Lockout/Tagout Program—Energy Control Program

The City of Kannapolis (hereafter "City") commits to providing a safe and healthy work environment, free from recognized hazards. The purpose of the lockout/tagout (LO/TO) program is to provide a system for the locking out and/or tagging out of energy-isolating devices to protect employees from the unexpected energization or startup of machines or equipment, or the release of stored energy that could cause injury to the employee. Wherever possible, energy-isolating devices should be locked out in accordance with 29 CFR 1910.147. Before employees service, repair or perform maintenance, the machine or equipment must be isolated from all hazardous energy, the energy isolation-device(s) for the machine or equipment must be locked out and/or tagged out, and all stored energy released or controlled.

Definitions

Authorized employee – an employee who has successfully completed training, demonstrated proficiency in LO/TO procedures, and is approved to lock or tag equipment for servicing or maintenance.

Affected employee – an employee who has been trained to recognize LO/TO devices and operates the equipment on which servicing is performed or works in the area where servicing is being performed. Affected employees are not authorized to conduct LO/TO procedures.

Other employee – an employee whose work operations are or may be in an area where energy control procedures may be utilized. Other employees are not authorized to conduct LO/TO procedures.

Responsibility

Department Directors

A. Implement this LO/TO program by directing all supervisors and managers to identify the activities where LO/TO shall be used, to identify "affected" employees, and to inform affected employees of the impending utilization of the LO/TO procedure by making known:

    - Impacted equipment.
    - Reason for LO/TO and associated hazards.
    - Approximate time that LO/TO will be in effect.
    - Name(s) of the authorized individual(s).

B. Enforce compliance with this program. All employees must be trained in the use of LO/TO and identified as either "authorized, affected, or other" under this program. Authorized employees must be approved by the risk manager.

Supervisors/Managers

A. Identify areas or equipment where LO/TO shall be used by conducting a thorough survey. The purpose of this survey is to identify all equipment or sources of energy that have the potential to cause bodily injury when activated.
B. Ensure proper training of all authorized and affected personnel.
C. Ensure necessary LO/TO equipment is provided, maintained in good working order free from defects, and is readily available to all authorized employees.
D. Enforce compliance with this program.

Employees

A. Complete required training as assigned and maintain understanding of assigned task relating to LO/TO.
B. Comply with all directives of this program.
C. Notify supervisor/manager if LO/TO equipment is needed.
D. Observe all LO/TO devices when in use and refrain from all use of the impacted equipment.

Risk Manager

A. Assist each department in selecting the appropriate procedure of energy isolation when requested.
B. Ensure proper training of all personnel is provided and approve authorized personnel.
C. Audit each department's compliance with this program on a regular basis.

Types and Magnitude of Energy and Hazards

Each authorized employee must be instructed in the types and magnitude of energy used by the City.

Training and Retraining of Employees

Employees must, (a) Be trained with respect to lockout/tagout procedure used by the City, (b) Understand that lockout/tagout is used to protect employees against hazardous energy from inadvertent operation of equipment or machinery, (c) Understand that he or she is to never attempt to operate an energy-isolating device when it is locked or tagged, (d) Be *retrained* if there is a change in the employee's job assignment, a change in machinery or equipment that presents a new hazard, a change in energy control procedures, or management considers that retraining is necessary.

Training or retraining of authorized employees must include:

- How to recognize hazardous energy sources.
- Type and magnitude of energy used especially with respect to the machinery or equipment to which the employee will be exposed.

- Purpose of the lockout/tagout procedure.
- Steps for shutting down, isolating, blocking, and securing equipment to which the employee will be exposed.
- Steps for placement, removal, and transfer of lockout/tagout devices and the division of responsibility for accomplishing those tasks.
- Requirements for testing to determine and verify effectiveness of lockout/tagout devices.
- The proper use and limitations of tags.

Authorized employees must receive written authorization from the risk manager. Minimum requirements for authorization include: (a) Completion of SJ42 & ES61 courses in NeoGov; (b) Completion of on-the-job (OTJ) training with an authorized supervisor; and (c) Demonstration of competency in LO/TO procedures.

Documentation will be completed for each employee following every training or retraining session.

Training or retraining of affected and/or other employees must include:

- Recognition of energy control devices
- Understanding the purpose of the program and the importance of not attempting to use equipment that is disabled by an energy control device

Affected and other employees must complete SG14 Lockout/Tagout Safety course in NeoGov.

Inspection Certification

A periodic inspection of the energy control procedure will be conducted at least annually to ensure that the procedure and the requirements of the standard are being followed.

The periodic inspection will be performed by an authorized employee other than the ones(s) utilizing the energy control procedure being inspected. The purpose of the periodic inspection is to correct any deviations or inadequacies identified.

