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| Site / Area: | | |  | | Date of Assessment | | |  | | Risk Assessment # | | **064RA** |
| Completed by (name) | | |  | | Signature | | |  | | | | |
| In Consultation with: | | |  | | Signature | | |  | | | | |
| Identify / describe activity, equipment, area or event you are assessing: | | | | | | | | **Oxy – Acetylene Welding** | | | | |
| Authorised by: | | |  | | Signature: | | |  | | Date: | |  |
| In conjunction with this risk assessment, training / education and development of a relevant SOP may be required. | | | | | | | | | | | | |
| **Step 1:** **Identify the hazard/s / Impact:**What do you believe are the hazards? What could happen? | | | | | **Step 2: Assess the potential risks:**  Template only MUST modify to site conditions  What do you believe are the risks?  How could this happen? | | | | | **Step 3: Reducing the risk:**  What do you believe can be done to reduce the risk?  Controls | | |
| **Hazardous Manual tasks**   * Manual Handling of the plant and gas bottles | | | | | * Pushing/pulling the oxy-acetylene set around the workshop * Moving projects on/off the bench | | | | | * Plant is mounted on a trolley for ease of movement * All workers are trained in safe manual handling techniques | | |
| **Hazardous Chemicals**   * Storage of gas bottles | | | | | * Sprains / strains * Gas leak | | | | | * Gas bottles must be secured to trolley &/or wall at all times. * Store cylinders in an upright position to ensure the safety device functions correctly * When cylinders not in use, cylinder valve to be kept closed. | | |
| **Radiation**   * Welding Flash | | | | | * Damage to eyes * Burns | | | | | * 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 Install non-flammable screens and partitions. * Signs used to warn that welding is occurring. * Provide PPE including filter shades for goggles and face shields to protect the eyes from radiation. Gloves and other protective clothing to be worn to cover exposed skin. | | |
| **Airborne Contaminants**   * Noxious fumes or flames | | | | | * Burns * Respiratory problems * death | | | | | * Gloves to be worn to prevent burns to hands and lower arm * Mechanical extraction fitted where possible * Use in well-ventilated areas * Long sleeve clothing to be worn, secured. * 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 * 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 always be well clear of weld splatter * Ensure welding 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 * Flashback arresters are fitted to the handpiece. | | |
| **Machinery & Equipment**   * Fire & explosion | | | | | * Serious injuries * Burns | | | | | * Work areas are well ventilated * Work area is free from rubbish, paper or dust that could be potential fuel sources or produce dust explosions. * Use flash back arrestors on gas hoses to prevent the flames travelling back and igniting the gas in cylinder. * Drain and purge equipment, such as gas hoses, and lock the gas off at the valve immediately after use. * Do not store flammable and combustible materials near welding area. * Firefighting equipment readily accessible near welding area. * Complete Hot Work Permit. | | |
| **Gravity**   * Slips, trips and falls | | | | | * Sprains / strains | | | | | * 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 might cause interruptions to welding operation * Any other work participants to follow same requirements * Hoses to be kept secure and clear of working zones. | | |
| **Extreme Temperatures**   * Prolonged working with heat | | | | | * Dehydration * Heat strain | | | | | * Take regular breaks * Cool potable water available | | |
| **Other:** | | | | |  | | | | |  | | |
| **Review hazard / risk assessment if task or circumstances change & at intervals appropriate to the level of risk (minimum 5 years)** | | | | | | | | | | | | |
| **Step 4: Monitor & Review:** | | | | | | | | | | | | |
| Were the controls effective? | | | | | Were there any unforeseen hazards / incidents? | | | | | New controls | | |
| Yes |  | | No |  | Yes |  | | No |  |
|  | | | | |  | | | | |  | | |
| Name: | |  | | | Signature | |  | | | Date |  | |