

Lockout / Tagout Policy

I. APPLICATION AND PURPOSE

This policy applies to the control of energy during the servicing and/or maintenance of machines and equipment at all facilities owned by the City of Cloquet.

The purpose of this policy is to establish procedures for affixing appropriate lockout devices or tagout devices to energy isolating devices and to otherwise disable machines or equipment to prevent unexpected energization, start-up or release of stored energy in order to prevent injury to employees.

This policy supports compliance with the Occupational Safety and Health Administration Lockout/Tagout Standard as found in 29 CFR 1910.147. This policy applies to all City of Cloquet employees who are authorized to perform maintenance service activities on equipment or processes which present energy hazards and any employees who are affected by these activities.

This policy does not apply to the following:

1. Work on cord or plug connected electric equipment for which exposure to the hazards of unexpected energization or startup of the equipment is controlled by the unplugging of the equipment.
2. Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water or petroleum products when they are performed on pressurized pipelines, provided that:
 - a. Continuity of service is essential,
 - b. A shutdown of the system is impractical, and
 - c. Documented procedures are followed and special equipment is used which will provide proven effective protection for employees.

II. DEFINITIONS

Affected Employee - An employee whose job requires him or her to operate or use a machine or equipment on which service or maintenance is being performed under lockout/tagout, or whose job requires him or her to work in an area in which such service or maintenance is being performed. Affected employees must be informed when lockout/tagout is being performed.

Authorized Employee - A person who locks and tags machines or equipment in order to perform service or maintenance on that machine or equipment.

Energy Isolating Device - A mechanical device that physically prevents the transmission or release of energy, including a manually operated electrical circuit breaker, a disconnect switch, a line valve, a block and any similar device used to block or isolate energy.

Lockout - The process used to identify, cut off and secure all energy sources before beginning repairs, adjustments or maintenance. A lockout device is used to secure equipment or machinery in the off position ensuring that the equipment or machinery cannot be operated.

Lockout Device - A lock (either key or combination type) that holds an energy isolating device in a safe position and prevents the machine or equipment from energizing.

Servicing and/or Maintenance - Workplace activities that require lockout/tagout on the equipment before beginning the activity because employees may be exposed to the unexpected energization or startup of the equipment or the release of hazardous energy. Servicing and/or maintenance includes constructing, installing, setting up, adjusting, inspecting, modifying, lubricating, cleaning or unjamming and making tool changes.

Tagout - Attaching a tag to the lock on the power source that has been shut off, indicating the time, reason for the lockout and the name of the person doing the work. The tag acts as a warning not to restore energy to the equipment or machinery.

Zero Energy State - All energy has been controlled in machinery or equipment.

III. RESPONSIBILITIES

Policy Administrator:

The Department Head from each city department shall be the Policy Administrator for their respective department.

The Policy Administrator shall be responsible for:

1. Issuing and administering this policy and making sure that the policy satisfies the requirements of all applicable federal, state or local lockout/tagout requirements.
2. Providing initial and annual training of employees on lockout/tagout procedures.
3. Maintaining the training records of all employees included in the training sessions.
4. Verifying, through periodic audit, that the energy control program for their department effectively protects employees servicing powered equipment.

Department Supervisors:

The Department Supervisors from each respective city department shall be responsible for:

1. Assuring that all employees, who are authorized to service equipment within their department, have received initial and annual training of employees on appropriate lockout/tagout procedures and energy control plans.
2. Maintaining the training records of all employees included in the training sessions.
3. Completing energy control plans for each specific piece of equipment or process within their respective department.
4. Assuring that appropriate energy isolation devices are available for all equipment or processes within their facilities.
5. Assigning locks to authorized employees.
6. Coordinating activities of contractors that may affect lockout/tagout and energy control procedures within the facilities.

Authorized Employees:

Authorized employees are responsible for:

1. Complying with the city's energy control program.
2. Following all safe shutdown and startup procedures.
3. Communicating activities to all affected employees and other authorized employees.
4. Ensuring the security of their own lock and key.

Affected Employees:

Affected employees are responsible for:

1. Advising the maintenance staff when equipment needs servicing.
2. Following the direction of the authorized employee as it affects the operation of their equipment.

