



LP 4.28

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Policy Owner:
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Policy Administrator:
VP for Finance and
Administration

Affected Parties:
Employees

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Machine Guarding

References: 29 CFR 1910.212

1 Responsibilities

1.1 Safety and Regulatory Compliance Officer

The Safety and Regulatory Compliance Officer has the overall responsibility for administering and maintaining this policy.

1.2 Managers and Supervisors

Managers and Supervisors are responsible for:

1.2.1 Ensuring that the program is implemented in their areas.

1.2.2 Ensuring that all employees receive training on machine operations and machine guarding.

1.3 Employees

Employees must:

1.3.1 Follow the program requirements and request assistance from their supervisor, when warranted.

1.3.2 Comply with all applicable guidelines contained in this safety policy and procedure.

2 Introduction

2.1 It is the policy of Lander University to permit only trained and authorized employees to operate machinery, tools, or equipment at any time on university property.

2.2 This policy describes methods and practices for care and use of machines, equipment, and tools that can be read and understood by all managers, supervisors, employees, and staff.

- 2.3 The program established by this policy is intended to be used to:
 - 2.3.1 Create an awareness of the hazards among university employees.
 - 2.3.2 Standardize procedures for use and care of tools and machinery used on university property.
 - 2.3.3 Provide a consistent format for training employees on the proper procedures to be used with tools and machinery on university property.
 - 2.3.4 Minimize the possibility of injury or harm to university operators.

3 Guards

- 3.1 This policy requires the provision of one or more methods of machine guarding to protect the operator and other employees in the machine area from hazards.
- 3.2 Examples of guarding methods include:
 - 3.2.1 Barrier guards.
 - 3.2.2 Two-hand tripping devices.
 - 3.2.3 Electronic safety devices.
- 3.3 Any machine or power-operated tool, function, or process that may cause injury must be guarded.
- 3.4 All permanent guards must be securely attached and in good working order, and all removable guards must be in place on the machine or equipment before starting use.
- 3.5 Guards must meet the following minimum general requirements:
 - 3.5.1 Guards must prevent contact. The guards must prevent the hands, arms, or any other part of an employee's body or an employee's clothing from making contact with dangerous moving parts.
 - 3.5.2 Guards must be secure. Guards must not easily be removed or altered. Guards and safety devices must be made of durable material that will withstand the conditions of normal use. Guards must be firmly secured to the machine.
 - 3.5.3 Guards must protect from falling objects. Guards must ensure that objects cannot fall into moving parts.

- 3.5.4 Guards must not create new hazards. If a guard creates a hazard of its own (e.g., a shear point, a jagged edge, or an unfinished surface that can cause a laceration), then employees must not use the piece of machinery or equipment.
- 3.6 The most common types of machine guards include:
 - 3.6.1 Fixed guards that provide a barrier between a person and the point of operation, power train, or other moving parts. Examples of such guards include fences, gates, and protective covers for blades, presses, and all moving parts.
 - 3.6.2 Interlocking guards that, when opened or removed, disengage the machine's power source such that the machine cannot be restarted until the guard is replaced.
 - 3.6.3 Adjustable guards that provide a barrier that can be adjusted to many different operations (e.g., varying sizes of stock).
 - 3.6.4 Self-adjusting guards that provide barriers that move or self-adjust, according to the size or position of the workplace. A self-adjusting guard returns to its resting position when no material is passing through.
- 3.7 Revolving drums, barrels, and containers must be guarded by an enclosure that is interlocked with the drive mechanism so the barrel, drum, or container cannot revolve unless the guard enclosure is in place.
- 3.8 When the periphery of the blades of a fan is less than seven feet above the floor or working level, the blades must be guarded.
 - 3.8.1 When the periphery of the blades of a fan is less than seven feet above the floor or working level, the guard must have openings not larger than one-half inch.
- 3.9 Machines designed for a fixed location must be securely anchored to prevent walking or moving.

4 Pre-operational Procedures

- 4.1 Hand tools must be inspected prior to use to ensure that:
 - 4.1.1 For tools with jaws, jaws are not sprung to the point of slippage.
 - 4.1.2 Impact tools are free of mushroomed heads.

