**PLANT & EQUIPMENT CHECKLIST**

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| **DETAILS** | | | | | | | |
| **Assessment Date:** |  | | | | | | |
| **Contract:** |  | | | | | | |
| **Site Name:** |  | | | | | | |
| **Plant / Equipment Description:** |  | | | | | | |
| **Activity Description:** | Tick all those that apply. | | | *Provide a broad description of activities involved.* | | | |
| Installation  Commissioning  Operation  Maintenance  Inspection  Cleaning | | Repairing  Dismantling  Transport  Storage  Disposal |
| **Assessed By:** |  | | | | | | |
| **PLANT AND EQUIPMENT SPECIFICS**  ***If multiple items of the same plant are to be purchased, note as “multiple items” in Model No. section.*** | | | | | | | |
| **Model No.:** |  | **Serial No.:** | |  | **Asset ID No.:** | |  |
| **Manufacturer:** |  | | | | | | |
| **Mobile Plant Load Capacity:** |  | **Operator Licensing Required?** | | Yes  No | **Plant Registration Required?** | Yes  No | |
| **HAZARD IDENTIFICATION CHECKLIST** | | | | | | | |
| *Use this checklist to determine if there are any hazards associated with the plant/equipment. “Yes” to any of the following indicates a need to conduct a risk assessment using Risk Assessment (004F) to determine risk control strategies including isolation requirements.*  *As part of hazard identification also consider any relevant points below:*   * *whether the plant/equipment is to be used for the purpose it was designed/manufactured* * *results of any calculations, analysis, testing, etc. associated with the plant/equipment* * *any conditions required for the safe operation of the plant/equipment* * *alterations or modifications required to be made to the plant/equipment* * *manufacturer recommendations regarding maintenance & inspections and frequencies of these* | | | | | | | |

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| **ASSESSMENT** | **Yes** | **No** | **N/A** | **COMMENTS** |
| **Section A: HAZARD IDENTIFICATION** | | | | |
| **1. Entanglement** |  |  |  |  |
| Can a person’s hair, clothing, gloves, necktie, jewellery, cleaning brush or cloth become entangled with moving parts of the plant? |  |  |  |  |
| **2. Crushing.** *Can anyone be crushed due to:* |  |  |  |  |
| Material falling off the plant? |  |  |  |  |
| Uncontrolled or unexpected movement of the plant or its load? |  |  |  |  |
| Lack of capacity for the plant to be slowed, stopped or immobilised? |  |  |  |  |
| The plant tipping or rolling over? |  |  |  |  |
| Parts of the plant collapsing? |  |  |  |  |
| Coming in contact with moving parts of the plant during testing, inspection, use, maintenance, cleaning or repair? |  |  |  |  |
| Being thrown off or under the plant? |  |  |  |  |
| Being trapped between the plant and materials or fixed structures? |  |  |  |  |
| Other factors? |  |  |  |  |
| **3. Friction** |  |  |  |  |
| Can anyone be burnt, gain abrasions etc. due to contact with moving parts or surfaces of the plant, or material handled by the plant? |  |  |  |  |
| **4. Striking.** *Can anyone be struck by moving objects due to:* |  |  |  |  |
| Uncontrolled or unexpected movement of the plant or material handled by the plant? |  |  |  |  |
| Plant, parts of the plant or work pieces disintegrating? |  |  |  |  |
| Work pieces being ejected? |  |  |  |  |
| Mobility of the plant? |  |  |  |  |
| Other factors? |  |  |  |  |
| **5. Explosion** |  |  |  |  |
| 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? |  |  |  |  |
| **6. Shearing** |  |  |  |  |
| Can anyone’s body parts be sheared between two or more parts of the plant, or between a part of the plant and a work piece or structure? |  |  |  |  |
| **7. Cutting, Stabbing or Puncturing.** *Can anyone be cut, stabbed or punctured due to:* | | | | |
| Coming in contact with sharp or flying objects? |  |  |  |  |
| Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant? |  |  |  |  |
| Plant, parts of the plant or work pieces disintegrating? |  |  |  |  |
| Work pieces being ejected? |  |  |  |  |
| The mobility of the plant? |  |  |  |  |
| Uncontrolled or unexpected movement of the plant? |  |  |  |  |
| Other factors? |  |  |  |  |
| **8. High Pressure Fluid** |  |  |  |  |
| Can anyone come into contact with fluids under high pressure in normal use, in the instance of plant failure? |  |  |  |  |
| **9. Slipping, Tripping and Falling.** *Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:* | | | | |
| Uneven or slippery work surfaces? |  |  |  |  |
| Poor housekeeping, such as shavings in the vicinity of the plant, spillage not cleaned up? |  |  |  |  |
| Obstacles being placed in the vicinity of the plant? |  |  |  |  |
| Other factors? |  |  |  |  |
| **10. Fall from Height.** *Can anyone fall from a height due to:* |  |  |  |  |
| Lack of a proper work platform? |  |  |  |  |
| Lack of proper stairs or ladders? |  |  |  |  |
| Lack of guardrails or other suitable edge protection? |  |  |  |  |
| Unprotected holes, penetrations or gaps? |  |  |  |  |
| Poor floor or walking surfaces, such as the lack of a slip-resistant surface? |  |  |  |  |
| Steep walking surfaces? |  |  |  |  |
| Collapse of the supporting structure? |  |  |  |  |
| Other factors? |  |  |  |  |

