## Likely Risk Issue

<table>
<thead>
<tr>
<th>Likely Risk Issue</th>
<th>Who/what may be harmed?</th>
<th>What is the Rate Level?</th>
<th>What Risk Control Action Needs To Be Taken?</th>
<th>Time Frame</th>
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</table>
| Damage to eyes from welding flash | Operators, Participants, Spectators | Severity of Risk (S): 3 Likelihood of Risk (L): 2 Overall Risk (S x L)= 6 MEDIUM | • Welding mask with correct grade lens must be worn  
  • Where practical suitable partitions to be placed around work area  
  • Safety glasses to be worn  
  • Other persons inside work area must wear similar eye protection | Every hire |
| Slipping Hazard                   | Operators, Participants | Severity of Risk (S): 3 Likelihood of Risk (L): 1 Overall Risk (S x L)= 3 LOW | • Ground in work area to be free of obstructions  
  • Ground to be checked for any grease or liquid spills  
  • Safety footwear to be worn and care taken to prevent slips and trips  
  • Work area to be clear of any obstructions which will might cause interruptions to welding operation  
  • Any other work participants to follow same requirements | Every hire |
| Burns injuries                    | Operators, Participants | Severity of Risk (S): 3 Likelihood of Risk (L): 2 Overall Risk (S x L)= 6 MEDIUM | • Gloves to be worn to prevent burns to hands and lower arm  
  • Long sleeve clothing to be worn  
  • Welding apron with correct grade protection to be worn  
  • Welded material to be allowed to cool down before handling  
  • Any other work participants to follow same requirements | Every hire |
| Noxious fumes or flames           | Operator, Participants  | Severity of Risk (S): 3 Likelihood of Risk (L): 3 Overall Risk (S x L)= 9 HIGH | • Operator to ensure that work pieces are to be free of any oils or other flammable materials before welding occurs.  
  • No flammable materials or liquids to be near the welding area  
  • Gas hoses to be checked for any damage before starting welding  
  • DO NOT USE IF ANY SUSPICIOUS DAMAGE IS EVIDENT  
  • ENSURE FLINT LIGHTER IS READY TO USE BEFORE TURNING ON GAS  
  • TURN ON ACETYLENE GAS FIRST AND LIGHT IT BEFORE TURNING OXYGEN ON (Refer to operating instructions)  
  • Gas hoses to be well clear of weld splatter at all times  
  • Ensure weld area is well ventilated  
  • Operator to be aware of proximity of a fire extinguisher  
  • ENSURE WELD TORCH VALVES AND GAS REGULATORS ARE CORRECTLY CLOSED WHEN WELDING/CUTTING COMPLETED | Every hire |

### Calculation of Risk Evaluation

**Severity of Risk (S)** is judged by evaluating the effects of the hazard if the risk occurs. This is evaluated as Minor = 1, Major = 2, Serious = 3

**Risk Likelihood (L)** - The likelihood of the harm occurring is evaluated on the basis of: Unlikely = 1, Possible = 2, Likely = 3

**Overall Risk** is calculated by multiplying the figure for Severity (S) and Likelihood (L). The overall risk figure calculated is related to the Risk Level of either Low: 1 to 3; Medium: 4 to 6 or High: 7 to 9

**NB** This is a generic risk assessment only. It is advisable to carry out a site-specific assessment prior to using this equipment.
The instructions recommended within this document apply to normal risk conditions. If the Oxy Welding Cutting Equipment is to be operated in a dangerous or hostile environment, the user/client is responsible for conducting an appropriate risk analysis and applying suitable controls to mitigate those additional risks.

This instruction should be read in conjunction with the Risk Assessment procedure for Oxy Welding/Cutting Equipment

GENERAL SAFETY
- Safety glasses must be worn at all times in work area.
- Appropriate footwear with substantial uppers must be worn.
- Long and loose hair must be contained.
- Close fitting/protective clothing must be worn.
- A welding mask with correct grade lens for GMAW must be worn.

POTENTIAL RISKS
- Burns & flying sparks
- Fumes, flashbacks and explosion from gas leak
- Radiation damage to eyes

TRANSPORT OF OXY WELDING/CUTTING EQUIPMENT
- Ensure unit is firmly tied down on transport vehicle without damaging unit, gas fittings & hoses

BEFORE STARTING
- Ensure no slip/trip hazards are present in work spaces and walkways
- Keep work area clean and free from grease, oil and other flammable material
- Gas hoses must be in good condition and not create a tripping hazard
- Make a visual inspection of all equipment for any damage before lighting
- FAULTY EQUIPMENT MUST NOT BE USED. IMMEDIATELY REPORT SUSPECT EQUIPMENT
- Check that area is well ventilated

PRESSURE SETTING
- Check that oxygen and acetylene regulator adjusting knobs are loose
- Check that both blowpipe valves are closed
- Slowly open cylinder valves on each cylinder for a half turn only
- Purge and check for constant gas flow

LIGHTING UP
- Open acetylene blowpipe slightly and light the blowpipe with flint lighter only
- Continue to open acetylene valve until flame no longer produce soot
- Slowly open oxygen blowpipe valve until a neutral flame is produced

SHUTTING OFF BLOWPIPES
- Close acetylene blowpipe valve first and then close oxygen blowpipe valve
- Loosen both regulator adjusting knobs
- Open acetylene blowpipe valve first until gauge reads zero to allow gas to drain out then close valve. Open oxygen blowpipe valve until gauge reads zero to allow gas to drain out then close valve.

INSPECTION AND MAINTENANCE
- Make a visual inspection of all equipment for any damage before use

The above instructions must be followed at all times. If any of the instructions are not possible, contact the site supervisor for an assessment of any safety requirements.