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| Site / Area: | |  | | Date of Assessment | |  | | Risk Assessment # | 090RA |
| Completed by (name) | |  | | Signature | | Template only MUST modify to site conditions | | | |
| In Consultation with: | |  | | Signature | |  | | | |
| Identify / describe activity, equipment, area or event you are assessing: | | | | | | Forklifts (electrical and gas) | | | |
| 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:**  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 | |
| **Operators – not licensed**   * Operators not operating forklifts currently causing accidents | | | | * Cause accidents through not knowing how to use forklift correctly * Death * Serious injury | | | | * Operators must be 18 years of age or older to hold a licence to perform high risk work. [HRW classes, training and assessment | SafeWork SA](https://safework.sa.gov.au/licence-and-registration/apply-renew/high-risk-work-licences/hrw-classes) | |
| **Hazardous Manual Task**   * Sustained or awkward postures * Leaning out of forklift due to poor visibility * Twisting when reversing | | | | * Sprains & strain | | | | * Task Rotation * Limit height of loads * Alternate looking over left and right shoulders | |
| **Electricity (battery operate forklifts)**   * Electric short * Faulty equipment * Not isolating equipment prior to maintenance * Incorrect charging for batteries | | | | * Electric shock * Chemical Burn * Fire * explosion | | | | * Completion of pre-start checklist * Schedule of maintenance * Only trained competent persons to conduct maintenance on equipment * Battery charging area * Remove any jewellery that could conduct electricity and be ware of any other metals int eh area that may increase the risk of explosion * Lead-acid batteries contain sulphuric acid. Extra precautions to be taken when removing and replacing batteries. Use appropriate handling equipment for lifting and moving heavy batteries * Hydrogen fumes can be produced during charging, particularly under boost and where overcharging occurs. Charge in a well ventilated area * First aid kits available * Emergency shower/eye wash available | |
| **Chemical (gas operated forklifts)**   * Not wearing PPE * Incorrect changing of gas cylinder * Gas Cylinder out of date * Refuelling | | | | * Burns * Explosion * Overcome by fumes (asphyxiation in enclosed spaces) | | | | * Work Instruction * PPE – rubber gloves, full length clothing, safety glasses * Gas cylinders changed by a competent person * Gas cylinders stored upright and chained * Gas cylinder less than 10 years old * Forklift to operated in a well ventilated area * Engine is turned off before changing LPG tanks * No smoking, open flames, sparks or other ignition sources to be in area | |
| **Machinery & Equipment – forklift instability and overturning**   * Roll sideways, tip forwards or tip backwards. * Occur on uneven surfaces, up or down slopes or ramps or on a gradient * Titled load * With an unstable load such as liquid loads, loads suspended from chains or slings from a jib attachment, where the load can swing, fall or move * Load exceeds the safe working load limit capacity of the forklift and attachments * Carrying wide or long loads | | | | * Serious Injury * Death | | | | * Operators seat is designed to prevent the operator from being ejected. * Restraints such as seat belt warn at all times (where fitted). Are maintained. * Protective devices are fitted or maintained to prevent the operator from being ejected. * Adhere to SWL capacity of forklift * Ensure tines are at the correct height (e.g. low to the ground with back tilts when travelling with the load) * Preventative maintenance plan in place | |
| **Traffic Management – collision with pedestrians**   * Pedestrians hit by moving vehicles * No physical barriers * Blind spots * Corners with limited visibility * Speeding * Forklifts operating in areas with low lighting | | | | * Serious Injury * Death | | | | * Traffic management risk assessment completed * Traffic management plan developed and implemented * Segregated pedestrian walkways (where practicable, physical barriers installed) * Pedestrian or forklift exclusion zones * Fork speed limits implemented * Pre- and post-operations checking of forklifts and the workplace (using attachments, carrying loads). | |
| **Traffic Management – collision with other powered mobile plant (e.g. cars)**   * hit by moving vehicles * No physical barriers * Blind spots * Corners with limited visibility * Speeding * Forklifts operating in areas with low lighting * No vehicle segregation (safe unloading zones) | | | | * Serious Injury * Death | | | | * Traffic management risk assessment completed * Traffic management plan developed and implemented * Segregated pedestrian walkways (where practicable, physical barriers installed) * Pedestrian or forklift exclusion zones * Fork speed limits implemented * Floor and road markings * Blind spot mirrors, eg convex mirrors * Signs displayed throughout. * Where forklifts go on public roads, must be registered. Go to [SA.GOV.AU - Special purpose vehicle registration](https://www.sa.gov.au/topics/driving-and-transport/registration/conditional-registration/special-purpose-vehicles) | |
| **Gravity**   * Slip trip fall getting on and off forklift * Falling or unexpected movement of plant * Pedestrian moving between load / structure or forklift | | | | * Slip Trip Falls * Sprain / Strain * Bruising * Laceration * Fracture * Crush | | | | * Licenced trained operators * Three points of contact when getting on / off forklift * Seatbelts * High visibility clothing worn in area * Speed restrictions * Safe working loads * Restricted access area * Operating on flat surfaces * Forklift signage | |
| **Extreme Weather**   * Stopping times are increased * Workers exposed to wet environments * Working in extreme heat | | | | * Vehicle collisions * Operator becomes unwell from wet weather exposure * Heat exhaustion * Heat strain / stoke | | | | * Operators to reduce speed in wet weather * Ensure forklifts are equipped with rain protection * Drink plenty of fluids throughout the shift * Take regular breaks in extreme heat | |
| **Other:** | | | |  | | | | * Further information can be found at   [A guide to forklift safety](https://www.safework.sa.gov.au/__data/assets/pdf_file/0018/144513/A-guide-to-forklift-safety.pdf) | |
| **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 |  |
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