### Objective

The objective of this procedure is to establish a means of positive control to prevent accidental starting or activating of machinery or systems while they are being repaired, cleaned and/or serviced. If hazards can be controlled by unplugging the equipment from the energy source and the plug is under the exclusive control of the employee performing the service and/or maintenance the lockout/tagout standard does not apply. If a guard or cover is removed for the purpose of troubleshooting, the lockout/tagout standard does not apply.

This program serves to:

- A. Establish a safe and positive means of shutting down machinery, equipment and systems.
- B. Prohibit unauthorized personnel or remote control systems from starting machinery or equipment while it is being serviced.
- C. Provide a secondary control system (tagout) when it is impossible to positively lockout the machinery or equipment.
- D. Establish responsibility for implementing and controlling lockout/tagout procedures.
- E. Ensure that only approved locks, standardized tags and fastening devices provided by the system will be utilized in the lockout/tagout procedures.

### Assignment of Responsibility

- A. The Manager of Facilities Management will be responsible for implementing the lockout/tagout program.
- B. MLS Managers and Supervisors are responsible for enforcing the program and insuring compliance with the procedures within their agency/department.
- C. The Director of Facilities Management is responsible for monitoring the compliance of this procedure and will conduct the annual inspection and certification of the authorized employees.
- D. Authorized employees (those listed in Attachment A) are responsible for following established lockout/tagout procedures.
- E. Affected employees (all other employees in the system) are responsible for insuring they do not attempt to restart or re-energize machines or equipment which are locked out or tagged out.

### Procedures

The ensuring items are to be followed in ensure both compliance with OSHA Control of Hazardous Energy Standard and the safety of our employees.

### A. Preparation for Lockout or Tagout

Employees who are required to utilize the lockout/tagout procedure (see Attachment A) must be knowledgeable of the different energy sources and the proper sequence of shutting off or disconnecting energy means. The four types of energy sources are:

- 1. Electrical (most common form)
- 2. Hydraulic or pneumatic
- 3. Fluids and gases
- 4. Mechanical (including gravity)

More than one energy source may be utilized on some equipment and the proper procedure must be followed in order to identify energy sources and lockout/tagout accordingly. See Attachment B for specific equipment covered under this program. Energy control procedures for each piece of equipment are kept at the Maintenance Department. Contact the Manager of Facilities Maintenance for details concerning those procedures.

### B. Electrical

- 1. Shut off power at machine and disconnect switch
- 2. Disconnecting means must be locked or tagged
- 3. Press start button to see that correct systems are locked out
- 4. All controls must be returned to their safest position
- 5. Points to remember:
  - a. If a machine or piece of equipment contains capacitors, they must be drained of stored energy
  - b. Possible disconnecting means include the power cord, power panels (look for primary and secondary voltage), breakers.
  - c. Some equipment may have a motor isolating shut-off and a control isolating shut-off.
  - d. If the electrical energy is disconnected by simply unplugging the power cord, the cord must be kept under the control of the authorized employee or the plug end of the cord must be locked out or tagged out.

#### C. Hydraulic/Pneumatic

- 1. Shut off all energy sources (pumps and compressors). If the pumps and compressors supply energy to more than one piece of equipment, lockout or tagout the valve supplying energy to the piece of equipment being serviced.
- 2. Stored pressure from hydraulic/pneumatic lines shall be drained/bled when release of stored energy could cause injury to employees.
- 3. Make sure controls are returned to their safest position (off, stop, standby, inch, job, etc.)

#### D. Fluids and Gases

- 1. Identify the type of fluid or gas and the necessary personal protective equipment.
- 2. Close valves to prevent flow, and lockout/tagout
- 3. Determine the isolating device, then close and lockout/tagout
- 4. Drain and bleed lines to zero energy state
- 5. Some systems may have electrically controlled valves. If so, they must be shut off and locked/tagged out.
- 6. Check for zero energy state at the equipment

### E. Mechanical Energy

Mechanical energy includes gravity activation, energy stored in springs, etc.

