

## 1. Purpose

The Catholic District School Board of Eastern Ontario (CDSBEO) shall permit only trained and authorized employees to operate machinery, tools, or equipment at any time. This procedure is applicable to:

- daily operators of machinery, tools, and equipment; and
- those who only occasionally have cause to use machinery, tools, or equipment.

This Pre-Start Equipment and Machine Guarding Safety Program describes methods and practices for care and use of machines, equipment, and tools that can be read and understood by all managers, supervisors, and employees of the CDSBEO. This program's intended use is to:

- create an awareness of the hazards among our employees,
- standardize procedures for use and care of the equipment,
- provide a consistent format for training employees on the proper procedures to be used,
- minimize the possibility of injury or harm to our employees, and
- ensure CDSBEO compliance with machine safety and equipment usage requirements.

This program is also intended to demonstrate the CDSBEO compliance with machine and tool safety requirements for construction/contractors.

## 2. Acronyms

CSA Z432 - Canadian Standards Association (electrical safety) CSA Z460 - Canadian Standards Association (electrical safety) OOHSA - Ontario Occupational Health and Safety Act

## 3. Administrative Duties

- a) The Occupational Health and Safety Department, along with the Plant and Maintenance Department, are responsible for developing and maintaining this written Pre-Start Equipment and Machine Guarding Safety Program and have authority to make necessary changes to ensure its success. The Plant and Maintenance Department Manager and Occupational Health and Safety Coordinator have the training and experience to oversee the machine/equipment safety program and conduct the required evaluations.
- b) This program will be reviewed any time there is a change in process or design of



equipment, or a new installation. Employees must contact the Plant and Maintenance Department or Occupational Health and Safety if changes are noticed that have not been documented. We encourage all suggestions since we are committed to creating a safe workplace for all our employees.

## 4. **Pre-operational Procedure**

- a) Hand tools shall be inspected by the operator prior to use to ensure that:
  - jaws are not sprung to the point of slippage on tools with jaws
  - impact tools are free of mushroom heads
  - tools with wooden handles must be free of splinters or cracks and secured tightly in the tool
  - that the tool is otherwise deemed safe to use
- b) Any machine or power-operated tool, function, or process that may cause injury shall be guarded. 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. Guards must meet these minimum general requirements:
  - i. Prevent contact The guards prevent hands, arms, or any part of an employee's or students' body or clothing from making contact with dangerous moving parts.
  - ii. Secure Guards must not be easy to remove or alter. Guards and safety devices must be made of durable material that will withstand the conditions of normal use and must be firmly secured to the machine.
  - iii. Protect from falling objects The guards ensure that no objects can fall into moving parts.
  - iv. Create no new hazards If a guard creates a hazard of its own such as a shear point, a jagged edge, or an unfinished surface which can cause a laceration, then employees or students must not use the piece of machinery or equipment and they must follow our Lockout/Tagout process (see administrative procedure Lockout/Tagout).
  - v. Location and installation of equipment must not create a hazardous condition.
  - vi. Equipment, when purchased, must be CSA approved or equivalent.
- c) If a guard is defective, damaged, or in any way does not meet the requirements of this procedure, employees and students may not use the machine, and must immediately notify Plant Maintenance and lockout/tagout the equipment.
- d) Where the operation of a machine or accidental contact with it can injure employees in the vicinity, the hazard is either controlled by lockout/tagout, or eliminated.



- e) Employees must locate and put on necessary and appropriate Personal Protective Equipment (PPE) for use with the machinery or equipment before beginning use. PPE can be obtained from your Supervisor/Manager. (See Administrative Procedure D1:14 Personal Protective Equipment)
- f) Employees must ensure that work areas are well lit, dry, and clean before beginning work. Sawdust, paper and oily rags are a fire hazard and can damage machinery and equipment and therefore must be cleaned up or removed prior to use.
- g) Employees must wear proper clothing (no long loose sleeves or long shirts) and remove jewelry to prevent entanglement in the machinery or equipment they are using. If hair is beyond shoulder length, it must be tied back.
- h) Only qualified personnel may install or repair equipment. Employees must notify the Plant and Maintenance Department if machinery or equipment is in need of repair.
- i) If a lock and tag is in place on a piece of machinery or equipment, it may not be removed and the machinery or equipment cannot be used.

