration and absorb the shock of a blow. Protective helmets are also used to protect against electrical shock.
- 3. Safety footwear must be Grade 1 Standard (green patch) and worn at all times (C.S.A. approved steel barrier). Canvas shoes, sandals, or other similar shoes are not permitted in identified hazard areas.
- 4. Appropriate eye protection must be worn when there is a danger of something entering your eyes. Faceshields must be worn when there is a danger of facial injury. This includes, but is not limited to flying particles, chemicals, acids or caustic liquids, gases or vapours or potentially injurious light radiation, use of any type of grinder or drilling overhead.

- 5. Respiratory protection must be worn as required by the circumstances. These circumstances may include, but are not limited to working in a dusty environment, working with or around designated substances present which may be disturbed, performing grinding, performing welding, and working with chemical processes, working in a hazardous environment, and/or as direct by the employer.
- 6. Fall protection requires that a safety harness must be worn when there is a danger of falling 10 feet (3 metres) or more, and must be adequately secured to a fixed support or lifeline by using a shock-absorbing lanyard.
- 7. Protective clothing and other protective devices shall be used as required to protect the worker from the hazard(s) present including electrical protective equipment, hearing protection and hand protection.

Hazard Assessment and P.P.E. Selection

Element Elevators facility management shall provide for assessing the workplace to determine if hazards are present, or likely to be present, which necessitate the use of P.P.E. if such hazards are present, or likely to be present, Element Elevators shall:

- If the hazard cannot be engineered out of the job: Select and ensure use of the types of P.P.E. that will protect the affected employee(s) from the hazards identified in the hazard assessment.
- Communicate selection decisions.
- Select P.P.E. that fits properly.
- Ensure the use of P.P.E. by each affected employee.

The hazard assessment involves conducting a walk-through survey of the area in question and/or an evaluation of the tasks conducted within a particular work area(s). Consideration should be given to the basic hazard categories such as: impact, penetration, compression, chemical, heat, dust, and light (optical) radiation.

During the survey, observe these items, at a minimum, to determine whether the program areas exist:

- Sources of motion (movement of tools, machinery, personnel).
- Sources of high temperatures.
- Sources of chemical exposures (gases, vapours, liquids).
- Sources of dust and particulate.
- Sources of light radiation (from welding, brazing, cutting, UV ovens).
- Sources of falling/dropping objects.
- Sharp objects that can pierce of penetrate.
- Rolling or pinching objects.
- Layout of the work area and location of workers.
- Sources of electrical hazards.

The data and information obtained in the survey must be organized and analyzed to ascertain the hazards and assist in the selection of P.P.E. Facility management shall verify that the required workplace hazard assessment has been performed through:

- A written certification that identifies the workplace evaluated.
- The person certifying that the evaluation has been performed.
- The date(s) of the hazard assessment

These assessment forms must be maintained on file at the facility as part of the P.P.E. program.

Tool/Equipment Maintenance

The company provides necessary equipment, tools and various machinery required to complete work-related tasks. If any of these items are found to be in poor condition or not working properly, please notify your supervisor immediately. Damaged equipment or tools that do not meet acceptable industry standards should not be used and should be returned to the appropriate location for repair or replacement as required.

If you are not familiar with how to use the equipment in a safe manner, ask for instructions from your Supervisor. Most equipment, tools or machinery come with operating and safety instructions that are to be followed by all employees.

P.P.E. Training Requirements

Facility management is responsible for training employees who are required to wear P.P.E. during the course of their work activities. Each employee is required to demonstrate that they know how to properly use P.P.E. the training is to be conducted on an annual basis. Retraining is required when an employee's work function/task has changed that renders the previous training obsolete, where there are changes in the type of P.P.E. to be used, and when the employee(s) are improperly or ineffectively using the P.P.E. All training must be documented according to corporate guidelines.

The mandatory training components to be addressed are as follows:

- When is P.P.E. necessary?
- What P.P.E. is required to be worn by the employees?
- How the employee is to do put on, remove, adjust and properly wear the assigned P.P.E.
- The limitations of the assigned P.P.E.
- Proper care, storage, maintenance, life span and disposal of the P.P.E.

Ensure that the employees can answer the following questions after completing P.P.E. Training:

- What are the specific hazards on your job that require P.P.E.?
- What do you do to replace damaged, worn, or defective P.P.E.?
- When do you require additional P.P.E. Training?

