



Safe Work Practices

Board Received: October 26, 2015

Review Date: November 2019

Policy Statement

The Grand Erie District School Board is committed to preventing occupational illness and injury to staff by implementing and maintaining a safe and healthy working and learning environment. In support of this commitment the following Operating Standards will be followed by all Grand Erie Staff and contractors.

- Operating Standards FS - 11 Hot Work and Hot Work Permits
- Operating Standards FS - 12 Lockout, Tagging and Test
- Operating Standards FS – 13 Working on Live Electrical
- Operating Standards FS - 14 Restricted and Confined Space

Operating Standards are posted on the Grand Erie Portal under >Departments >Facilities Services>Resources for Facilities >FS Standard Operating Procedures (SOP)

Where an employee fails to comply with this Policy or respective Operating Standards, the Board’s progressive discipline Procedure HR119 will be applied.

Accountability:

1. Frequency of Reports – As needed
2. Criteria for Success – Workplace safety is enhanced

Operating Standards - Hot Work and Hot Work Permits

“hot work” is defined as any welding, cutting, grinding, application of torched on roofing materials or any other activity involving open flames, sparks or other ignition sources, which may cause smoke or fire or which may trigger detection systems.

- This Operating Standards applies to all personnel (including contractors) who are involved in construction and maintenance activities and/or who may be involved in “hot work” activities at any Grand Erie District School Board site.
- If the hot work can be performed outside the facility, a hot work permit will not be required. However, if hot work is performed inside of a facility or on the roof of a building, a hot work permit is required and must be approved prior to the start of work. If determined necessary by the appropriate Supervisor during pre-inspection, a manned fire watch may also be required.

RESPONSIBILITIES

Division Managers

The responsibility for compliance with the Grand Erie hot work permit program rests with the Division Managers. It is their responsibility to ensure that the hot work permit program is carried out within their area of authority.

Supervisors, Project Coordinators, Project Managers

Supervisors, Project Coordinators, Project Managers have the authority to authorize a hot work permit. It is their responsibility to ensure that:

- Individuals working under their direction are trained and understand the applicable provisions of the hot work program and that all requirements of any hot work permit is fulfilled before work is performed.
- An approved Hot Work Permit is completed prior to the commencement of any hot work.
- A completed copy of the Hot Work Permit is returned upon completion of the work.
- Properly trained fire watchers are assigned when required by the Hot Work Permit.

Hot Work Site Pre-Inspection

It is the responsibility of the individual having supervisory responsibility over the work being done to perform a pre-inspection of the area where work is to be done. They are required to:

- Assess the risks associated with the work area, i.e. whether the work area is cluttered, houses combustible materials or flammable liquids.
- Determine whether additional safeguards may be required.
- Determine whether a fire watch is necessary.

Individuals Performing Hot Work

Individuals are responsible for:

- Obtaining an approved hot work permit from the appropriate supervisory personnel for the hot work to be conducted on Grand Erie property or from their supervisor for hot work conducted in shop areas.
- Ensuring that conditions are safe before commencing the hot work.
- Ensuring that the hot work permit is posted in a conspicuous area at the work site.
- Being prepared to contact supervisory personnel should conditions change or warrant reassessment during the hot work project.
- Using appropriate personal protective equipment (PPE) while performing hot work (welding helmets, gloves, jackets, etc.).

Fire-watchers

Fire-watchers are responsible for:

- Being aware of the inherent hazards involved in the hot work.
- Ensuring that safe conditions are maintained during the hot work.
- Ensuring that appropriate fire extinguishers are readily available.
- Knowing how to report a fire or other emergency situation.
- Maintaining the watch for at least 60 minutes after the work is completed.
- Using the appropriate personal protective equipment (PPE)
- Completion of the appropriate sections of the hot work permits.
- Returning the completed hot work permit to the person who issued the permit

Managers

Managers shall be responsible for:

- Establishing designated areas for welding, cutting, brazing and torch soldering and grinding operations where the potential fire danger is limited.
- At the manager’s discretion, hot work conducted in these areas may occur under a general hot work permit, to be reissued monthly.
- Establishing procedures for hot work in other areas.
- Designating at least one trained individual responsible for issuing the hot work permit in areas not specifically designed for such operations.
- Requiring supervisors and employees performing hot work to be suitably trained in the safe operation of the equipment.
- Advising all contractors about flammable materials or hazardous conditions of which they may not be aware in areas where they will be working.

