GRAMBLING STATE UNIVERSITY
GRAMBLING, LOUISIANA

Policy # 59002

LOCKOUT TAGOUT (LOTO)

Effective Date: October 01, 2021 **Revised Date:** November 17, 2022
Responsible Office: Safety & Risk Management / Facilities and Planning
Division: Finance

I. PURPOSE/OBJECTIVE

Lockout Tagout policy establishes the minimum requirements for isolation of both kinetic and potential energy prior to equipment maintenance, servicing, adjustment, or removal.

II. SCOPE

Applicable to all University employees involved in servicing or operating any machinery or equipment on Grambling State University property if:

- They are required to remove or bypass a guard or other safety device.
- They are required to place any part of their body into an area on a machine or piece of equipment where an associated danger zone exist during a machine operating cycle.
- They are at risk of coming into contact with parts of fixed electrical equipment or circuits which have been de-energized.

III. Definitions

Affected Employees are those employees who operate machinery or equipment upon which locking or tagging out is required under this program.

Authorized (Qualified) Employees are the only ones certified to lock and tag out equipment or machinery. It is possible for an individual to be considered "qualified" regarding certain equipment in the workplace, but "unqualified" as to other equipment.

Energized means a machine or piece of equipment connected to an energy source or containing residual or stored energy.

Lockout Devices are devices that utilize a lock, either key or combination to hold an energy isolating device in a safe position.

Other Employees are identified as those that do not fall into the authorized, affected, or qualified employee category. Essentially, it will include all other employees.

Tagout Devices are warning tags (weather & chemical resistant) standardized in size, color, with wording warning of hazardous energy.

IV. Responsibilities

Director of Facilities Management

- Support the requirements of the lockout tag program.
- Ensure funding is available for the administration, implementation, operation and maintenance of this program

Safety and Risk Management Personnel

- Provide lockout/tagout (LOTO) educational training procedures to affected employees.
- Assist in the performance of hazard assessments upon request.
- Supply tags to the affected department upon request.

Employees

- Required to comply with the restrictions and limitations imposed upon them during the use of LOTO
- Required to perform LOTO in accordance with this program
- Shall not attempt to start, energize, or use any machine or equipment which is locked/tagged out

V. Policy/Procedure

This program shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked/tagged out before employees perform service or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury. All energy sources shall be locked out by use of an energy isolating device, which is locked, and a tag is attached with a self-locking and non-releasable device. Tags shall be of a standardized design, durable, substantial, and chemical-resistant material which are supplied by Safety and Risk Management. All tags shall bear a message such as: Do Not Start, Do Not Operate, and bear the name of the employee who attached the tag, and the date and time of attachment. Locks and tags shall be issued to Authorized Employees who perform LOTO procedures.

Improper or failure to use LOTO procedures may result in:

- Electrical shock
- Chemical exposure
- Skin burns
- Lacerations & amputation
- Fires & explosions
- Chemical releases
- Eye injury
- Death

Preparation for LOTO Procedures
If an energy source can be locked out the LOTO procedures will be utilized. A LOTO survey will be conducted to locate and identify all energy sources to verify which switches or valves supply energy to machinery and equipment. Dual or redundant controls will be removed.

A Tagout Schedule should be developed for applicable equipment and machinery. This schedule describes the energy sources, location of disconnects, type of disconnect, special hazards and special safety procedures. The schedule will be reviewed each time to ensure employees properly lock and tag out equipment and machinery. If a tagout schedule does not exist for a piece of equipment, machinery and process, one must be developed prior to conducting a LOTO. As repairs and/or renovations of existing electrical systems are made, standardized controls will be used.

All qualified personnel will be assigned a lock with one key, hasp and tag. All locks will be keyed differently, except when a specific individual is issued a series of locks for complex LOTO tasks, and will identify the company employee that applied the locks and/or tags. In some cases, more than one lock, hasp, and tag are needed to completely de-energize equipment and machinery. Additional locks may be checked out from the Safety & Risk Department or supervisor on a shift. All locks and hasps will be uniquely identifiable to a specific employee.