Lockout/Tagout Policy

It is Element Elevators's policy to provide a safe workplace for its employees. Element Elevators takes every precaution to minimize any health risks to employees in situations arising from the control of hazardous energy sources by means of lockout/tagout procedures that disable machinery or equipment during maintenance and/or servicing.

This policy is also intended to increase awareness of such situations, provide training in protective and safety procedures, and establish responsibilities for implementing the written program that conforms to corporate safety guidelines and federal regulations.

No employee shall knowingly enter or work on a piece of equipment and/or machinery where the unexpected energizing, start-up, or release of stored energy could occur and cause injury. Each facility must maintain disciplinary procedures that apply to the violation of the lockout/tagout program. Failure to comply with this policy will subject the employee to the most severe discipline – up to and including discharge on the first offense.

Ontario Health and Safety Act for Industrial Establishments, R.R.O. 1990, Reg. 851, is the primary legislative authority for Element Elevators.

About OHSA:

- 1. Ontario Regulations 627/05 Section 182-195 R.R.O. December 2005
 - a. Electrical Hazards
- 2. Occupational Health and Safety Act R.R.O. 1990, REGULATION 851
 - a. Section 42(1)
 - b. Section 68
 - c. Section 75
 - d. Section 76

Pertain to Lockout and Tagout legislative requirements. In general, whenever servicing and/or maintenance, replacement, or major repair, renovation, or modification of a machine or equipment is performed, in which the unexpected energization or start up of the machines or equipment or release of stored injury could cause injury to employees. The legislative requirements establish minimum performance requirements for the control of such hazardous energy.

This standard requires Element Elevators to develop and use an energy control program that includes step-by-step procedures for affixing appropriate lockout/tagout devices to prevent unexpected energization. The program procedures must include preparation for shutout, equipment isolation, lockout/tagout application, release of stored energy, and verification of isolation. The standard also requires training for authorized and affected employees.

The standard applies only to general industry and not to other industries. The standard also supplemented other general industry, standards that require lockout provisions and provides comprehensive and uniform procedures for complying with those provisions.

The following definitions provide information related to lockout/tagout and relevant safety procedures:

Affected Employee	An Employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout and tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
Authorized Employee	A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under the standard.
Capable of Being Locked Out	An energy-isolation device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy-isolating devices are capable of being locked out if lockout can be achieved without the need to dismantle, rebuild, or replace the energy-isolating device or permanently alter its energy control capability.
Circumvention of Lockout	The process of removing a lockout by anyone other than the original person who attached the lock.
Energized	Connected to an energy source or containing residual or stored energy.
Energy-Isolating Device	 A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated circuit breaker A disconnected switch Manually operated switches by which the conductors of a circuit can be disconnected from all underground supply conductors, and without which no pole can be operated independently A line valve A block Any similar device used to block or isolate energy.

Energy Source	Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.
Hot Tap	A procedure used in repair, maintenance, and service activities that 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, has, water, steam, and petrochemical distribution systems.
Lock	A standardized key operated mechanism, coded by marking or colour to identify it as either an employee or departmental lock only utilized for Lockout. Locks are to be keyed differently from each other, and only one key available for that lock.
Lockout	The placement of a lockout device on an energy-isolating device in accordance with an established procedure, ensuring that the energy-isolating device is in a safe position and prevents the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.
Lockout Device	A device that utilizes a positive means such as a lock either key or combination type, to hold an energy-isolating device in a safe position and prevents the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.
Normal Product Operations	The utilization of a machine or equipment to perform its intended production function.
Servicing and/or Maintenance	Workplace activities such as constructing, installing, setting-up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubricating, cleaning or unjamming of machines or equipment, and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or start up of the equipment or release of hazardous energy.
Setting-Up	Any work performed to prepare a machine or equipment to perform its normal production operation.
Tagout	The placement of a tagout device on an energy-isolating device in accordance with an established procedure to indicate that the energy-isolating and the equipment being controlled may not be operated until the tagout device is removed.
Tagout Device	A prominent device, such as a tag and a means of attachment, that can be securely fastened to an energy-isolating device in accordance with an established procedure to indicated that the energy-isolating device and the equipment being controlled may not be operated until

the tagout device is removed.

Lockout/Tagout Program

The Operations Manager and Supervisors having contact with employees and non-employees involved with operations such as servicing, repairing, adjusting, lubricating, or performing other work on power-driven equipment will ensure that all steps of these lockout/tagout guidelines are followed.

