I. POLICY
To ensure that all individuals are protected from accidental or unexpected activation of mechanical and/or electrical equipment during maintenance, repairing, cleaning, servicing, or adjusting said equipment.

A. It is the policy of Louisiana State University in Shreveport that any individual engaging in the maintenance, repairing, cleaning, servicing, or adjusting of prime movers, machinery, or equipment on department/agency property will abide by the procedures outlined in this document and specific procedures outlined in the LSUS Equipment Management Program.

B. Lockout is a first means of protection; warning tags only supplement the use of locks. Tags alone may be used only when the application of a lock is not feasible and with approval of the appropriate supervisor (provided the employer complies with the provisions of the standard that requires additional training and more rigorous periodic inspections).

II. DEFINITIONS

A. LOCKOUT: The practice of using keyed or combination security devices ("locks") to prevent the activation of mechanical or electrical equipment.

B. TAGOUT
1. The practice of using tags in conjunction with locks to increase the visibility and awareness that equipment is not to be energized or activated until such tags are removed.
2. Tagout devices will be of the non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds.

C. ACTIVATION/ENERGIZATION: To set machinery into motion by starting, switching, pushing, moving, or otherwise engaging power sources for such
equipment. To provide a flow of electricity or complete a circuit that is the main power source for the machinery/equipment.

D. ENERGY CONTROL PROCEDURES: Use of lockout/tagout equipment to ensure safe work practices.

E. HAZARDOUS MOTION: Motion of equipment under mechanical stress or gravity that may abruptly release and cause injury. Hazardous motion may result even after power sources are disconnected. Examples are coiled springs or raised hydraulic equipment.

F. PRIME MOVER: Power driven machinery and equipment.

III. RESPONSIBILITIES

A. Department Head or Qualified Designee

1. Provide training to authorized/affected employees on lockout/tagout procedures.
2. Inspect energy control procedures and practices at least annually to ensure that general and specific lockout/tagout procedures are being followed.
   a. Inspections must be carried out by persons other than those employees directly utilizing energy control procedures.
   b. Inspections will include a review of each authorized employee’s responsibilities.
   c. Certify that periodic inspections have been performed (See: LOCKOUT/TAGOUT INSPECTION FORM)
3. Maintain a record of equipment, machinery, and operations that require the use of lockout/tagout procedures. The record will include the location, description, power source, and primary hazards of equipment/machinery, a list of the primary operators/maintenance personnel, and a list of lockout/tagout equipment that is used and maintained on site.
4. Ensure that each supervisor adheres to procedures.

B. SUPERVISORS

1. Ensure that all employees and all contractor/vendor employees engaging in work requiring locking/tagging out of energy sources understand and adhere to adopted procedures.
2. Ensure that employees have received training in energy control procedures prior to operating the machinery/equipment.
3. Provide and maintain necessary equipment and resources, including accident prevention signs, tags, padlocks, and seals.
4. Where applicable, incorporate operation specific lockout/tagout procedures into the department/agency Equipment Management Program.
5. Notify the designated individual(s) of new or revised equipment, machinery, or operations that require the use of lockout/tagout devices during servicing, maintenance, or repair.

C. EMPLOYEES
   1. Adhere to Specific Procedures outlined in this document for all tasks that require the use of lockout/tagout procedures.

IV. SPECIFIC PROCEDURES

The following simple lockout procedure is provided to assist agencies in developing their own procedures. For more complex systems, more comprehensive procedures may need to be developed, documented, and utilized.

A. PREPARATION FOR LOCKOUT/TAGOUT: Conduct a survey to locate and identify all isolating devices to determine which switch(es), valve(s), or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, stored energy, or others) may be involved.

B. SEQUENCE OF LOCKOUT/TAGOUT SYSTEM PROCEDURE
   1. Notify affected employees that a lockout or tagout system is going to be utilized and the reason why. The authorized employee shall know the type and magnitude of energy that the machine/equipment utilizes and shall understand the hazards thereof.
   2. If the machine/equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
   3. Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
   4. Lockout/Tagout the energy isolating devices with assigned individual lock(s) or tag(s). No copies of keys shall be made or distributed.
   5. After ensuring that no personnel are exposed, verify the energy sources have been disconnected. Operate the push button or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating control(s) to neutral or off position after the test.
   6. The equipment is now locked out or tagged out.