Supervisors and or Facility Staff coordinating projects

Supervisors and or Facility Staff coordinating projects are responsible for:

- Maintaining cutting or welding equipment in a safe operating condition.
- Obtaining a Hot Work Permit for any cutting, welding, brazing, torch soldering, grinding or open flame, heat or spark producing operations occurring outside of the designated area(s).
- Ensuring the precautions listed on the Hot Work Permit are understood by the person(s) performing the permitted cutting, welding or brazing operations.
- Informing outside contractors and service personnel of the expectation that they will follow all OSHA requirements.
- Verifying that outside contractors have a Hot Work Permit if one required is for the work being conducted.

Training and Review

All employees who are required to perform hot work shall be trained on Operating Standards Hot Work and Hot Work Permits. At least once per year this procedure shall be reviewed with each employee. The training and review of the procedure will be documented on a form entitled “Hot Work and Hot work Permit Review”.

The form will be signed and dated by both parties and is to be retained for a period of 2 years as a record by the employee’s supervisor.

Operating Standards Lockout, Tagging and Test

Where the starting of a machine, transmission machinery, device or thing may endanger the safety of a worker,

1. control switches or other control mechanisms shall be locked out, and
2. other effective precautions necessary to prevent such starting shall be taken

Responsibility:

This Operating Standards shall be followed by all employees and contractors.

Each employee is responsible for his/her own safety. No employee shall rely on someone else for lockout protection.

Each employee performing work that requires locking-out shall apply his/her own safety lock to each source of power. If more than one employee is working on the equipment, each employee shall apply his/her own lock, e.g. one employee – one lock; three employees – three locks; five employees – five locks, etc. ON EACH POWER SOURCE.

Training and Review

All employees who are required to lock out a machine or piece of equipment shall be trained on the lockout procedure. At least once per year this procedure shall be reviewed with each employee. The training and review of the procedure will be documented on a form entitled “Lockout Procedure Review”.

The form shall provide:

- Identification of the employee,
- Equipment checklist,
- Space for the supervisor’s and employee’s remarks.

The form will be signed and dated by both parties and is to be retained for a period of 2 years as a record by the employee’s supervisor.

Operating Standards Working on Energized Electrical Equipment

This procedure will apply during any work on, testing, troubleshooting or verification that involves exposed energized electrical parts where a person, their tools, or test probes could come into contact with power.

No Grand Erie District School Board employee will carry out work on exposed energized equipment except for the purpose of testing, troubleshooting or verification.

Responsibility

It is the responsibility of any person assigned to test, verify, troubleshoot or otherwise work on any exposed energized electrical equipment to comply with the Operating Standards Working on Energized Electrical Equipment

For all other work on electrical equipment the Operating Standards Lockout, Tagging and Test will be followed to ensure the equipment is de-energized.

Management will

- allow only qualified employees to perform work on or near exposed live equipment
- provide suitable personal protective equipment and departmental devices to ensure full compliance with these procedures
- provide and ensure regular testing of protective gloves in accordance with applicable standards and good industry practices
- maintain documentation of glove assignment and testing
- provide training including a copy of this procedure to employees who are required or likely to require them to work on or perform testing, verification or troubleshooting on live exposed electrical equipment, the training shall be specific to this procedure.
- maintain documentation of above training

Person in Charge will:

- ensure energized electrical work practices are followed

- inform employees of known energy sources, voltages and the required protection procedures when assigning work
- apply appropriate corrective action when these work practices are not followed
- report violations of these procedures to the facility services supervisor

Qualified Employee will:

- follow the Procedure at all times when working on exposed live electrical equipment
- use any personal protective equipment required by this procedure
- use only approved meters as specified in this procedure under Testing Equipment and Tools
- inform the project supervisor of any problems or concerns related to the procedures immediately
- inspect voltage rated rubber gloves prior to every use
- report any damage or events such as arcs or flash that may affect the performance of meters, gloves or other safety equipment
- ensure any damaged equipment shall be put out of service, and the supervisor shall be informed and related work discontinued
- sign-off that they have received a copy of the Operating Standards Electrical Safety and understand it
- apply the Operating Standards Lockout, Tagging and Test when possible instead of working on exposed energized equipment.