- 4.1.3 For tools with wooden handles, the handles are free of splinters or cracks and are tight in the tool.
- 4.1.4 Tools are otherwise safe for use.
- 4.2 All machinery and equipment must be inspected at the start of each shift on a daily basis.
- 4.3 If a machine or tool guard is defective, damaged, or in any way does not meet the requirements of these procedures, employees must not use the machine and must immediately notify their direct supervisor.
- 4.4 Where the operation of a machine or accidental contact with it can injure employees in the vicinity of use, the hazard must be either controlled for or eliminated.
- 4.5 Employees must locate and doff any necessary and appropriate personal protective equipment (PPE) for use with the machinery or equipment before beginning such use.
- 4.6 Employees must ensure that work areas are well-lit, dry, and clean before beginning work.
 - 4.6.1 Sawdust, paper, and oily rags are a fire hazard and can damage machinery and equipment.
- 4.7 Employees must change any clothing or remove any jewelry that could become entangled in the machinery or equipment prior to their use.
- 4.8 Installation or repair of equipment must be completed only by qualified personnel.
- 4.9 Employees must notify their direct supervisor if machinery or equipment needs any type of repair.
- 4.10 Employees must determine that guards are in place at all points on machinery where they could contact moving parts before turning the machine on.
- 4.11 The manufacturer's instructions must be consulted on the safe and correct operation of the machine prior to its use.
- 4.12 If a lock or tag is in place on a piece of machinery or equipment, it must not be removed and the machinery or equipment must not be used.

5 Operating Procedures

- 5.1 Employees may not remove a guard for any reason while operating any piece of machinery or equipment.
- 5.2 All necessary PPE must be worn while the machinery or equipment is running.
- 5.3 If an employee is distracted or unable to focus on the work with the machinery or equipment, they must stop work with that machinery or equipment.
- 5.4 Moving mechanisms must be clear of people and objects.
- 5.5 Upon finishing with a piece of equipment, tool, or machine, basic maintenance must be performed.
- 5.6 All equipment should be kept sharp, oiled, and stored properly, as appropriate.
- 5.7 All body parts must be kept clear of moving parts of any machine.
- 5.8 If items must be fed into machinery, they must be inserted in via push sticks and not with the hands.
- 5.9 Employees must exercise caution and not rush.
- 5.10 Problematic equipment must be immediately reported to the direct supervisor so that it can be repaired or replaced.
- 5.11 Employees must always use the proper piece of machinery or equipment for the job.
- 5.12 Electric cables and cords must be kept clean and free from kinks.
- 5.13 Powered tools must never be carried by their cords.

6 New Equipment

- 6.1 While work is in progress during the installation of new equipment, the Safety and Regulatory Compliance Officer must be involved from the beginning to the end of the installation process to ensure proper guarding.
- 6.2 Corrections that need implementation during the installation process must be completed, as needed.

- 6.3 The Safety and Regulatory Compliance Officer must always be involved with the selection and purchasing of equipment from the beginning of the process.
- 6.4 Before operation of any equipment, the equipment operator must signify that the equipment meets all expectations in their area(s) of concern.
- 6.5 The Safety and Regulatory Compliance Officer must be consulted during all phases of equipment installation and ensure that the equipment is safe and efficient to operate before permitting employees to operate it.
- 6.6 Once the Safety and Regulatory Compliance Officer has verified that installation is complete and that the equipment is safe to use, the equipment can be put into service.

7 Training

- 7.1 Under no circumstances is an employee permitted to operate any machinery or equipment until they have been properly trained.
 - 7.1.1 This requirement for proper training includes all new operators or users of machinery and equipment, regardless of claimed previous experience.
- 7.2 All personnel expected to use equipment during the course of their job must receive training.

8 Recordkeeping

- 8.1 Supervisors must ensure that all inspections are submitted to the Safety and Regulatory Compliance Officer.
- 8.2 The Safety and Regulatory Compliance Officer is responsible for maintaining records of inspections of machinery, tools, and equipment.
- 8.3 All training records must be maintained by the Safety and Regulatory Compliance Officer.

9 Program Evaluation

- 9.1 The Safety and Regulatory Compliance Officer is responsible for completing an annual evaluation of the policy and its associated processes.
- 9.2 The evaluation will include a review of reported accidents and of near misses to identify any areas in which additional safety measures need to be taken.

9.3 The purpose of the evaluation is to determine the effectiveness of the program.

9.4 This evaluation may include:

9.4.1 A walk-through of the area(s) in which machinery and powered tools are used.

9.4.2 Interviews with employees to determine whether they are familiar with the requirements of this program and if safety measures are being practiced.

10 Policy Revision History

- First draft of policy submitted by Finance and Administration on 3/14/2025.
- Reviewed and revised by Policy Coordinator with approval from Finance and Administration 4/11/2025.
- Final revisions applied by Policy Coordinator on 4/14/2025.
- Reviewed by Board of Trustees Policy Committee on 4/19/2025.
- Revised and updated by Finance and Administration on 4/23/2025.
- Submitted for full board review by Policy Coordinator on 4/23/2025.
- Approved by Lander University Board of Trustees on 5/6/2025.