IV. GENERAL PROGRAM ACTIVITIES

1. All equipment that contains energy, of any form, will be locked out prior to being serviced or maintained.
2. All employees who are authorized to work on equipment or machinery in the company will follow appropriate city and department lockout/tagout procedures.
3. Contractors who perform work on city owned equipment will comply with city and department lockout/tagout procedures.
4. Department supervisors shall evaluate all pieces of equipment requiring lockout and develop an energy control plan for their department. This plan will identify all energy isolation points to be locked and tagged, as well as any special information required to safely achieve a zero energy state. When a piece of equipment has two or more sources of energy, a written plan for that specific piece of equipment must be developed and made readily available to all persons performing maintenance on that equipment.
5. Lockout checklists and safe startup checklists will be used during all service and maintenance activities to ensure the safety of both authorized and affected employees.

V. LOCKOUT / TAGOUT PROCEDURES

The following lockout/tagout procedures shall be utilized in the following situations:

1. Whenever service or maintenance is being performed on or around any machine where injury could result from unexpected startup or the release of stored energy.
2. Whenever new equipment or machinery is being installed.
3. When a guard or other safety device must be bypassed or removed.
4. When an employee must place any part of his or her body where it could be caught by moving machinery.

Preparation and Notification:

Before servicing or installing equipment, employees must be able to answer the following questions:

1. What is the type of energy source on the equipment?
2. What are the potential hazards related to the energy source?
3. What steps are necessary to control the energy source?
4. Who needs to be notified that the equipment will be shut down for service?

Once these questions have been answered, notify all affected employees that a lockout procedure is about to begin and that the equipment will be shut down for service.

Shut Down The Equipment:

Following normal procedures and/or the manufacturer's instructions, shut down the equipment. Make sure all energy sources have been located and shut down. Some machines may have more than one power source. All must be shut down.

Isolate the Equipment:

Following shutdown, equipment should be isolated by:

1. Shutting off the main breaker or control switch.
2. Closing of all necessary valves.
3. Disconnecting process lines.
4. Pulling of plugs.

Attach The Lockout Device and Tag:

Each employee who is performing maintenance is responsible for locking and tagging the equipment.

Where feasible, each authorized employee shall have their own locks and keys and these shall be identified with the employee's name. The department supervisor of each respective department shall determine where individual employee locks are required. Employees must never use another employee's lock and never lend their own lock to someone else.

Lockout devices shall be affixed to each energy isolating device by authorized employees. When all energy sources are locked, be sure to properly fill out an appropriate tag and affix directly to the energy isolating device. If more than one employee is involved in the maintenance of multiple pieces of equipment which are locked out by the same isolating device, multiple locking devices must be used to allow each maintenance employee to lock and tag. In any case where multiple maintenance employees are involved, close communication between all parties is a necessity.

Release Any Stored Energy:

After locking and tagging equipment, employees must make sure that any stored energy on the equipment is released. This should be done by:

1. Inspecting equipment to make sure all parts have stopped moving.
2. Bleeding electrical capacitance.

3. Venting or isolating pressure or hydraulic lines from the work area, leaving vent valves open.
4. Releasing the tension on springs or blocking the movement of spring-driven parts.
5. Blocking or bracing parts that could fall because of gravity.
6. Monitor the process to make sure that the work you are doing will not result in an accumulation of stored energy.

Test Equipment to Verify that All Energy Has Been Released or Controlled:

Following lockout and prior to commencing work, the authorized employee shall verify that isolation and de-energization of the machine or equipment has been accomplished. With all personnel clear from any danger areas, this should be done by:

1. Testing the start switches on the equipment to confirm that all power sources have been shut down and switches cannot be moved to the “on” or “start” position.
2. Check pressure gauges to make sure that all lines are de-pressurized and stored energy has been released.
3. Secure all blocks, clamps, chains and cribs.
4. Check electrical circuits to make sure that voltage is at zero.
5. Secure blanks (used to block feeder lines) and make sure they are not leaking.

