|  |  |  |  |
| --- | --- | --- | --- |
| 1. Hazard Management Details – General | | | |
| **Plant/Equipment Item: Forklift (Fuel)** | **Make/Model No.:** | | **Serial No.:** |
| **School / Work Location:** | **Region:** | | |
| **Name of Person(s) Conducting Activity:** | | | **Date Conducted:** |
| Forklift   http://image.made-in-china.com/2f0j00ieqtkmREbWoC/3-5ton-Lpg-Forklift-CPQD35-.jpg | | **Description of Use:**  A forklift is a motorised vehicle which uses power operated prongs/tines to lift and move heavy loads. | **Summary of Key Risks:**  **(refer to appropriate subsections)**     * Entanglement * Impact and cutting injuries * Shearing * Electricity * Ergonomics * Noise * Vibration * Fire and explosion * Slips, Trips or Falls * Other (exhaust fumes) |

Plant and Equipment Risk Management Form

|  |  |  |
| --- | --- | --- |
| 2. Documentation | | |
| **Relevant Legislation/Standards** | **Y / N** | **Comments** |
| **Is plant required to be registered?** | Y  N |  |
| **Is a user license required?** | Y  N |  |
| **Key Reference material** |  | AS 2359 Powered Industrial Trucks – General Requirements, WorkSafe Victoria Guidance Note: “Forklift Safety, Reducing the Risk.”  AS 4983 Gas fuel systems for forklifts and industrial engines |
| **Plant Documentation** | **Y / N** | **Comments** |
| **Are operator’s manuals accessible?** | Y  N | Operators manual should be supplied on purchase of the vehicle |
| **Is this a restricted use item?** | Y  N | Operators must have an appropriate fork lift licence |
| **Does this item require safe use documents/test?** | Y  N | Operators must have an appropriate fork lift licence |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 3. Hazard Identification | |  | | | | |
| **Hazards Inspected** | | **Risk Assessment** | | | **Description of Risk** | **Control Measures** |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **ENTANGLEMENT**  Can anyone’s hair, clothing, gloves, cleaning brushes, tools, rags or other materials become entangled with moving parts of the plant or materials? | Y  N | Major | Rare | Medium | Loose clothing, long hair, gloves, body parts and other material may become entangled in moving parts of the forklift (e.g. chain mast). | Ensure clothing, gloves, hair or other such items are kept clear of moving parts of the forklift when operating or performing maintenance (e.g., overalls can be used to restrict loose clothing etc.).  Remove or secure any packaging that may become entangled in the chain mast. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **IMPACT AND CUTTING INJURIES**  Can anyone be crushed/cut/struck etc. due to: |  |  |  |  | Materials could fall from the tines of the forklift or pallet whilst in operation if not appropriately secured.  Forklift could rollover if the load is unbalanced, operated on an uneven surface or traversing a slope.  The mobility of the forklift poses a significant risk to pedestrians and property.  Use of inappropriate parts could lead to mechanical failure.  Operator error (e.g. poor visibility, fatigue etc.) may lead to an accident. | Ensure only licensed persons operate the forklift and have been trained in safe work practices.  Ensure the forklift is only operated on appropriate surfaces (i.e. level ground) and a seatbelt is worn at all times.  Ensure the load is within the forklifts lifting capacity and is appropriately secured before lifting and moving.  Ensure the forklift is serviced or repaired by a qualified person and only manufacturer recommended parts and accessories are used.  Ensure appropriate traffic management controls have been implemented. For example:   * Designated and marked pedestrian paths (e.g. painted walkways, bollards/fenced walkways etc.) * Pedestrian no go zones * High visibility clothing is worn by operator/persons in the work area * Signs and barricades to be installed to warn other employees/persons in area * A documented Traffic Management Plan is in place * Relevant employees have attended traffic management training   Ensure forklift is fitted with appropriate safety features. For example:   * ‘Dead Man’s’ control/emergency stop * Park brake * Seatbelt * Rollbar/cage * Reversing alarm |
| * Material falling off the plant? | Y  N | Major | Possible | High |
| * Uncontrolled/unexpected movement of plant/load? | Y  N | Major | Rare | Medium |
| * Lack of capacity to slow, stop or immobilise plant? | Y  N | Severe | Rare | Medium |
| * The plant tipping or rolling over? | Y  N | Severe | Rare | Medium |
| * Parts of the plant disintegrating or collapsing? | Y  N | Severe | Rare | Medium |
| * Contact with moving parts during testing, inspection, operation, maintenance, cleaning or repair? | Y  N | Major | Rare | Medium |
| * Being thrown off or under the plant? | Y  N | Severe | Rare | Medium |
| * Contact with sharp or flying objects? (e.g. work pieces being ejected) | Y  N |  |  |  |