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

Where tagout is used for energy control, the periodic inspection will include a review, between the inspector and each authorized and affected employee, of that employee's responsibilities under the energy control procedure being inspected, and an overview regarding the limitations of the tags.

The periodic inspections will be documented by a certification stating the machine or equipment on which the energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

Refer to form “Lockout/Tagout Inspection Certification” located at the end of this program document.

Identification of Energy Isolating Devices

Locks designated for LO/TO procedures shall be red in color and sufficient in design and composition to withstand elements of exposure. Each lock shall be operated by a singular, unique key. Master keys or duplicate keys are prohibited. LO/TO devices other than those provided by the City are prohibited.

Tags designated for LO/TO procedures shall be red/white in color, sufficient is design and composition to withstand elements of exposure, not easily removed, and shall display the following information:

- Signal word such as “Warning” or “Danger” **and** “Do Not Operate”
- Name of authorized employee
- Date of LO/TO device application
- Photo of authorized employee (not required but strongly encouraged)

Energy-Isolating Devices

Each employee must be instructed that their department has conducted a survey of *all* machinery, equipment and processes that possess potentially hazardous energy. The survey located all equipment and identified all isolating devices that must be locked or tagged to render the equipment safe for service, maintenance or repair and describes applicable lockout/tagout procedure. The information for each item of machinery or equipment has been recorded on the Types/Locations of Energy-Isolating Devices form, which is maintained in the respective department and is readily available for use in conjunction with the lockout/tagout procedure.

Types/Locations of Energy-Isolating Devices form will be used whenever a new piece of equipment or machine is introduced into the work area or whenever a new procedure may be developed due to a change in process, machine or equipment making previous procedure invalid.

Note: *Types/Locations of Energy-Isolating Devices form is located at the end of this program document.*

Sequence of Lockout/Tagout System—Procedure

Each employee will be informed of the lockout/tagout sequence. That sequence includes the following steps:

Step One—Upon notification from the authorized employee of a LO/TO requirement, the department director or designee will notify all affected employees (operators and others in the area) that lockout/tagout procedures are being used (see Responsibility, Department Directors, A).

Step Two—The machine must be shut down by normal procedure.

Step Three—Each energy-isolating device must be located. Each device must be operated to isolate the equipment from the energy source(s).

Step Four— After responding to important notes (below), each energy-isolating device must now be locked and/or tagged with assigned individual locks or tags.

Note:

- If a lock cannot be used, group tagout is required and shall include an authorized department supervisor/manager, and completion of the tagout justification authorization.
- If more than one authorized employee is required for lockout/tagout procedures (see group lockout), the designated group coordinator must have each authorized employee affix a lockout/tagout device.

Step Five—Each device or manner by which energy can be stored must be located. Stored energy must be safely released or controlled to prevent unwanted energy discharge.

Step Six—(a) Ensure that personnel are not exposed; (b) attempt to start the equipment with the normal operating controls to ensure that lockout/tagout is effective; (c) return the operating controls to "neutral" or "off." The equipment is now properly locked or tagged out.

Tagout Justification System

If the machine, equipment, or process can be locked out, the authorized employee shall use a lock and tag. If a lock is not able to be used, complete the tagout justification authorization, then return to Sequence for LO/TO, Step Six.

Procedure for Restoring Machines or Equipment to Normal Production Operations:

- When servicing, maintenance or repair is complete and the equipment/machine is ready to be started up, the authorized employee will ensure that: (a) no one is exposed to the equipment/machine; (b) all tools have been removed from the machine/equipment; (c) guards have been reinstalled; (d) there are no exposed electrical wires; (e) and that he or she is satisfied that it is safe for startup.
- After responding to important notes (below), remove all lockout/tagout devices.

Note:

- If the authorized employee is not available to remove the lockout/tagout device, the device may only be removed by or under the direction of the risk manager **and** the department director or designee who completes and documents the following:
  - Identify the authorized employee whose device is being removed.
  - Describe all reasonable efforts to locate this employee.

  - Describe the action taken to ensure that, prior to his or her resumption of work, the employee knows that the device has been removed.
- If more than one authorized employee is required to remove a lockout/tagout device, the designated group coordinator shall be responsible to verify that all removal procedures are followed.
- Operate the devices to restore energy to the machine/equipment.

Temporary Removal of Lockout/Tagout Devices

When testing, the positioning of machines/equipment, or other requirements demand the temporary removal of lockout/tagout devices, the authorized employee must: (a) follow the sequence steps for restoring energy; (b) conduct the tests or position the equipment; and (c) de-energize all systems and reapply energy control measures in accordance with policy.