C. RESTORING MACHINES OR EQUIPMENT TO NORMAL OPERATIONS
1. After the servicing and/or maintenance is complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.

2. After all tools have been removed from the machine or equipment, guards have been reinstalled, and employees are in the clear, remove all lockout or tagout devices. Operate the energy isolating devices to restore energy to the machine or equipment.

D. PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place his/her own personal lockout/tagout device on the energy isolating device(s). When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hosp) may be used. If lockout is used, a single lock may be used to lockout the machine or equipment (with the key being placed in a lockout box or cabinet that allows the use of multiple locks to secure it). Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet.

E. TEMPORARY REMOVAL OF LOCKOUT/TAGOUT DEVICES

In situations where lockout/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 component thereof, the following sequence of actions will be followed:

1. Remove non-essential items and ensure that machine or equipment components are operationally intact.
2. Notify affected employees that lockout/tagout devices have been removed and ensure that all employees have been safely positioned or removed from the area.
3. Have employees who applied the lockout/tagout devices remove them.
4. Energize and proceed with testing or positioning.
5. De-energize all systems and reapply energy control measures in accordance with section 5.2 of these procedures.

F. MAINTENANCE REQUIRING UNDISRUPTED ENERGY SUPPLY-

Where maintenance, repairing, cleaning, servicing, adjusting, or setting up operations cannot be accomplished with the prime mover or energy source disconnected, such operations may only be performed under the following conditions:

1. The operating station (e.g. external control panel) where the machine may be activated must be under the control of a qualified operator at all times.
2. All participants must be in clear view of the operator or in positive communication with each other.
3. All participants must be beyond the reach of machine elements that may move
rapidly and present a hazard.
4. Where machine configuration or size requires that the operator leave the control station to install tools, and where there are machine elements that may move rapidly if activated, such elements must be separately locked out.
5. During repair procedures where mechanical components are being adjusted or replaced, the machine shall be de-energized or disconnected from its power source.

V. EMPLOYEE TRAINING
Authorized employees shall receive annual lockout/tagout training from a qualified individual. Affected employees shall receive awareness level training within one year of hire, and every three (3) years.

VI. RECORDKEEPING

A. INSPECTION RECORDS
The maintenance unit supervisor will maintain inspection records in accordance with 4.1 B of this document, as well as complete and maintain all LOCKOUT/TAGOUT INSPECTION FORMS

B. TRAINING RECORDS
Training records will be maintained and include an outline of topics covered and a sign in sheet of those employees attending. Documentation of training shall be forwarded to the Loss Prevention Coordinator.

APPROVED

Michael T. Ferrell, Vice Chancellor of Business Affairs
April 3, 2009

Vincent J. Marsala, Chancellor
April 3, 2009
Appendix A
LOCKOUT/TAGOUT INSPECTION FORM

1. Inspection Date: _____________________

2. Inspector: _________________________ / __________________
   (Printed Name)                                 (Signature)

3. Employee(s) Inspected
   _______________________/___________________
   _______________________/___________________
   _______________________/___________________
   _______________________/___________________
   (Printed name)                     (Signature)

4. Machine/equipment on which the energy control procedure was being utilized:
   __________________________________________________

<table>
<thead>
<tr>
<th>Item</th>
<th>Circle Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does employee have access to adequate lockout/tagout devices?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Has employee tested the effectiveness of his/her lockout/tagout devices?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Has employee received lockout/tagout training in the last year?</td>
<td>Yes No</td>
</tr>
<tr>
<td>If this is an outside contractor, has a supervisor informed him/her of the necessity for adhering to these procedures?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Have all procedures been followed?</td>
<td>Yes No</td>
</tr>
<tr>
<td>Were tagouts legible and clearly displayed?</td>
<td>Yes No</td>
</tr>
</tbody>
</table>