

# A Safe Workplace

## A Workplace Safety and Health Manual for Your Community

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		Approved By: Harvey Bostrom
Subject: G-14	Oxygen and Acetylene Leak Test	Effective: April 01, 2005
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Refer to part 17 Welding and Allied Processes of *The Manitoba Workplace Safety and Health Act and Regulations* and CSA Standards W117, 2-01 (R2006), Safety in Welding, Cutting and Allied Processes.

**PPE Required:** Leather gloves, steel toe boots

### Equipment Required:

Soapy water (nonfat soap) or approved leak test solution, fire extinguisher of suitable type as per MSDS label.

### Testing Oxygen Connections:

1. Make sure torch oxygen valve is closed.
2. Turn pressure-adjusting screw on the oxygen regulator to normal working pressure.
3. Stand to one side and slowly open the oxygen cylinder valve. Watch the pressure rise gradually on the cylinder contents gauge. Sudden opening of the cylinder valve may damage the regulator or lead to a fire.
4. Set regulator to pressure recommended by supplier.
5. Check regulator for an increase in the reading (creeping) on the outlet pressure gauge. If it creeps, close the cylinder valve. Any drop in pressure reading indicates a leak between the cylinder and the torch valve.
6. Check for leaks using soapy water or leak test solution brushed on all connections and entire length of hoses. The solution will bubble wherever there is a leak.
7. Once all leaks have been corrected, re-open the cylinder valve slowly.

### Testing Acetylene Connections:

Repeat steps 1-7 except, in step 2, set the pressure adjusting screw on the acetylene regulator to produce a pressure of about 69kPa (10psi).