This form is to be used to identify hazards associated with plant, machinery and equipment and to establish safety control measures to prevent harm to life, health, property and the environment. The assessment is to be retained for verification requirements.

|  |
| --- |
| **General Information** |
| **Risk Assessment Number:**       | **Date Conducted:**       | **Date Reviewed:**       |
| **Plant/ Equipment Item:**       | **Make/ Model #:**       | **Serial No.:**       |
| **Site Address:**       |
| **Assessmentteam - Names:**                                              | **Signatures:** | **Summary of key risks:**                                              |
| **Does the plant need to be registered** [ ]  Yes [ ]  No  | If yes, are records maintained as required: [ ]  Yes [ ]  No |
| **Does the operator require a licence or competency** | [ ]  Yes [ ]  No  | If yes, describe required type:       |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1.0** | **Plant Inspection, Testing & Maintenance** | **Hazard is Present** | Con-sequence | Likelihood | RiskRating | **Description of Risk** | **Control Measures** |
| 1.1 | Is regular maintenance conducted on plant and records retained for verification? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 1.2 | Is the plant inspected on a regular basis? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 1.3 | Is testing of the plant carried out by a competent person where required? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 1.4 | Can anyone be injured as a result of the plant not being serviced appropriately and/or maintained in line with manufacturer’s recommendations? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **2.0** | **Guarding** | **Hazard is Present** | Con-sequence | Likelihood | RiskRating | **Description of Risk** | **Control Measures** |
| 2.1 | Is guarding used and in place? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.2 | Is guarding of solid construction and securely mounted - (i.e. resist impact or shock)? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.3 | Is guarding difficult to bypass or disable? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.4 | Is guarding properly maintained? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.5 | Can guarding be removed to allow maintenance and cleaning of plant when the plant is not in normal operation? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.6 | If the guarding can be removed, can the plant be restarted whilst the guarding is not attached? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.7 | Electronic sensor guarding is working and cannot be bypassed? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 2.8 | All switches are clearly marked? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **3.0** | **Operational Controls** | **Hazard is Present** | Con-sequence | Likelihood | RiskRating | **Description of Risk** | **Control Measures** |
| 3.1 | Can operational controls be identified on the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 3.2 | Do they indicate their nature, function and direction of operation? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 3.3 | Are operational controls conveniently located? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 3.4 | Are operational controls located or guarded to prevent unintentional activation? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 3.5 | Can they be locked into the “off” position to enable the disconnection of power? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **4.0** | **Emergency Stops** | **Hazard is Present** | Con-sequence | Likelihood | RiskRating | **Description of Risk** | **Control Measures** |
| 4.1 | Does the plant have emergency stops? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 4.2 | Are emergency stops prominent, clearly and durably marked? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 4.3 | Are they immediately accessible to the plant operator? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 4.4 | Are emergency stops coloured red? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 4.5 | Can the emergency stop be adversely affected by electrical or electronic circuit malfunction? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **5.0** | **General Hazard & Risk Identification** | **Hazard is Present** | Con-sequence | Likelihood | RiskRating | **Description of Risk** | **Control Measures** |
| **Entanglement - Can anyone be injured due to:** |
| 5.1 | Can anyone’s hair, clothing, gloves, cleaning brushes, tools, rags or other materials become entangled with moving parts of the plant or materials? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Crushing – Can anyone be crushed due to:** |
| 5.2 | Material falling off the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.3 | Uncontrolled or unexpected movement of the plant or its load? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.4 | Lack of capacity of for the plant to be slowed, stopped or immobilised? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.5 | The plant tipping or rolling over? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.6 | Parts of the plant collapsing? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.7 | Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.8 | Being thrown off or under the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.9 | Being trapped between the plant and materials or fixed structures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.10 | Other factors not mentioned? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Cutting, Stabbing and Puncturing – Can anyone be cut, stabbed or punctured due to:** |
| 5.11 | Coming in contact with sharp or flying objects? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.12 | Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.13 | The plant, parts of the plant or work pieces disintegrating? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.14 | Work pieces being ejected? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.15 | The mobility of the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.16 | Uncontrolled or unexpected movement of the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.17 | Other factors not mentioned?  | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Shearing - Can anyone be injured due to:** |
| 5.18 | Can anyone’s body parts be sheared between two parts of the plant, or between a part of the plant and a work piece or structure? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Friction - Can anyone be injured due to:** |
| 5.19 | Can anyone be burnt due to contact with moving parts of surfaces of the plant, or between a part of the plant and a work piece of structure? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Striking - Can anyone be struck by moving objects due to:** |