- 1. Block out or use die ram safety chain
- 2. Lockout or tagout safety device
- 3. Shut off, lockout or tagout electrical system
- 4. Check for zero energy state
- 5. Return controls to safest position.

### F. Release from Lockout/Tagout

- 1. Inspection: Make certain the work is completed and inventory the tools and equipment that were used to insure they were removed from equipment.
- 2. Clean-up: Remove all towels, rags, work-aids, etc.
- 3. Replace guards: Replace all guards possible. Sometimes a particular guard may have to be left off until the start sequence is over due to possible adjustments. However, all other guards should be put back into place.
- 4. Check controls: All controls should be in their safest position.
- 5. The work area shall be checked to ensure that all employees have been safely positioned or removed and notified that the lockout/tagout devices are being removed.
- 6. Remove locks/tags. Remove only your lock or tag.

#### G. Service or Maintenance Involving More than One Person

When servicing and/or maintenance is performed by more than one person, each authorized employee shall place his own lock or tag on the energy isolating source. This shall be done by utilizing a multiple lock scissors clamp if the equipment is capable of being locked out. If the equipment cannot be locked out, then each authorized employee must place his tag on the equipment.

#### H. Removal of an Authorized Employee's Lockout/Tagout by MLS

Emergency procedures for removing lockout/tagout should include the following:

- 1. Verification by employer that the authorized employee who applied the device is not in the facility.
- 2. Make reasonable efforts to advise the employee that his/her device has been removed.
- 3. Ensure that the authorized employee has this knowledge before he/she resumes work at the facility.

#### I. Procedures for Outside Personnel/Contractors

Outside personnel/contractors shall be advised that MLS has and enforces the use of lockout/tagout procedures. They will be informed of the use of locks and tags and notified about the prohibition of attempts to restart or re-energize machines or equipment that are locked out or tagged out.

MLS will obtain information from the outside personnel/contractor about their lockout/tagout procedures and advise affected employees of this information.

### J. Training and Communication

Each authorized employee who will be utilizing the lockout/tagout procedure will be trained in the recognition of applicable hazardous energy sources, type and magnitude of energy available in the work place, and the methods and means necessary for energy isolation and control.

Each affected employee (all employees other than authorized employees utilizing the lockout/tagout procedure) shall be instructed in the purpose and use of the lockout/tagout procedure, and the prohibition of attempts to restart or re-energize machines or equipment that are locked out or tagged out.

Training records for all employees are kept in the Human Resources department.

#### K. Periodic Inspection

A periodic inspection (at least annually) will be conducted of each authorized employee under the lockout/tagout procedure. This inspection shall be performed by the Manager of Facilities Maintenance. If the Manager of Facilities Maintenance is also using the energy control procedure being inspected, then the inspection shall be performed by another party.

The inspection will include a review between the inspector and each authorized employee of that employee's responsibilities under the energy control (lockout/tagout) procedure. The inspection will also consist of a physical inspection of the authorized employee while performing work under the procedures.

The Manager of Facilities Maintenance shall certify in writing that the inspection has been performed. The written certification shall be retained at the Maintenance Department.

### Attachment A

### List of Authorized Personnel For Lockout/Tagout Procedures

Manager of Facilities Maintenance, Maintenance Technicians

Name	Job Title
Curtiss Ray	Manager of Facilities Maintenance
	(Inspector)
Roberto Soto	Assistant Manager of Facilities
	Maintenance
Russell Pierce	Maintenance Technician II
Jon Vodka	Maintenance Technician I
Dave Mack	Maintenance Technician I
Derek Davis	Maintenance Technician I
Albert Brown	Maintenance Technician I
Pete Roberson	Maintenance Technician I
Lanny Myers	Maintenance Technician I
Edgar Nunez	Maintenance Technician I