Training

Training will be provided to all staff as required who will be testing, troubleshooting or verifying on exposed energized electrical equipment. In addition all Persons in Charge shall receive training.

Only employees who have successfully completed the training program will be considered qualified to apply this Procedure. Only qualified personnel who have been trained in their use may use electrical test equipment and special tools.

Training in the procedures above will be provided to;

- Electricians and apprentice electricians
- HVAC Technicians
- Persons in Charge
- Others as determined by the Grand Erie District School Board

The content of the training will include the;

- applicable legislation and codes
- hazards likely to be encountered working on energized electrical equipment
- Safe Work Practices
- Use of gloves and other PPE
- inspection and maintenance of gloves and other PPE
- common errors and misconceptions
- correct application and use of meters and tools
- limitations of meters and tools
- inspection of the meters and tools
- understanding of instrument indication or information provided
- proper inspection, maintenance and storage of meters and tools

Successful completion of training requires;

- Full attendance of the course with no interruptions or temporary absences
- Completion and passing of a comprehension test at the end of the course
- The Instructor is satisfied the participant has learned and understood the procedures
- A certificate of training will be signed and dated by both parties and is to be retained for a period of 2 years as a record by the employee's supervisor

Operating Standards Restricted and Confined Space

Board employees are **PROHIBITED** from entering confined space areas, these spaces will **ONLY** be entered by trained contractors.

Contractors are required to develop and implement their own Confined Space program, along with specific entry and rescue plans, which meet the criteria set out in Ontario's Occupational Health and Safety Act and its Regulations. Contractors are responsible for ensuring that their workers have been properly trained in entering Confined Spaces as well as any specific plans that may exist in accordance with the Act. This shall include the potential hazards, precautionary measures, use and maintenance of required personal protective equipment and rescue techniques. Written procedures shall be developed and posted. The Contractor is responsible for ensuring that workers understand and abide by these procedures and that permits are used.

Authorized Board employees will **ONLY** be allowed to enter a restricted space as long as **NO** hot work activity is being conducted.

Definitions:

“confined space” means a fully or partially enclosed space:

- (a) that is not both designed and constructed for continuous human occupancy, **and**
- (b) in which atmospheric hazards may occur because of its construction, location or contents or because of the work that is being done in it.

If you have a space that is fully or partially enclosed, the two conditions - (a) and (b) above - must both apply before the space can be considered a “confined space”.

“restricted space” means a tank, vat, vessel, duct, vault, boiler or other space from which egress of a worker is restricted, limited or impeded because of the construction, design, location or other physical characteristics of the space.

Restricted spaces are designated where access and/or egress to or from the space was limited or restricted but where the hazardous atmosphere characteristics of a confined space (given in Section 1 of Regulation 632) were not fulfilled. If a task is performed in a restricted space that changes the character of the atmosphere so as to render it hazardous (welding, chemical or solvent based product use) **RESTRICTED** spaces must be treated as confined spaces

“assessment” means an assessment of hazards with respect to one or more confined or restricted spaces in a workplace or at a project.

“atmospheric hazards” means any of the following, in isolation or in combination:

- (a) an oxygen content in the atmosphere that is less than 19.5 percent or more than 23 percent by volume; or
- (b) the accumulation of flammable, combustible or explosive agents; or
- (c) the accumulation of atmospheric contaminants, including gases, vapours, fumes, dusts, or mists, that could,
 - (i) result in acute health effects that pose an immediate threat to life, or
 - (ii) interfere with a person's ability to escape unaided from a confined space.

“cold work” means work that that is not capable of producing a source of ignition.

“competent person” means a person who,

- (a) is qualified because of knowledge, training and experience to organize the work and its performance,
- (b) is familiar with the Act and the regulations that apply to the work, and
- (c) has knowledge of any potential or actual danger to health or safety in the workplace.