VI. WORK REQUIRING MORE THAN ONE PERSON

If more than one employee is involved in the maintenance of multiple pieces of equipment which are locked out by the same isolating device, multiple locking devices must be used to allow each maintenance employee to lock and tag. Each person shall place his or her own lock and tag on the energy isolating devices. This prevents one employee from accidentally energizing or starting up the equipment while another employee is still working. In any case where multiple maintenance employees are involved, close communication between all parties is a necessity.

When an energy isolating device cannot accept multiple locks and tags, a multiple lockout device or hasp will be used.

VII. SAFE STARTUP PROCEDURES

Once the maintenance or installation is completed, the equipment can be restarted. The following procedures are to be followed for safe startup:

Preparing For Startup:

Employees must make sure the area is safe for restart by:

1. Making sure all equipment components are fully assembled and operational.
2. Making sure all safety guards are in place.
3. Removing all tools from the equipment and the work area.
4. Removing all braces, pins, blocks, cribs and chains.

5. Reconnecting all pressure tubing, pipes and hoses, and closing or opening, all valves.
6. Clearing the work area of all personnel.

Removing Lockout Devices and Tags:

Except in emergencies, each lockout device must be removed by the employee who put it on.

Notify Affected Employees:

Notify all personnel in the area that maintenance, servicing or installation is completed, lockout/tagout has been removed, and the equipment is ready to be restarted and returned to service.

VIII. ANNUAL PROGRAM EVALUATIONS

An evaluation of each department's lockout/tagout policy must be done annually, at a minimum, by a person designated by each department head and must include:

1. Interviews with each authorized employee to discuss the employee's responsibilities under your written energy control program and lockout/tagout procedures.
2. Checks to make sure proper locks and tags are being used.
3. Checks to make sure all lockout/tagout procedures are being followed.

IX. RECORDKEEPING

Annual Evaluations:

Each respective department shall maintain accurate records of all department energy control program evaluations.

Training Records:

Each respective department shall maintain accurate records of all lockout/tagout training activities.

ATTACHMENTS:

Lockout Checklist.

Safe Startup Checklist.

Energy Control Diagram.

Lockout/Tagout Evaluation Form.

LOCKOUT CHECKLIST

	Yes	No	N/A
STEP 1: BEFORE BEGINNING TO SERVICE EQUIPMENT			
Have the type and amount of energy source on the equipment been identified?			
Have the possible dangers related to the energy source being controlled been identified?			
Are the steps necessary to control the energy source understood?			
Have all affected employees been notified when the equipment will be shut off for service?			
STEP 2: SHUT DOWN EQUIPMENT			
Have the City's safety procedures been followed?			
Have the manufacturer's instructions been referred to?			
STEP 3: ISOLATE THE MACHINE OR EQUIPMENT			
Has the main breaker or control switch been shut off?			
Have valves been closed?			
Have process lines been disconnected?			
STEP 4: ATTACH LOCK AND TAG			
Have the lock and tag been attached?			
STEP 5: CONTROL STORED ENERGY			
Has the electrical capacitance been bled?			
Have pressure or hydraulic lines from the work area been vented or isolated?			
Have tanks been drained?			
Are switches or levers that could be moved into the start position blocked, clamped or chained?			
Are lines containing process materials that are toxic, hot, cold, corrosive or asphyxiating cleared?			
STEP 6: VERIFY THAT THE ENERGY STATE IS AT ZERO			
Have the start switches on the equipment been tested?			
Have pressure gauges been checked to insure that lines are depressurized?			
Are blocks or cribs secure?			
Have electrical circuits been checked to verify that voltage is at zero energy?			
Are blanks, used or block feed chemicals, secure and not leaking?			
STEP 7: IF YOU HAVE ANSWERED YES TO THE ABOVE STEPS, BEGIN WORKING.			

SAFE STARTUP CHECKLIST

	Yes	No	N/A
STEP 1: INSPECT THE AREA			
Are all machine components operational?			
Are all safety guards in place?			
Have all tools been removed from the machine?			
Have all braces, pins, blocks and chains been removed?			
Are all pressure tubing, pipes and hoses connected with valves closed?			
Is the work area clear for mechanical operation?			
STEP 2: REMOVE LOCKOUT DEVICES AND TAGS			
Remove lockout devices and tags.			
STEP 3: NOTIFY AFFECTED EMPLOYEES			
Is the work area cleared before starting up the equipment?			
Has the servicing been completed and the locks and tags removed?			
STEP 4: IF YOU ANSWERED YES TO ALL THE ABOVE, START UP THE EQUIPMENT.			