Element Elevators has designated Lucy Rus (President) to complete this task and be responsible for ensuring that all steps of the program are being followed.

Supervisors are responsible for conducting periodic inspections of the locking out and tagging out of energy-isolating devices. To ensure that the procedures are being followed completely and correctly, the General Manager and Operations Manager will keep all records of the periodic inspections.

Where tagout is used for energy control, the periodic inspection should include a review between the Supervisors and each authorized and affected employee, of that employee's responsibilities under the energy control procedure being inspected.

The Supervisors should certify that the periodic inspections have been performed. The certification should identify the machine or equipment on which the energy control procedure was being utilized and the date of inspection.

Training and Communication

Employees are required to be trained to understand the energy control program and have the knowledge and skills needed for safe application, usage, and removal of energy controls. The plant must have written certification that each employee has received training on a regular basis. For new employees, a thorough training program will be instituted. For current employees, refresher programs will occur throughout the year.

Each authorized employee is required to receive training to understand the nature of stored energy and the potential hazards associated with working on equipment that has not been properly locked out. The training should cover the following areas:

- Proper procedures for removing a piece of equipment from service
- The importance of individual locks and the need for proper identification of work being performed
- Requirements for group lockouts and correct procedures for switching locks during shift changes
- Correct procedures for removing locks and restarting equipment that has been locked out

Training for other employees should cover the following requirements:

- Each affected employee is required to be instructed in the purpose and use of the energy control procedure.
- All other employees whose work operations are or may be in an area where energy control procedures may be utilized are required to be instructed in the procedure for and the prohibition relating to attempts to restart to reenergize machines or equipment that are locked out or tagged out.
- Retraining for all authorized and affected employees is required whenever there is a change in their job assignments; a change in machines, equipment, or processes that present a new hazard; or a change in the energy control procedures.
- The retraining should establish employee proficiency and introduce new or revised control methods and procedures, as necessary.

Equipment Isolation

All staff are required to ensure that before any employee performs any servicing or maintenance on a machine or equipment, the machine or equipment is isolate and rendered inoperative. If an energy-isolating device is capable of being locked out, the facility must use lockout, unless the facility can demonstrate that use of a tagout system will provide full employee protection. If an energy-isolating device is not capable of being locked out, the facility must use a tagout system.

For full employee protection, when a tagout device is used on an energy-isolating device, the device must be attached at the same location where the lockout device would have been attached, and the authorized safety equivalent to that of a lockout system.

NOTE: Equipment is "capable of being locked out" if it is designed with a hasp or other fastener that a lock can go through or be affixed on, or if it has a locking mechanism built into it.

A lock must be used if doing so will not require the authorized employee to dismantle, rebuild, replace, or permanently alter the equipment's switch that turns the equipment on and off.

In addition, the standard requires that when switches, circuit breakers, or other such devices are installed in a single cabinet or box, the authorized employee must tag the specific switch or device, not the cabinet or box.

Also, effective January 2, 1990, all major replacement, repair, renovation or modification of machines and equipment, and all new machine or equipment installations must be designed to accept lockout devices.

Notification of Employees

Affected employees are required to be notified by an authorized employee of the application and removal of lockout devices or tagout devices. Notification should be given before the controls are applied and after they are removed from the machine or equipment.

Lockout and Tag Devices

Each facility will provide locks, tags, key blocks or other devices for isolating, securing, or blocking of machines or equipment from energy sources.

Lockout/tagout devices must be singularly identified, must be the only devices used for energy control, and must not be used for other purposes.

Lockout/tagout devices must also meet the following requirements:

- Be durable and capable of withstanding exposure to the environment. Tagout devices must also be able to withstand weather conditions.
- Be standardized within the facility in one of these criteria: colour, shape, or size, and print and format in the case of tagout devices.
- Be substantial enough (especially lockout devices) to prevent removal without the use of excessive force or unusual techniques. Tagout devices and the means to attach them must be substantial enough to prevent inadvertent or accidental removal.
- Identify the employee applying device.
- Identify when the tagout device was put in.
- Identify why the tagout device was put on and a phone number to contact the person who put the tag on.

Tagout devices must warn against hazardous conditions if the machine or equipment is energized and must include appropriate warnings such as: *Do Not Start, Do Not Open, Do Not Close, Do Not Energize and Do Not Operate*.

