|  |  |
| --- | --- |
| C:\Users\susanb\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\PRIMARY_A_Vertical_Housed_RGB.PNG | health & safetyrisk register(example of a risk register for workshop-based activities) |

|  |
| --- |
| For use in conjunction with the [Health & Safety: Risk management requirements](https://safety.unimelb.edu.au/__data/assets/pdf_file/0009/4708161/health-and-safety-risk-management-requirements.pdf)*.* For more information, refer to <https://safety.unimelb.edu.au/safety-topics/management-systems/implement>. |

| Activity | Associated Hazards/Risks | Inherent Risk Analysis | Inherent Risk Rating | Legislation/Standards/ Guidance | University Policies and Requirements | Controls | Residual Risk Rating |
| --- | --- | --- | --- | --- | --- | --- | --- |
| L | C |
| Use of fixed plant e.g.:* lathe
* guillotine
* press
* pedestal drill
* pedestal grinder
* linisher
* band saw
* bench saw
 | Lack of operator competency/trainingRisks associated with plant and its operation unassessed/unidentifiedLack of/inappropriate safety features such as guarding and emergency stopsUnrestricted access by unauthorised workersPoorly maintained plantElectrocution/shock from electrical equipment and plantManual handling injuries from poor posture, lifting and interaction with plantDifficult access to plant or equipment due to poor housekeeping arrangementsNoise exposure | Possible | Major | High | * *Occupational Health and Safety Act 2004* (Vic)
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.2 Noise
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.5 Plant
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.6 High Risk Work
 | * *Health & Safety: Regulated plant requirements*
* *Health & Safety: Personal protective equipment requirements*
* *Health & Safety: Risk management requirements*
* *Health & Safety: Noise management requirements*
 | * ERMS/Plant hazard and risk assessments (include manual handling requirements for the plant and associated activities)
* Guarding and engineering controls
* Emergency stops
* Training
* Level of supervision appropriate to level of operator training and skill
* Restricted access
* Scheduled maintenance
* Preoperational checks
* Standard Operating Procedures
* Plant Registers
* Prepurchasing checklist – plant and equipment
* Personal protective equipment
* Testing and tagging of electrical equipment
* Scheduled workshop inspections
* Workshop cleaning and housekeeping rules
* Signage
* ERMS/Noise risk assessments
* Audiometric testing for operators
 | Medium |
| Using mobile plant such as pallet lifter or forklift | Lack of operator competency/trainingRisks associated with plant and its operation unassessed/unidentifiedUnrestricted access by unauthorised workersPoorly maintained plantFumes from mobile plant in closed areas | Possible | Major | High | * *Occupational Health and Safety Act 2004* (Vic)
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.5 Plant
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.6 High Risk Work
 | * *Health & Safety: Regulated plant requirements*
* *Health & Safety: Personal protective equipment requirements*
* *Health & Safety: Risk management requirements*
 | * ERMS/Plant risk assessments Preoperational checks and log book
* Training (Licensed operators for forklifts and some other mobile plant)
* Level of supervision appropriate to level of operator training and skill
* Restricted access (keys held by authorised person when not in use)
* Traffic management plan
* Scheduled maintenance
* Standard Operating Procedures
* Plant Registers
* Prepurchasing checklist – plant and equipment:
	+ include purchase of appropriate plant for the area and tasks (eg electric forklift in enclosed area)
 | Low |
| Using mobile plant such as an overhead crane and other lifting devices | Lack of operator competency/trainingRisks associated with plant and its operation unassessed/unidentifiedLack of/inappropriate safety features such as emergency stopsUnrestricted access by unauthorised workersPoorly maintained plantManual handling injuries associated with setting up slings and rigging equipmentLoss of load due to:* failure of plant
* failure of rigging equipment
* poorly rigged/tied equipment
 | Rare | Major | Medium | * *Occupational Health and Safety Act 2004* (Vic)
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.5 Plant
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.6 High Risk Work
* AS 1353 (series) Flat Synthetic-Webbing Slings
* AS 1380 (series) Fibre-Rope Slings
* AS 1438 (series) Wire-Coil Flat Slings
* AS 4497 (series) Round Slings—Synthetic Fibre
* AS 1418 (series) Cranes, Hoists and Winches
 | * *Health & Safety: Regulated plant requirements*
* *Health & Safety: Personal protective equipment requirements*
* *Health & Safety: Risk management requirements*
 | * ERMS/Plant risk assessments
* Preoperational checks and log book
* Emergency stops
* Training (Licensed riggers and dogging for some lifting equipment and operations)
* Level of supervision appropriate to level of operator training and skill
* Restricted access
* Scheduled maintenance for mobile plant
* Scheduled maintenance and appropriate storage for slings and lifting gear
* Slings and lifting gear that meet Australian Standards
* Standard Operating Procedures
* Plant Registers
* Prepurchasing checklist – plant and equipment
* Personal protective equipment
 | Low |
| Maintenance of plant – routine preventative and repair | Lack of maintenance workers competency/trainingRisks associated with working on unguarded parts of plant (eg entrapment)Unrestricted access by unauthorised workers | Rare | Major | Medium | * *Occupational Health and Safety Act 2004* (Vic)
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.5 Plant
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.6 High Risk Work
 | * *Health & Safety: Regulated plant requirements*
* *Health & Safety: Personal protective equipment requirements*
* *Health & Safety: Risk management requirements*
 | * ERMS/Plant risk assessments
* Isolation/lock out procedures
* Standard maintenance procedures
* Level of supervision appropriate to level of operator training and skill
 | Low |
| Using chemicals (e.g.: lubricants, coolants, degreasers)* purchasing
* storage
* handling
* disposal
 | Incompatible chemicals stored together:* to fire
* explosion
* release of toxic fumes