“**competent worker**” means a person who,

- (a) is qualified because of knowledge, training and experience to perform the work; and
- (b) is familiar with the Act and with the provisions of the regulations that apply to the work; and
- (c) has knowledge of all potential or actual danger to health or safety in the work.

“**emergency work**” – means work performed in connection with an unforeseen event that involves an imminent danger to the life, health or safety of any person.

“**hot work**” any work or operation involving open flames or producing heat and/or sparks including welding, soldering, cutting, brazing, grinding, use of asphalt/tar kettles, operation of electrical tools (corded and battery powered).

“**Supervisor**” – means a person who has charge of a workplace or authority over a worker.

“**worker**” means a person who performs work or supplies services for monetary compensation.

Responsibilities:

The Grand Erie District School Board – Shall be responsible to:

- ensure that every precaution reasonable in the circumstances is being taken to protect the health and safety of a worker with respect to restricted space entry;
- pre-qualify any contractors that are required to perform confined space entry or related work;
- ensure that all restricted and confined spaces are competently identified and assessed, this includes assessments in new buildings and new additions as required;
- maintain an inventory list of the locations of all restricted spaces within the Board and annually review the inventory and update as necessary;
- ensure no worker enters into a confined space

Facility Services Manager or Designate – Shall be responsible to:

- Implement and coordinate the restricted space program
- Ensure Supervisors and staff have completed necessary training and are adhering to this restricted Space Program;
- Ensure all areas within their departments that meet the definition of a restricted space are identified;
- Develop and maintain departmental/divisional restricted space entry procedures which are consistent with this Program.

Facility Services Division Managers and Supervisors Have the authority to authorize a restricted space entry

Shall be responsible to:

- Ensure workers do not enter confined spaces
- Ensure that only authorized employees enter restricted spaces
- Ensure an adequate hazard assessment is conducted of each potential restricted space;
- Ensure that the hazard assessment is reviewed as often as is necessary to ensure that the relevant plan remains adequate;
- Ensure adequate measures to control hazards identified in the hazard assessment are identified and implemented;
- complete the necessary job site training to any new, or untrained, or transferred worker as per this program, and that appropriate training records of such are maintained;

Workers– The worker shall be responsible for ensuring that:

- they do not enter a confined space,
- they complete only work and activities in a restricted space that are permitted,
- they are fully aware of the contents of this program
- any hazard, potential hazard, contravention of this program, Occupational Health and Safety Act, or its Regulations that they are aware of is immediately reported to their supervisor;

Health and Safety Officer – Shall:

- monitor legislative changes impacting this procedure

Training Requirements:

General Training

All positions named need to be made aware of their responsibilities under this procedure.

Training for supervisors and workers required to implement restricted space entries or perform related work shall contain a minimum of the following elements:

- recognition, definition, and identification of a restricted space;
- safe work practices to be followed for working in restricted spaces and for performing related work;

Supervisors are responsible to identify workers in need of training. Training will be a departmental expense. Records of qualification of the trainer and copies of the training program will be maintained by Facility Services Staff.

A training review will be conducted on an annual basis to ensure that restricted space training is adequate. Where the review determines that training is not adequate, additional training will be provided. Additional retraining shall also be conducted whenever a periodic inspection reveals, or whenever there is reason to believe that there are deviations from or inadequacies in the workers knowledge or compliance with the restricted space program.

Refresher training for restricted space supervisors and workers or workers performing related work will be re-assessed annually or whenever there is a change in their job assignments requiring training, or a change in condition, equipment or processes that presents a new hazard, or when there is a change in the restricted space program. Every worker must successfully complete this course.

A certificate of training will be signed and dated by both parties and is to be retained for a period of 2 years as a record by the employee's supervisor

Identification

Method for Restricted Space Identification

The Grand Erie District School Board requires that:

- Confined Spaces and Restricted Spaces encountered on Grand Erie District School Board property or by Grand Erie District School Board workers, contractors, or sub-contractors must be identified in a restricted and confined space inventory. Inventory will be reviewed on an annual basis and updates made as new locations are created.
- Placards will be placed on all areas clearly identifying Confined space area as “ DO NOT ENTER CONFINED SPACE” , Restricted space area will be clearly identified as “Restricted Space - Entry by authorized personnel only”
- Workers will be trained in accordance with this identification.