ENERGY CONTROL DIAGRAM

Plan # _____ Page # _____ of _____

Machine # _____

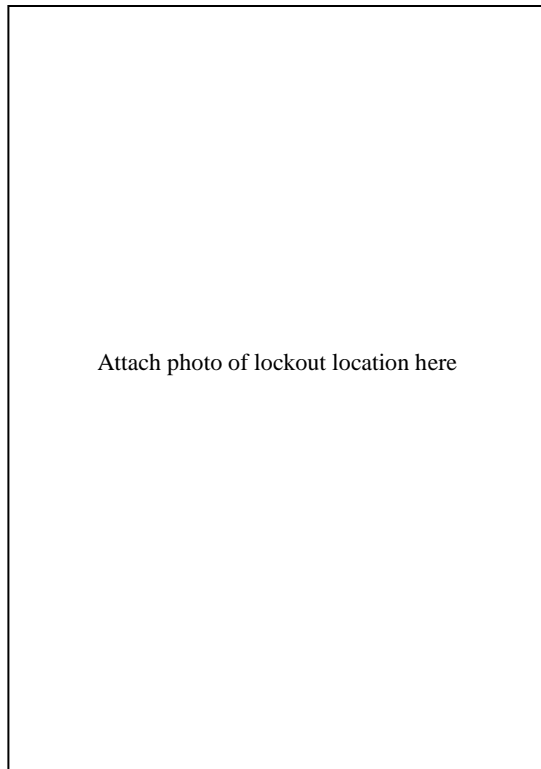
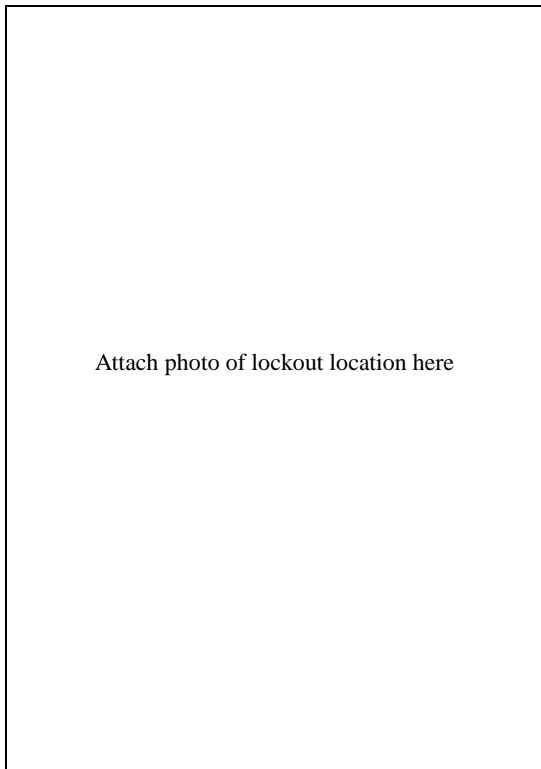
Machine Name: _____

Department: _____

Approved by: _____

Special Lockout/Tagout Instructions:

List any special instructions for this machine here:



LOCKOUT/TAGOUT EVALUATION FORM

Facility _____ Date _____

Evaluator Name _____ Title _____

Machine Name: _____

Describe the job being evaluated:

Names of persons working on the job:

Check the persons
being interviewed

	Yes	No	<u>Comments</u>
Did authorized employees understand their responsibilities under the Lockout/Tagout Policy?	<input type="checkbox"/>	<input type="checkbox"/>	_____
Were locks and tags in place?	<input type="checkbox"/>	<input type="checkbox"/>	_____
Were affected employees notified?	<input type="checkbox"/>	<input type="checkbox"/>	_____
Was the lockout/tagout checklist completed?	<input type="checkbox"/>	<input type="checkbox"/>	_____
Were all City safety procedures being followed?	<input type="checkbox"/>	<input type="checkbox"/>	_____