| Policy Name: Hot Work Policy | Policy No: S101-XX |
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| Committee approval date: | - |
| Council approval date: | - |
| Revision date(s): | - |
| Department/Division: | Health and Safety |

## 1. Purpose

This policy will ensure that a consistent approach is adopted and all appropriate safeguards are enacted to protect employees who must perform hot work.

## 2. Policy Statement

The Town of Pelham will take every reasonable precaution to safeguard employees performing hot work.

## 3. Definitions

**Hot Work**: Work that could produce a source of ignition, such as a spark or open flame. Examples of hot work include welding, cutting, grinding and the use of non-explosion proof electrical equipment.

**Hot Work Permit**: Written authorization to preform works capable of providing a source of ignition.

**Spotters**: An employee whose role is to be attentive to the possibility of any health and safety dangers as a result of hot work.

## 4. General Provisions

A Hot Work Permit may be required prior to engaging in any work activity that uses or produces flames, sparks, or heat that could act as an ignition source for any flammable or combustible material, at the discretion of the assigning supervisor or project coordinator.

Situations which warrant hot work permits include (but not limited to) industrial welding, cutting, torch work, and grinding inside combustible structures and confined spaces.

Supervisors and employees are responsible for identifying and controlling workplace hazards before hot work is performed.

Prior to engaging in hot work, supervisors and staff must ensure that the following precautions have been met:

- Ensure that all equipment is in good operating order before work starts.
- Inspect the work area thoroughly before starting. Look for combustible materials in structures (partitions, walls, ceilings).
- Sweep clean any combustible materials on floors around the work zone. Combustible floors must be kept wet with water or covered with fire resistant blankets or damp sand.
- Use water only if electrical circuits have been de-energized to prevent electrical shock.
- Combustible materials shall be removed to a safe distance (minimum of 11m) or protected with fire resistant blankets or shields.
- Protect natural gas lines and equipment from falling sparks, hot materials and objects.
- Block off cracks between floorboards, along baseboards and walls, and under door openings, with a fire resistant material. Close doors and windows.
- Cover wall or ceiling surfaces with a fire resistant and heat insulating material to prevent ignition and accumulation of heat.
- Inspect the area following work to ensure that wall surfaces, studs, wires or dirt have not heated up.
- Vacuum away combustible debris from inside ventilation or other service duct openings to prevent ignition. Prevent sparks from entering into the duct work. Cover duct openings with a fire resistant barrier and inspect the ducts after work has concluded.

**Protective Equipment**

- Protect your face from UV radiation by wearing a tight-fitting, opaque welder's helmet, resistant to impact, heat and electricity.
- Protect the back of your head by using a hood.

- Wear pants and long-sleeved shirts with buttoned cuffs and a collar to protect the neck.
- Wear high top boots fully laced to prevent sparks from entering into the boots.
- Remove all ignition sources such as matches and butane lighters from pockets. Hot welding sparks may light the matches or ignite leaking lighter fuel.
- Wear gauntlet-type cuff leather gloves or protective sleeves of similar material, to protect wrists and forearms. Leather is a good electrical insulator if kept dry.
- Direct any spark spray away from your clothing.
- Wear layers of clothing. To prevent sweating, avoid overdressing in cold weather. Sweaty clothes cause rapid heat loss. Leather welding jackets are not very breathable and can make you sweat if you are overdressed.
- Wear a fire-resistant skull cap or balaclava hood under your helmet to protect your head from burns and UV radiation.

**Controls of Hot Work**

The following guidelines should be followed to prevent hot work-related disorders:

**Engineering Controls**

Control measures ensuring the space must be purged and continuously ventilated to maintain an atmosphere of less than 5% of the LEL and maintain an oxygen concentration of less than 23%. As a precautionary measure, the Town of Pelham requires the presence of fire prevention equipment (e.g. fire extinguisher or bucket of water) in the immediate vicinity of the performance of hot work duties.

**Spotters**

The Town of Pelham requires that all employees engaged in the performance of hot work duties work with a spotter to ensure their ongoing safety. The spotter will be responsible for quickly responding to any emergent situations that may potentially threaten the health and safety of the employee performing hot work duties.

**Acclimatization**

Employees need to adapt to new temperatures and exposure to chemicals. A flexible schedule can be arranged on an "as needed" basis.

### Work Conditions

An alarm system and exit procedure is in place to provide adequate warning and allow safe escape if the levels of 5% LEL or 23% oxygen are exceeded. It is good practice to incorporate a safety factor that provides for adequate warning should the levels be approached.

### Personal Protective Equipment

During work in hot environments and with hot chemicals, workers should use protective garments for adequate protection. This may includes CSA-approved safety glasses, CSA Grade 1 safety boots, long trousers, long-sleeve shirts, CSA-approved hard hats, and any other specialty PPE required for the job site

## 5. Attachments

1) Hot Work Permit