| * The mobility of the plant? | Y  N | Severe | Rare | Medium |
| * Inappropriate parts and accessories being used? | Y  N | Severe | Rare | Medium |
| * Other | Y  N |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Hazards Inspected | | Risk Assessment | | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  | |  |
| **SHEARING**  Can anyone’s body parts be sheared between two parts of plant, or between a part of the plant and a work piece or structure? | Y  N | Severe | Rare | Medium | Forklift/pedestrian interaction could lead to a person being trapped between the forklift and another object. | | Establish a Traffic Management Plan.  Ensure appropriate traffic management controls are in place (refer to cutting and impact injuries section). |
| **PRESSURISED CONTENT**  Can anyone come into contact with fluids or gases under high pressure, due to plant failure or misuse of the plant? | Y  N |  |  |  |  | |  |
| **ELECTRICITY**  Can anyone be injured or burnt due to: |  |  |  |  | Overhead power lines or electric wires pose a significant risk to the operator. | | Operator to check area for any potential hazards.  Ensure the forklift is not operated in close proximity to overhead power lines or electrical wiring. |
| * Live electrical conductors? (*e.g.* exposed wires) | Y  N | Severe | Rare | Medium |
| * Working in close proximity to electrical conductors? | Y  N |  |  |  |
| * Access to electricity? | Y  N |  |  |  |
| * Damaged or poorly maintained electrical leads, cables or switches? | Y  N |  |  |  |
| * Water near electrical equipment? | Y  N |  |  |  |
| * Lack of isolation procedures? | Y  N |  |  |  |
| * Other | Y  N |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **ERGONOMICS**  Can anyone be injured due to: |  |  |  |  | Operating the forklift for extended periods of time or poorly designed or degraded seats may cause musculoskeletal injury. | Ensure the forklift is not operated for extended periods of time.  Ensure appropriate rest breaks are taken.  Ensure forklift seating is in good condition and can be adjusted for different body types. |
| * Poorly designed workstation? | Y  N | Moderate | Possible | Medium |
| * Repetitive body movement? | Y  N | Moderate | Possible | Medium |
| * Constrained body posture or the need for excessive effort? | Y  N |  |  |  |
| * Design deficiency causing psychological stress? | Y  N |  |  |  |
| * Inadequate or poorly placed lighting? | Y  N |  |  |  |
| * Does the plant impact on the surrounding workplace and create potential hazards? (Consider potential impact on the design and layout of the workplace) | Y  N |  |  |  |
| * Is the location of the plant inappropriate? (Consider potential effects due to environmental conditions and terrain) | Y  N |  |  |  |
| * Other | Y  N |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **RADIATION**  Can anyone using the plant, or in the vicinity of the plant suffer injury or illness due to exposure to radiation in the form of any of the following:   * infra-red radiation * ultra violet light * microwaves | Y  N |  |  |  |  |  |
| **NOISE**  Can anyone using the plant, or in the vicinity of the plant, suffer injury due to exposure to noise? | Y  N | Moderate | Unlikely | Medium | Operation of the forklift could result in high noise levels. | Appropriate hearing protection should be worn whilst operating the equipment (if required). |
| **VIBRATION**  Can anyone be injured or suffer ill-health from exposure to vibration? | Y  N | Moderate | Unlikely | Medium | The operator of the forklift could suffer from Whole Body Vibration (WBV) as a result of vibration generated by the forklift. | Take regular breaks from continuous operation.  Conduct periodic maintenance of the forklift for smooth operation and to reduce vibration. |
| **FRICTION**  Can anyone be burnt due to contact with moving parts, materials or surfaces of the plant? | Y  N |  |  |  |  |  |
| **SUFFOCATION**  Can anyone be suffocated due to lack of oxygen, or atmospheric contamination? | Y  N |  |  |  |  |  |
| **CONDITION**  Is a hazard likely due to the age and condition of the plant? (*Consider how hard the machine has been worked, and whether it is used constantly or rarely).* | Y  N |  |  |  |  |  |
| * Can anyone be injured as a result of the plant not serviced appropriately and/or maintained in line with manufacturer’s recommendations? | Y  N |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **SLIPS/TRIPS/FALLS**  Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: |  |  |  |  | Access and egress to the forklift could pose a risk of slip, trip or fall.  Poor housekeeping could result in a slip, trip or fall hazard. | Ensure operator wears slip resistant footwear to reduce risk of slips/falls.  Ensure operator maintains three points of contact when accessing or exiting the vehicle.  Ensure good housekeeping practices are maintained throughout the work area. |