Outside Contractors

If maintenance, service, or repair is performed by an outside contractor, the department director or designee must inform the contractor of this written program. Contractors retain ultimate responsibility for performing LO/TO procedures consistent with 29 CFR 1910.147 when working on City equipment.

Group Lockout or Tagout

When group lockout/tagout is required and when more than one group is involved, a group coordinator must be designated by supervision. The designated group coordinator must seek agreement from the other authorized employees and must ensure that each authorized employee: (a) places a lockout or tagout device on the energy-isolating devices; or (b) places the device on a multiple lockout/tagout device (hasp) if the device cannot accept multiple locks/tags; or (c) places the device on a multiple-lock lockout box or cabinet that holds the key to the single lock on the energy-isolating device.

Lockout/Tagout—Types/Locations of Energy-Isolating Devices

1. Name of department: _____
2. Name of equipment or machine: _____
3. Serial number of equipment or machine: _____
4. Location of equipment or machine: _____
5. Each type of energy used by the equipment or machine:
   a. _____
   b. _____
6. Magnitude of each source of energy:
   a. _____
   b. _____
7. Hazards to be expected from each source of energy:
   a. _____
   b. _____
8. Type and location of each device for isolating energy to the machine or equipment and the method of lockout/tagout to be used (use an additional form, if needed):

Type	**Location**	**Method of Lockout/Tagout**
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Identification of each device and manner by which energy can be stored in the machine or equipment and identification of the procedure for dissipating or restraining the stored energy (use additional form, if needed):

Device/Manner Procedure

a. _____

b._____

c._____

d._____

Lockout/Tagout—Inspection Certification/Authorization

Name of Equipment/Machine: _____

Employee Name/ID #: _____

Training Completed: SJ42, ES61, OTJ

Job Title: _____

Department: _____

Date of Inspection/Certification: _____ / _____ / _____

Signature of Employee: _____

Signature of Supervisor: _____

Risk Management only:

Is the employee authorized to implement lockout/tagout procedure? ☐ Yes ☐ No

Date Authorized: _____ / _____ / _____

Risk Manager Signature: _____

Tagout Justification Authorization

Requirement One

Full Employee Protection. If you cannot indicate a "yes" answer for each of the following items, do not use the tagout system:

- The tagout system provides full employee protection. **Yes / No**
- Tagout device(s) placed at the same location where the lockout device(s) would have been placed. **Yes / No**
- The tagout system provides safety equivalent to the lockout program. **Yes / No**
- Employees can fully comply with all tagout-related provisions. **Yes / No**

Additional Safety Measures. Check the measure(s) used to provide equivalent protection and/or state any other alternative used:

- Isolating circuit element removal. **Yes / No**
- Control switches blocked. **Yes / No**
- Extra disconnecting device opened. **Yes / No**
- Removal of valve handles. **Yes / No**
- Alternative measures used to provide equivalent protection: _____. **Yes / No**

Tagout Device. Check the tagout device against each criterion listed below. The tagout device should satisfy each criterion:

- Singularly identified. **Yes / No**
- Device used only for controlling energy. **Yes / No**
- Not used for other purposes. **Yes / No**
- Durable/substantial. **Yes / No**
- Able to withstand its intended environment. **Yes / No**
- Nonreusable. **Yes / No**
- Attachable by hand. **Yes / No**
- Self-locking. **Yes / No**
- Indicates employee identity. **Yes / No**
- Exposure will not cause deterioration. **Y**es / No
- Does not deteriorate in corrosive environment. **Yes / No**
- Standardized as to: ___color; ___shape and size; ___print and format. **Yes / No**
- Minimum unlocking strength of no less than 50 pounds. **Yes / No**
- Equivalent to a one piece, all environment-tolerant nylon cable tie. **Yes / No**

Warning Message. Ensure that the tagout device:

- Warns against hazardous conditions. **Yes / No**
- Includes "Do Not Start (Open, Close, Energize, Operate, etc.)" **Yes / No**

Training. Be certain that the employees have been trained that:

- Tags are simply warning devices. **Yes / No**
- Tags do not provide physical restraint. **Yes / No**

- Tags must never be removed without authorization. **Yes / No**
- Tags may evoke a false sense of security. **Yes / No**
- Tags are only part of the overall program. **Yes / No**
- Tags must be securely attached. **Yes / No**
- Tags must never be ignored or bypassed. **Yes / No**

Requirement Two

State your reasons for using the tagout system:

State how equivalent employee protection was provided:

Describe the training provided to employees:

At which location was the training provided:

Include the date of the employee training:

Include the signature of the person who performed the training:

Include signature and date of the person who authorized the use of the tagout system:

_____	_____	_____
Authorized Employee Name	Authorized Employee Signature	Date
_____	_____	_____
Authorized Supervisor Name	Authorized Supervisor Signature	Date