## 5. **Operating Procedures**

- a) Employees may not remove a guard for any reason while operating any piece of machinery or equipment.
- b) All necessary Personal Protective Equipment (PPE) must be worn while the machinery or equipment is running.
- c) 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.
- d) Upon finishing with a piece of equipment, tool, or machine, basic maintenance must be performed. It must also be kept sharp, oiled, and stored properly, as appropriate.
- e) Problem equipment must be immediately entered into the work order for repairs or replacement.
- f) Employees must always use the proper piece of machinery or equipment for the job.
- g) Electric cables and cords are to be kept clean and free from kinks. Equipment should never be carried by its cord.



## 6. Training Program

- a) Under no circumstance will an employee operate a piece of machinery or equipment until he/she is confirmed as competent and approved to operate the machinery and equipment. This includes all new operators or users of machinery and equipment, regardless of claimed previous experience.
- b) This may include training and employee classroom instruction and operational training on each specific piece of machinery and equipment.
- c) The Human Resources Department will identify all new employees in the Employee Orientation Program and arrange with department management to schedule proper instruction for those employees who require training.

Training consists of:

- 1. Review of these written procedures by employee.
- 2. Review of equipment operating manuals.
- 3. Standard operating procedures (SOP) for each piece of equipment or tool the employee is expected to operate.
- 4. D1:14 Personal Protective Equipment administrative procedure.
- 5. Review general safety training videos.
- 6. Successful completion of examination.
- d) The Human Resources Department along with Occupational Health and Safety is responsible for scheduling the employee with department management to complete the practical operational training program after successful completion of the classroom training. The Supervisor/Manager is responsible for training a designated Operations Trainer in their department/area.

## 7. New Equipment Pre-start Inspection Procedures

The procedures in this section are required at the following times:

- 1. during and after the installation of new equipment
- 2. during and after the rearrangement of existing equipment into a new layout
- 3. during the relocation of existing equipment
- a) While work is in progress on installation of new equipment, the following departments, in charge of specific expertise, must be involved from the beginning to the end of the installation process: Plant and Maintenance, Engineering, and Occupational Health and Safety. Corrections that need implementation during the installation will be completed as needed.



- i. Before operation of the equipment in the workplace, all specialty departments must signify that the equipment meets all expectations in their area of concern.
- b) Plant and Maintenance is accountable for all phases of installation and for ensuring equipment is safe and efficient to run before letting employees operate.
- c) Once Plant and Maintenance has verified completion, the equipment can be placed into service.

## 8. Inspections

- a) Machinery, tools, and equipment will be inspected regularly to ensure safety and serviceability. Contractor, classroom instructor and/or JHSC representatives will do the inspections. The inspections will take place according to the following schedule:
  - 1. Regular monthly shop inspection
  - 2. The Board may choose to hire an outside contractor for periodic audits.

## 9. Recordkeeping:

- a) The Plant and Maintenance Department is responsible for maintaining records of their departmental inspections of machinery, tools, and equipment. School Operations will keep their own records on file. Occupational Health and Safety will keep annual audits by contractor and inspections performed by the JHSC.
- b) Occupational Health and Safety and Human Resources Departments maintain records in employee training files of individuals trained and certified for machinery and equipment.

## 10. Disciplinary Procedures

a) Constant awareness of and respect for machine, tool, and equipment safety procedures and compliance with all safety rules are considered conditions of employment. Supervisors/Managers and individuals in the Human Resources Department reserve the right to issue disciplinary warnings to employees for failure to follow the guidelines of this machine, tool, and equipment safety program.

## 11. Program Evaluation



- a) Occupational Health and Safety is responsible for evaluating and updating the Prestart and Machine Guarding Program. An evaluation will include a review of reported accidents, as well as near misses, to identify areas where additional safety measures need to be taken.
- b) The JHSC will also conduct a periodic review to determine the effectiveness of the program. This review may include:
  - 1. a walk-through of the department
  - 2. interview with employees during inspections to determine whether they are familiar with the requirements of this program and if safety measures are being practiced
  - 3. a review of the written program every 3 years