| * Uneven, slippery or steep work surfaces? | Y  N | Major | Rare | Medium |
| * Poor housekeeping, e.g. spillage in the vicinity? | Y  N | Moderate | Possible | Medium |
| * Obstacles being placed in the vicinity of the plant? | Y  N | Moderate | Possible | Medium |
| * Inappropriate or poorly maintained floor or walking surfaces (i.e. lack of a slip-resistant surface, unprotected holes, penetrations or gaps?) | Y  N | Major | Rare | Medium |
| If operating or maintaining plant at height can anyone slip, trip or fall due to: |  |  |  |  |
| * Use of work platforms, stairs or ladders? | Y  N |  |  |  |
| * Lack of guardrails or other suitable edge protection? | Y  N |  |  |  |
| * Other | Y  N |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Hazards Inspected | | Risk Assessment | | | | Description of Risk | | Control Measures |
|  | | **Cons** | | **Like** | **Risk**  **Level** |  | |  |
| **FIRE AND EXPLOSION**  Can anyone be injured by fire? | Y  N | Major | | Rare | Medium | Inappropriate storage and handling of fuel (e.g. LPG, diesel) poses a risk of fire and explosion to the operator. | | Ensure fuel is appropriately stored (e.g. locked storage area).  Ensure refuelling is conducted in a safe manner (e.g., equipment is switched off, away from ignition sources, in well-ventilated area etc.). |
| * Can anyone be injured by explosion of gases, vapours, liquids, dusts, or other substances? | Y  N | Major | | Rare | Medium |
| **TEMPERATURE/MOISTURE**  Can anyone come into contact with objects athigh or low temperatures? | Y  N |  | |  |  |  | |  |
| * Can anyone suffer ill health due to exposure to high or low temperatures? | Y  N |  | |  |  |
| * Can anyone be injured or suffer ill health due to exposure to moisture? | Y  N |  | |  |  |
| **OTHER** Can anyone be injured or suffer ill health from exposure to: |  |  | |  |  | Exhaust fumes can be toxic if allowed to accumulate in an enclosed space. | | Ensure the forklift is not operated in an enclosed space.  Ensure the forklift is refuelled in a well-ventilated space. |
| * Chemicals? | Y  N |  | |  |  |
| * Toxic gases or vapours? | Y  N |  | |  |  |
| * Fumes / Dusts? | Y  N | Moderate | | Rare | Low |
| * Other? (please specify) | Y  N |  | |  |  |
| **4. Risk Assessment Signoff** | | | | | | | | |
| Authorised By: | | | Signature: | | | | Date: | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Consequence - Evaluate the consequences of a risk occurring according to the ratings in the top row  |  |  |  | | --- | --- | --- | | Descriptor | Level | Definition | | **Insignificant** | **1** | No injury | | **Minor** | **2** | Injury/ ill health requiring first aid | | **Moderate** | **3** | Injury/ill health requiring medical attention | | **Major** | **4** | Injury/ill health requiring hospital admission | | **Severe** | **5** | Fatality |   3. Risk level - Calculate the level of risk by finding the intersection between the likelihood and the consequences   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Likelihood | Consequence | | | | | | **Insignificant** | **Minor** | **Moderate** | **Major** | **Severe** | | **Almost Certain** | Medium | High | Extreme | Extreme | Extreme | | **Likely** | Medium | Medium | High | Extreme | Extreme | | **Possible** | Low | Medium | Medium | High | Extreme | | **Unlikely** | Low | Low | Medium | Medium | High | | **Rare** | Low | Low | Low | Medium | Medium | | Likelihood - Evaluate the likelihood of an incident occurring according to the ratings in the left hand column  |  |  |  | | --- | --- | --- | | Descriptor | Level | Definition | | **Rare** | **1** | May occur somewhere, sometime (“once in a life time / once in a hundred years”) | | **Unlikely** | **2** | May occur somewhere within the Department over an extended period of time | | **Possible** | **3** | May occur several times across the Department or a region over a period of time | | **Likely** | **4** | May be anticipated multiple times over a period of time  May occur once every few repetitions of the activity or event | | **Almost Certain** | **5** | Prone to occur regularly  It is anticipated for each repetition of the activity of event |   4. Risk Level/Rating and Actions   |  |  | | --- | --- | | Descriptor | Definition | | **Extreme:** | Notify **Workplace Manager and/or Management OHS Nominee** immediately. Corrective actions should be taken immediately. Cease associated activity. | | **High:** | Notify **Workplace Manager and/or Management OHS Nominee** immediately. Corrective actions should be taken within 48 hours of notification. | | **Medium:** | Notify **Nominated employee, HSR / OHS Committee**. Nominated employee, OHS Representative / OHS Committee is to follow up that corrective action is taken within 7 days. | | **Low** | Notify **Nominated employee, HSR / OHS Committee**. Nominated employee, HSR / OHS Committee is to follow up that corrective action is taken within a reasonable time. | |