When tagout systems are used, employees are required to be trained in the following limitations of tags:

- Tags are essentially warning devices affixed to energy-isolating devices and do not provide the physical restraint on those devices that is provided by a lock.
- When a tag is attached to an energy-isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
- In order to be effective, tags must be legible and understandable by authorized employees, affected employees, and all other employees whose work operations are or may be in the area.

• Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.

Application of Energy Controls

Use the following general procedural steps for lockout/tagout:

- Any employee or non-employee who is required to maintain or service any equipment or machinery will ensure that the equipment or machinery has been properly locked and tagged out before work begins.
- To properly lockout/tagout equipment or machinery, turn the main power disconnect switch, breaker, valve, or other energy-isolating device to the off or neutral position. Use a personal padlock and hasp to ensure that the energy source is locked out. Attach a danger tag to the energy-isolating device. Each employee who is required to perform maintenance or service on equipment or machinery must place his/her individual padlock and tag on the lockout hasp.
- When the equipment or machinery is locked and tagged out, the Supervisors and the person responsible for performing the maintenance or service are required to inform the machine operator and any other affected employees that maintenance or services is being perform on the equipment or machinery.
- Before maintenance or service can begin, test the energy isolation device to ensure that the controls cannot be moved to the on or active position. If there is a potential for a release of stored energy, make sure that blocks are used to prevent the equipment or machinery from cycling. The employee will take whatever other appropriate and trained steps necessary to ensure the release of stored energy (including gravity).

When more than one person (group lockout/tagout) is required to perform service or maintenance on equipment or machinery, each person will attaché his/her personal padlock and danger tag to the lockout hasp.

No one should remove another person's lock and danger tag without prior authorization from the person who is performing the service or maintenance. The Supervisor responsible for lock and key maintenance is the only person authorized to remove any lock and only once the reason for the shutdown is understood.

If the equipment or machinery needs to be repositioned or tested, take the following steps:

- Remove all tools, blocks, and other materials from the equipment or machine points of operation.
- Warn all affected employees and employees in the immediate area that the equipment or machinery is going to be tested or repositioned.
- Have each person who is performing maintenance or service remove his/her personal padlock, danger tag, and lockout hasp. Reenergize the equipment or machinery.
- Test or reposition the equipment or machinery.

- When the testing or repositioning is complete, de-energize the main power switches, breaks, valves, or other energy-isolating devices. Ensure that the lockout hasp, individual padlock(s), and danger tag(s) are replaced before work resumes.
- Retest the energy-isolating device to ensure that the controls cannot be moved to the on or active position.

Release of Lockout/Tagout

When service or maintenance is complete and the equipment or machinery is ready to be returned to production operation, take the following steps:

- Remove all tools, blocks and other materials from the equipment or machine points of operation.
- Warn all affected employees and other employees in the area that the equipment or machinery is going to be returned to production operation.
- Have each person who is performing service or maintenance remove his/her individual padlock and danger tag.
- Return the main power switches, breakers, valves, or other energy-isolating devices to the on or active position.
- Start the production operation.

Circumvention of Lockout

If for some reason the employee who implements the lockout/tagout procedure is not able to remove his/her lock at the end of the shift, the Supervisors are the only person authorized to remove the lock, provided that specific procedures and training for such removal have been developed, documented, and incorporated into the energy control program. The Supervisors are required to demonstrate that the specific procedure provides safety equivalent to the removal of the device by the authorized employee who applied it. The procedure for utilizing bolt cutters will be under the total control of the maintenance Supervisors. Any discussion the Supervisors have with the employee(s) whose lock is being removed is recommended and the nature of this discussion should be fully documented.

The specific procedure must include at least the following elements:

- Verifying that the authorized employee who applied the device is not at the facility.
- Making all reasonable efforts to contact the authorized employee to inform him/her that his/her lockout or tagout device has been removed.
- Ensuring that the authorized employee has this knowledge before he/she resumes work at the facility.

Outside Personnel (Contractors)

Whenever outside servicing personnel are to be engaged in activities covered by the standard, the Mechanic and/or Supervisors must inform each other of their respective lockout or tagout procedures.

Failure to following the standard will result in an immediate stoppage of work. The Supervisor in charge of the area will inform the contractor of the proper lockout/tagout steps. Any failure bye the outside contractors to take direction from the Supervisor will result in the outside contractors removal from the activity and possible the location.