Routine Maintenance & Machine Adjustments Lockout and tagout procedures are not required if equipment must be operating for proper adjustment. This rare exception may be used only by trained and authorized employees where specific procedures have been developed to safely avoid hazards. All considerations will be made to prevent the need for an employee to break the plane of a normally guarded area where the equipment, tools and other devices are in use.

General LOTO Procedures
Before working on, repairing, adjusting or replacing machinery and equipment, the following procedures will be utilized to place the machinery and equipment in a neutral or zero mechanical state.
The following procedures shall be used when locking or tagging out a system

1. **Preparation for Shutdown**
   Before authorized or affected employees turn off a machine or piece of equipment, the authorized employee will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the means to control the energy. Notification will be provided to all affected employees that the machinery, equipment or process will be out of service.

2. **Machine or Equipment Shutdown**
   The machine or equipment will be shut down using the specific procedures for that specific machine. An orderly shutdown will be utilized to avoid any additional or increased hazards to employees as a result of equipment de-energization

3. **Machine or Equipment Isolation**
   All energy control devices that are needed to control the energy to the machine or equipment will be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.

4. **Lockout or Tagout Device Application**
   Lockout or tagout devices will be affixed to energy isolating devices by authorized employees. Lockout devices will be affixed in a manner that will hold the energy isolating devices in the "safe" or "off" position.

   Where tagout devices are used they will be affixed in such a manner that will clearly state that the operation or the movement of energy isolating devices from the "safe" or "off" positions is prohibited.

   The tagout devices will be attached to the same point a lock would be attached. If the tag cannot be affixed at that point, the tag will be located as close as possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.

   Lockout and tagout all energy devices by use of hasps, chains and valve covers with an assigned individual lock that identifies the employee applying the device.

5. **Stored Energy Release/Restraint**
   Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.

   Stored energy (capacitors, springs, elevated members, rotating fly wheels, and hydraulic/air/gas/steam systems) must be relieved or restrained by grounding, repositioning, blocking, and/or bleeding the system.

6. **Verification of Isolation**
   Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employees will verify that isolation or de-energization of the machine or equipment have been accomplished. After assuring that no employee will be placed in danger, test all lock and tag outs by following the normal start up procedures (depress start button, etc.).

   Caution: After Test, place controls in neutral position.

   Where the re-accumulation of stored energy to a hazardous energy level is possible, verification of isolation will be continued until the maintenance or servicing is complete.

Shift or Personnel Changes
Should the shift change before the machinery or equipment can be restored to service, the lock and tag out must remain. If the task is reassigned to the next shift, those Employees must lock and tag out before the previous shift may remove their lock and tag.

Release from LOTO
Before lockout or tagout devices are removed and the energy restored to the machine or equipment, the following actions will be taken:

1. The work area will be thoroughly inspected to ensure that nonessential items have been removed and that machine or equipment components are operational.
2. The work area will be checked to ensure that all employees have been safely positioned or removed. Before the lockout or tagout devices are removed, the affected employees will be notified that the lockout or tagout devices are being removed.
3. Each lockout or tagout device will be removed from any isolating device by the employee who applied the device.

LOTO Procedure for Electrical Plug-Type Equipment
This procedure covers all electrical plug-type equipment such as battery chargers, some product pumps, office equipment, powered hand tools, powered bench tools, lathes, fans, ete.

When repairing or adjusting the above equipment, the following procedures must be utilized to prevent accidental or sudden startup:

1. Unplug electrical equipment from wall socket or in-line socket.
2. Attach "Do Not Operate" tag and plug box & lock on end of power cord.
3. An exception is granted to not lock & tag the plug if the cord & plug remain in the exclusive control of the Employee working on, adjusting or inspecting the equipment.
4. Test equipment to assure power source has been removed by depressing the "Start" or “On" switch.
5. Perform required operations.
6. Replace all guards removed.
7. Remove lock & plug box and tag.
8. Inspect power cord and socket before plugging equipment into power source. Any defects must be repaired before placing the equipment back in service.

LOTO Procedures Involving More Than One Employee If more than one Employee is assigned to a task requiring LOTO, each must also place his or her own lock and/or tag on the energy isolating device(s). An authorized employee who has primary responsibility for a set number of employees working under the protection of a group lockout or tagout device should ascertain the exposure status of individual group members.