Increased risk of unsafe atmosphere where gas cylinders are usedDamaged, removed, or incorrect labelsChemicals used in inappropriate containersFire and explosion during decantingPhysical contact with a chemicalManual handling hazards associated with large heavy containers of chemicalManual handling injuries from moving and setting up gas cylinders | Rare | Major | Medium | * *Occupational Health and Safety Act 2004* (Vic)
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.1 Hazardous Manual Handling
* *Occupational Health and Safety Regulations 2017* (Vic) Part 4.1 Hazardous Substances and Materials
* *Dangerous Goods Act 1985* (Vic)
* *Dangerous Goods (Storage and Handling) Regulations 2012* (Vic)
 | * *Health & Safety: Chemical requirements*
* *Health & Safety: Personal protective equipment requirements*
* *Health & Safety: Risk management requirements*
 | * SDS obtained prior to purchase/order of chemical(s)
* Risk assessment of area where chemicals are delivered
* Risk assessments to determine chemical properties and appropriate handling arrangements
* Gas cylinders secured
* Chemicals in small sized containers to reduce weight
* Chemicals labeled
* Use lifting aids and trolleys for larger items
* Use personal protective equipment described in the SDS
* Training for workers using chemicals
* Access to chemical storage restricted to authorised workers only
* Adequate supervision with regards to level of training and experience
* Cylinder trolleys
* Manual handling training for gas cylinders
* Local induction and emergency training
* Emergency procedures in place
* Spill kits available
* First aid kits
* Trained first aiders
* Chemicals labeled and disposed of in appropriate containers
* Removed by EPA licensed contractor
 | Low |
| Welding | Manual handling injuries from moving welding equipment/cylindersFumesBurns from hot metalWelding arc – flashGas leak from welding hosesFlashbackElectrocution | Unlikely | Moderate | Low | * *Occupational Health and Safety Act 2004* (Vic)
* *Occupational Health and Safety Regulations 2017* (Vic) Part 3.1 Hazardous Manual Handling
* *Occupational Health and Safety Regulations 2017* (Vic) Part 4.1 Hazardous Substances and Materials
 | * *Health & Safety: Hot work requirements*
* *Health & Safety: Personal protective equipment requirements*
* *Health & Safety: Risk management requirements*
 | * Risk assessment to determine if activity is defined as “hot work”
* SDS for welding rods and other chemicals
* Dedicated welding bay
* Mechanical extraction
* Welding equipment secured and cylinders on trolley
* Welding equipment checked and maintained
* Hoses checked and maintained
* Flashback arrestors attached to both
* Welding activity earthed
* Trained operator
* Use PPE
 | Low |