It is the responsibility of the Supervisors and the mechanism to periodically inspect outside contractors' work areas to ensure that the lockout/tagout steps are being following.

Additional Requirements

Testing or Positioning Machines, Equipment or Their Components:

In situations in which lockout or tagout devices must be temporarily removed from the energy-isolating device and the machine or equipment energized to test or position the machine, equipment, or a component thereof, use the following sequence of actions:

- Clear the machine or equipment of tools and materials.
- Remove employees from the machine or equipment area.
- Remove the lockout or tagout devices.
- Energize and proceed with testing or positioning.
- De-energize all systems and reapply energy control measures.

Evaluation

It is important to evaluate the effectiveness of the lockout/tagout program. Supervisors may evaluate the program by administering a written test on the procedures and policy, requiring employees to demonstrate competency prior to completion of the training session, or provide follow-up observation and coaching. Supervisors should also routinely observe employees performing lockout procedures and question some of them at random to be certain that they understand the process. In the event of a MOL inspection, or Element Elevators's audit, the inspector/auditor observes and evaluates the employees and asks them to demonstrate their knowledge of procedures.

Supervisors should provide all affected employees with the following information:

- Knowledge of stored energy as it applies to equipment in the plant and the nature of the hazards associated with stored energy
- A detailed procedure to be following when removing a piece of equipment from service
- A personal lock for use in locking out equipment
- Access to tags
- A detailed procedure for work that requires more than one person's involvement
- A detailed procedure to follow when restarting equipment that has been locked out

Issuing of Locks

Element Elevators has created a procedure to purchase, issue, maintain and inspect personal safety locks and general company locks and tags. These locks may be combination locks.

It is understood by all employees that each lock is numbered and recorded by Element Elevators. No employee is to provide a key copy to another individual. It is logged in Element Elevators's Lock and Tag control log sheet.

Element Elevators has a standard procedure that ensures that all safety locks will have one key to be provided to the owner of the lock. For all locks and tags handed out, Element Elevators has a sign out and training instruction document that must be signed by the employee.

Element Elevators has a return policy on any locks and tags in possession of employees who leave Element Elevators.

Possible Exemptions

Consideration may be given to the following situations where lockout/tagout procedures would be exempt. In general, where no part of an employee's body or other person is placed in a position where it may be injured by any part of the machine accidentally starting or moving, then exemption may be justified. Element Elevators should determine whether it wishes to allow such exemptions. Here are some other possible exemptions:

- Where power is required for troubleshooting purposes.
- Where regular and minor adjustments are required or parts require repositioning, provided that the provided safety interlocks are not bypassed or defeated, and that not part of the workers' body is placed in an area where it is in jeopardy of being injured by the machine.
- Prior to entry, the safety gate must have cover secured by personal safety locks.

References

- Ontario Health & Safety Act for Industrial Establishments, R.R.O. 1990, Reg.851
- Ontario Regulations 627/05 Electrical Lockout/Tagout guidelines

Lockout/Tagout Acknowledgement

$\underline{Acknowledgement}$

abide and adhere to the police	d and understood the Company Lockout/Tagout usage, agrees to be contained herein, in addition to the Health and Safety Act and projects and/or industrial operations dated this day of
Employee Name	Employee Signature
Supervisor Name	Supervisor Signature

Oil Loss Monitoring Program

Procedure:

For all hydraulic elevating devices with buried cylinders or buried piping, the following will be performed:

- An oil monitoring log book (OLM) will be placed in the machine room for the elevating device complete with the elevating device installation number and address
- A fixed oil reference point will be established with the car level at the lowest landing. This reference mark can be one of the following:
 - o An oil level dipstick that is clearly marked with the oil level
 - o A oil level gauge with the oil level clearly marked
 - o An oil level reference mark clearly marked and measured from the top of the tank This reference point will also be recorded in the OLM, signed and dated by the mechanic defining the fixed reference mark.
- On a monthly basis, the elevating device will be positioned at the lowest level and the oil level compared to the recorded fixed reference point.
- If the oil level is correct, the mechanism will print his name and registration number, and will sign the OLM and clearly note that no oil was added.
- If oil needs to be added, the amount of oil will be recorded on the OLM as well as the reason for adding the oil. The mechanic will print his name and registration number, and will sign the OLM.
- If the oil loss cannot be account for, the elevating device will be immediately taken out of service and the mechanic will contact his/her supervisor.

The End.