WELDING/FLAMMABLE MATERIALS POLICY

[Organization Name] will take all necessary steps to ensure the health and safety of its employees who work with flammable materials or welding equipment as part of their job duties. This policy will outline the requirements that must be satisfied according to the Canadian Standards Association (CSA), and the *Alberta Occupational Health and Safety Act,* regulations, and code.

SCOPE

This policy applies to all employees of [Organization Name] who work with flammable materials or perform welding/allied processes.   
  
POLICY   
  
[Organization Name] will uphold all requirements set out in the Canadian Standards Association (CSA) and the Alberta *Occupational Health and Safety Act,* regulations and Code to ensure all employees and managers are provided with information and safety protocols for the safe usage of welding equipment and flammable materials.   
  
Employer Responsibilities

* If the work area is classified as non-hazardous, an employer must ensure that flammable substances stored or used at the work area:
* will not be in sufficient quantity to produce an explosive atmosphere if inadvertently released
* are not stored within 30 metres of an underground shaft
* are not stored in the immediate vicinity of the air intake of a ventilation supply system, an internal combustion engine, or the firebox of a fired heater or furnace.
* The employer must ensure that flammable substances are stored only in containers approved to CSA Standard B376‑M1980 (R2008), Portable Containers for Gasoline and Other Petroleum Fuels.
* If a workplace hazard assessment classifies the work area as hazardous, the employer must ensure:
  + a professional engineer, or a competent person authorized by a professional engineer, divides and classifies the work area in accordance with section 18 of the Canadian Electrical Code and,
  + adequate documentation is prepared and maintained by a competent person, outlining the boundaries of the classified area and any specific measures to be taken to prevent the unintentional ignition of an explosive atmosphere.
* If an area is considered hazardous, the employer must ensure that equipment used will not ignite a flammable substance, and static electricity is controlled.
* If a work area is considered hazardous, the employer must ensure that the boundaries of the hazardous location are clearly identified to warn workers of the nature of the hazards associated with the presence of the flammable substance in that work area, or fenced off to prevent workers or equipment from entering the area without authorization.
* The employer must ensure that all safety equipment and personal protective equipment (PPE) is provided to employees and employees are supervised wearing their PPE appropriately at all times while working.
* If reasonably practicable, an employer must ensure that procedures and precautionary measures are developed for a hazardous location that will prevent the inadvertent release of

a flammable substance or oxygen gas if it can contact a flammable substance.

* The employer is responsible for ensuring that all necessary safety equipment and safeguards are in place and in good working order.
* An employer must ensure that open flames from flare pits, flare stacks or flares are not less than 25 metres beyond the boundary of a hazardous location.
* An employer must ensure that a gas or oil fired furnace is designed, operated, monitored, controlled and maintained in a manner that minimises the possibility of internal explosion of the fire box.
* Employers must ensure that hot work is not begun until a hot work permit is issued that indicates the nature of the hazard, the type and frequency of atmospheric testing required,

the safe work procedures and precautionary measures to be taken, and the protective equipment required.

* Employers must ensure that hot work is not begun until the hot work location is

cleared of combustible materials, or suitably isolated from combustible materials,

procedures are implemented to ensure continuous safe performance of the hot work, and testing shows that the atmosphere does not contain a flammable substance, in a mixture with air, in an amount exceeding 20 percent of that substance’s lower explosive limit for gas or vapours, or the minimum ignitable concentration for dust.

* An employer must comply with the requirements of CSA Standard W117.2‑06, Safety in Welding, Cutting and Allied Processes.
* An employer must ensure that welding or allied process equipment is erected, installed, assembled, started, operated, used, handled, stored, stopped, inspected, serviced, tested, cleaned, adjusted, carried, maintained, repaired and dismantled in accordance with the manufacturer’s specifications.
* An employer must ensure that, before a welding or allied process is commenced, the area surrounding the operation is inspected and all combustible, flammable or explosive material, dust, gas or vapour is removed, or alternate methods of rendering the area safe are implemented.
* An employer must ensure that if a leak of the gas supply develops during gas welding or an allied process, the supply of gas is immediately shut off by the worker performing the welding or allied process, and the work is not resumed until the leak is repaired.
* An employer must ensure that welding services provided from vehicles comply with CSA Standard W117.2‑01, Safety in Welding, Cutting and Allied Processes.
* An employer must ensure that a storage compartment on a vehicle from which welding services are provided is certified by a professional engineer as meeting the requirements of the Alberta OHS Code.

Employee Responsibilities

* All employees are to follow manufacturer’s instructions in the use, care, storage, inspection and maintenance of all welding equipment and flammable materials.
* Employees must never smoke in a work area where a flammable substance is stored, handled, processed or used.
* Employees must not use open flames in a work area where flammable substances are stored, handled, processed or used.
* Employees must ensure that all flammable materials and substances are kept away from possible sources of ignition and are not exposed to cross contamination with any other substances.
* Employees must ensure that they are wearing appropriate personal protective equipment at all times where necessary and that their clothing/PPE is not contaminated with a flammable substance.
* Employees must ensure that they are aware of all safety procedures and emergency protocol(s).
* Employees must prioritise their own safety precautions and the safety precautions related to their team and the general environment.
* Employees must ensure that flammable substances are not at risk of ignition in hazardous locations.
* Employees should never perform hot work in hazardous locations or in explosive atmospheres.
* Employees must ensure that compressed or liquefied gas containers are used, handled, stored and transported in accordance with the manufacturer’s specifications.
* Employees must ensure that sparks, flames or other sources of ignition are not allowed to come in contact with gas cylinders, regulators or hoses of a compressed or liquefied gas system.
* Employees must ensure that all necessary safety equipment and safeguards are in place prior to beginning work.
* If a welding or allied process is performed above an area where other people may be present, the employee must ensure that adequate means are taken to protect the people below the operation from sparks, debris and other falling hazards.
* Employees who operate an electric welding machine must not leave the machine unattended without removing the electrode.
* Employees must not insert or remove a compressed gas cylinder from a storage compartment by holding the valve or valve protection cap.
* If a welding service vehicle is not in service for any reason, an employee must:
* Close the compressed gas cylinder valves,
* Remove the regulators if they are not integral to the cylinders, and
* Put on and secure the valve protection caps or plugs.