When there are multiple groups assigned to tasks requiring LOTO, the onsite supervisor will place their LOTO device on the equipment. Before placing the LOTO device on the

equipment the supervisor will inform all employees affected by the LOTO that he is LOTO the equipment and will also inform all affected employees before removing any LOTO device.

Management's Removal of LOTO

Only the employee that locks and tags out machinery, equipment or processes may remove the lock and tag; however, should the employee leave the facility before removing the lock and tag, the supervisor may remove the lock and tag. The supervisor must be assured that all tools have been removed, all guards have been replaced and all employees are free from any hazard before the lock and tag are removed and the machinery, equipment or process is returned to service. Communication with the employee who placed the lock is required prior to lock removal.

Temporary Removal of LOTO for Safety Testing

The temporary removal of LOTO must be done in this order:

1. Clear away tools
2. Notify affected personnel
3. Remove the LOTO device.
4. Energize and proceed with testing.
5. De-energize and reapply control measures.

This procedure should be documented (i.e., who performs & verifies).

Employees Training

All employees involved in LOTO processes will be trained according to the specific needs of “Qualified”, “Affected”, and “Other”. The training will be conducted by a qualified individual at the time of employment and at least annually thereafter.

Retraining is required when there is a change in job assignments, in machines, a change in the energy control procedures, or a new hazard is introduced. All training and/or retraining must be documented, signed, and certified.

Grambling State University
Lockout/Tagout Procedure

Page 1 of 2

Building: | Location: | Date:

PURPOSE:
This procedure outlines the minimum required safety information and specific procedure to be followed for the servicing and maintenance of machines and or equipment when the unexpected start up or release of stored energy could cause injury or death to employees.

SCOPE:
This procedure will be used as a campus-wide general procedure for isolating all potentially hazardous energy (lockout/tagout) before employees perform any servicing and maintenance activities where unexpected energizations, start up or release of stored energy could cause injury. This procedure, when used in conjunction with the Lockout/Tagout Log on the attached pages, provides the necessary information for lockout/tagout.

PROCEDURE:
1. Only trained, Authorized Employees can lockout/tagout.
2. All Affected and other Employees working in or entering work areas where lockout/tagout is performed must be trained.
3. Determine all energy isolating devices requiring lockout/tagout to ensure effective control of hazardous energy.
4. Determine the type and magnitude of the energy and required controls.
5. Notify all Affected Employees of the plans to lockout/tagout.
6. Shutdown the equipment/process by normal procedures.
7. Locate the necessary Energy Isolating Device(s) to equipment/process and operate them to isolate energy sources and affix lockout/tagout devices.
8. Relieve all stored or residual energy and take appropriate measures to ensure it does not reaccumulate. Affix lockout/tagout device as necessary.
9. Verify energy isolation and relief of stored energy after ensuring employees are not exposed and before beginning work. After start/ON buttons are activated, press the stop/OFF button.
10. Perform the servicing and maintenance.
11. To safely restore machines, equipment or process to normal production operations, replace all guards and safety devices, remove all personnel, and remove all tools and equipment.
12. Notify Affected Employees.
13. Remove lockout/tagout devices (by authorized employee who installed lockout/tagout devices).

LOCKOUT/TAGOUT DEVICE REMOVAL BY EMPLOYER:
When it becomes necessary to remove the lockout/tagout devices of an employee who is unavailable at the facility, it can be done only by the Supervisor and then under a special, approved procedure. Refer to Page 6 of Lockout/Tagout Program for further details.

GROUP LOCKOUT/TAGOUT
When a lockout/tagout job involves numerous lockout/tagout devices and many employees, a group lockout/tagout procedure may be used. A separate, special written procedure or permit is required.

CONTRACTORS
All contractors must comply with the lockout/tagout procedures specified by the site employer and employees of the employer must not violate the contractor's lockout/tagout.

Grambling State University
Lockout/Tagout Log

Page 2 of 2

Building/Department:

Energy Isolation Devices

Lock/Tag Number	Describe in detail where the lock is applied and where the equipment or machinery being locked is located.	Name/Badge	Phone #	Supervisor	Date L/T Applied	Released		Remarks
						Date	Initials	