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## **MACHINE GUARDING PROCEDURE**

### **Introduction:**

The Turtle Mountain School Division (The Division) recognizes the hazards and risks of moving parts of machinery; and that any machine part, function, or process which may cause injury must be safeguarded. The Division will inspect all equipment with moving parts and machinery for hazard, as per manufacturer's guidelines. A guard will be either purchased or manufactured, and properly installed for all machinery with moving parts, as per manufacturer's guidelines.

### **Definitions:**

**Point of Operation:** That point where work is performed on the material; such as cutting, shaping, boring, or forming of stock.

**Power Transmission:** Apparatus: All components of the mechanical system which transmit energy to the part of the machine performing the work. These components include flywheels, pulleys, belts, connecting rods, couplings, cams, spindles, chains, cranks, and gears.

**Other Moving Parts:** All parts of the machine which moves while the machine is working. These can include reciprocating, rotating, and transverse moving parts, as well as feed mechanisms and auxiliary parts of the machine.

**Lockout:** Where all control devices are locked in the inoperative position when machinery or equipment is shut down:

- For regular maintenance or repairs;
- When the nature of work may expose any worker to a potential hazard;
- When equipment or machinery is defective and is unsafe to be used.

### **Categories**

Dangerous moving parts are categorized in three basic areas: Point of Operations, Power Transmission Apparatus, and all Other Moving Parts. Refer to the Definitions section of this policy for more information on the areas.

### **EVALUATION AND INSTALLATION OF SAFEGUARDING EQUIPMENT**

1. Maintenance or Industrial Arts teachers will evaluate all new equipment or machinery purchased for safeguarding prior to it being put into operation.
2. Maintenance employees, with the assistance of Supervisors of the affected school or departments, will ensure that guards are properly installed and maintained for all equipment and machinery that is identified as requiring safeguarding. Machine and equipment guards shall be installed, maintained, and used as per manufacturer's specifications.
3. Maintenance/Industrial Arts staff will perform inspections of all guards as part of the Preventative Maintenance Program Policy.
4. Each user must ensure that the guards and tool rests are in place before using any power tools or equipment.



5. Should questions or concerns arise around a specific machine guarding application, staff shall consult The Division Health and Safety Officer or designate.

### **Elevator room specific guards**

1. In machine rooms and secondary machinery spaces, the following shall be guarded to protect against accidental contact:
  - a. Driving machine sheaves and ropes whose vertical projection upon horizontal plane extends beyond the base of the machine;
  - b. Sheaves;
  - c. Exposed gears, sprockets, tape or rope sheaves, or drums of selectors, floor controllers, or signal machines, and their driving ropes, chains, or tapes; and
  - d. Keys, keyways, and screws in projecting shafts.
2. Hand winding wheels and flywheels that are not guarded shall have yellow markings.

### **Removal and Replacement of Guards**

1. Maintenance employees are the only employees who shall remove safeguards for the purposes of maintenance and repair. This shall only be done after the correct lockout procedures are followed. (Refer to Lockout of Energy Devices). No guard must ever be removed for any other purpose than maintenance or repair.
2. Any safeguard removed for maintenance or repair must be reinstalled prior to the equipment or machinery being put back into service. The equipment or machinery must be tested for proper operation and to ensure that the guard is properly protecting the operator. All lockout procedures must be followed prior to placing equipment back into operation.
3. All employees, volunteers, and contractors must report immediately to Maintenance employees any equipment or machinery that has been identified as requiring safeguarding where the safeguard is missing or in disrepair. The equipment or machinery guarding must be reinstated or the equipment or machinery shall be locked out.
4. Any safeguards found missing or compromised during the Quarterly Inspection Process by the Workplace Safety and Health Committee must be brought immediately to the attention of a Maintenance employee and the Manager or Supervisor responsible for the specific equipment or machinery.

### **Consequences of Unauthorized Removal**

Any employee, volunteer, or contracted employee who removes a safeguard for any reason without the permission and supervision of the Maintenance Department may be subject to discipline, as per Disciplinary Action Policy.