| 5.20 | Uncontrolled or unexpected movement of the plant or material handled by the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.21 | The plant, parts of the plant or work pieces disintegrating? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.22 | Work pieces being ejected? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.23 | Mobility of the plant?  | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.24 | Plant colliding with any person or object? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.25 | Contact with moving parts if testing, inspection, operation, maintenance, cleaning or repair? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.26 | Other factors not mentioned? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **High Pressure Fluid - Can anyone be injured due to:** |
| 5.27 | Can anyone be injured by fluids under high pressure, due to plant failure or misuse?  | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Electric Shock / Burns - Can anyone be injured by electrical shock or burnt due to:** |
| 5.28 | The plant contacting live electrical conductors? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.29 | The plant working in close proximity to electrical conductors? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.30 | Overload of electrical circuits? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.31 | Damaged or poorly maintained electrical leads and cables? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.32 | Damaged electrical switches/ cables? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.33 | Water near electrical equipment? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.34 | Lack of isolation procedures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.35 | Contact with objects at high temperatures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.36 | Other factors not mentioned? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Explosion - Can anyone be injured due to:** |
| 5.37 | Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances, triggered by the operation of the plant or by material handled by the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Slipping, Tripping and Falling – Can using the plant, or in the vicinity of the plant, slip, trip or fall due to:** |
| 5.38 | Uneven or slippery work surfaces? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.39 | Poor housekeeping, e.g. Swarf in the vicinity of the plant, spillage not cleaned up? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.40 | Obstacles being placed in the vicinity of the plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.41 | Other factors not mentioned? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Heights - Can anyone be injured due to:** |
| 5.42 | Lack of proper work platform? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.43 | Lack of proper stairs or ladders? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.44 | Lack of guardrails or other suitable edge protection? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.45 | Unprotected holes, penetrations or gaps? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.46 | Poor floor or walking surfaces, such as the lack of a slip-resistant surface? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.47 | Steep walking surfaces?  | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.48 | Collapse of the supporting structure? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.49 | Other factors not mentioned? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.50 | Objects falling? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Ergonomics –Can anyone be injured due to:** |
| 5.51 | Poorly designed seating? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.52 | High forces or constrained postures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.53 | Repetitive body movement? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.54 | Constrained body posture or the need for excessive effort? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.55 | Design deficiency causing mental or psychological stress? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.56 | Inadequate or poorly placed lighting? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.57 | Lack of consideration given to human error or human behaviour? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.58 | Mismatch of the plant with human traits and natural limitations? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.59 | Other factors not mentioned? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Suffocation – Can anyone be injured due to:** |
| 5.60 | Suffocation due to lack of oxygen or atmospheric contamination? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Temperature - (including Thermal Comfort indoor and outdoor)** |
| 5.61 | Can anyone suffer ill-health due to exposure to high or low temperatures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.62 | Can anyone come in contact with objects at low temperatures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **High Temperature - Fire** |
| 5.63 | Can anyone come into contact with objects at high temperatures? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.64 | Can anyone be injured by fire? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Mechanical Failure?** |
| 5.65 | Can anyone be exposed to a risk to health and safety due to mechanical failure of pressurised elements that may release fluids which pose a risk to health and safety? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Load Shifting – Forklifts / Cranes: Can anyone be injured due to:** |
| 5.66 | SWL not marked on lifting device? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.67 | Unsuitable / inappropriate devices being used? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.68 | Plant intended to lift people? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Other Hazards – Can anyone be injured or suffer ill-health from exposure to:** |
| 5.69 | Noise? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.70 | Vibration? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.71 | Radiation? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.72 | Chemicals? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.73 | Toxic gases or vapours? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.74 | Fumes/ Dusts? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.75 | Other - (please specify)? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.76 | Placarding and Signage? | [ ]  Yes [ ]  No |       |       |       |       |       |
| **Training Procedures: Can anyone be injured due to:** |
| 5.77 | Safe Working Procedures / SWMS/JSEA not developed, displayed? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.78 | Employees not having received training on the safe use of plant? | [ ]  Yes [ ]  No |       |       |       |       |       |
| 5.79 | Could systems associated with the plant create potential hazards? | [ ]  Yes [ ]  No |       |       |       |       |       |