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| **11. Hot or Cold Temperature.** *Can anyone:* | | |  |  | |  | |  | | | |
| Come into contact with objects at high or low temperature? | | |  |  | |  | |  | | | |
| Be exposed to hot or cold temperature? | | |  |  | |  | |  | | | |
| Be injured by fire? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **12. Electrical.** *Can anyone be injured due to:* | | |  |  | |  | |  | | | |
| The plant contacting live electrical conductors? | | |  |  | |  | |  | | | |
| Plant working close to electrical conductors? | | |  |  | |  | |  | | | |
| Overload of electrical circuits? | | |  |  | |  | |  | | | |
| Damaged or poorly maintenance electrical leads or cables? | | |  |  | |  | |  | | | |
| Damaged electrical switches? | | |  |  | |  | |  | | | |
| Water near electrical equipment? | | |  |  | |  | |  | | | |
| Lack of isolation procedures? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **13. Ergonomics.** *Can anyone be injured due to:* | | |  |  | |  | |  | | | |
| Poorly designed seating? | | |  |  | |  | |  | | | |
| Poorly designed operator controls? | | |  |  | |  | |  | | | |
| High forces? | | |  |  | |  | |  | | | |
| Repetitive body movements? | | |  |  | |  | |  | | | |
| Awkward body posture or the need for excessive effort? | | |  |  | |  | |  | | | |
| Vibration? | | |  |  | |  | |  | | | |
| Design deficiency causing physical or personal stress? | | |  |  | |  | |  | | | |
| Lack of consideration given to human error or human behaviour? | | |  |  | |  | |  | | | |
| Mismatch of the plant with human traits and natural limitations? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **14. Suffocation.** *Can anyone be suffocated due to:* | | |  |  | |  | |  | | | |
| Lack of oxygen? | | |  |  | |  | |  | | | |
| Atmospheric contamination? | | |  |  | |  | |  | | | |
| Entry into confined spaces of the plant? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **15. Combination of Hazards.** *Can anyone be injured due to unexpected start-up/over-run/over-speed (or similar) from:* | | | | | | | | | | | |
| Failure/disorder of the control system e.g. a hydraulic system? | | |  |  | |  | |  | | | |
| Restoration of energy supply after an interruption? | | |  |  | |  | |  | | | |
| External influences on electrical equipment? | | |  |  | |  | |  | | | |
| Other environmental factors e.g. gravity, wind, etc.? | | |  |  | |  | |  | | | |
| Errors in the software? | | |  |  | |  | |  | | | |
| Errors made by the operator? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **15. Other Hazards.** *Can anyone be injured or suffer ill-health from exposure to:* | | | | | | | | | | | |
| Hazardous chemicals? | | |  |  | |  | |  | | | |
| Toxic gases or vapours? | | |  |  | |  | |  | | | |
| Fumes? | | |  |  | |  | |  | | | |
| Dust? | | |  |  | |  | |  | | | |
| Noise? | | |  |  | |  | |  | | | |
| Radiation? | | |  |  | |  | |  | | | |
| Biological? | | |  |  | |  | |  | | | |
| Inadequate/poorly placed lighting? | | |  |  | |  | |  | | | |
| Lack of operator competency? | | |  |  | |  | |  | | | |
| Lack of / inadequate safety signage compliant to AS/NZS 1319 / Codes? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **Section B: ISOLATION IDENTIFICATION** | | | | | | | | | | | |
| **16. Direct Energy Sources.**  *Is the plant / equipment:* | | | | | | | | | | | |
| Powered by electricity and is the connection of a plug-in type supplied from a 240V power outlet? | | |  |  | |  | |  | | | |
| Powered by electricity and is the connection of a plug-in type supplied from a 415V power outlet? | | |  |  | |  | |  | | | |
| Electrically powered and hard wired back to a circuit breaker within a switchboard? | | |  |  | |  | |  | | | |
| Powered by LPG (liquefied petroleum gas) or CNG (compressed natural gas)? | | |  |  | |  | |  | | | |
| Powered by diesel? | | |  |  | |  | |  | | | |
| Powered by another means? Specify energy source | | |  |  | |  | |  | | | |
| **17. Residual, Stored or Potential Energy Sources** | | | | | | | | | | | |
| Is there electrical charge stored in electrical components such as capacitors? | | |  |  | |  | |  | | | |
| Is there electrical charge stored in batteries? | | |  |  | |  | |  | | | |
| Is there stored energy in springs under compression or tension? | | |  |  | |  | |  | | | |
| Is there stored energy with hydraulic systems (pressurised fluids in hoses/pipes)? | | |  |  | |  | |  | | | |
| Is there store energy within pneumatic systems (pressurised air in hoses/pipes)? | | |  |  | |  | |  | | | |
| Is there potential stored energy due to gravity? | | |  |  | |  | |  | | | |
| Is there stored energy due to the rotation of components such as flywheels? | | |  |  | |  | |  | | | |
| **18. Other Energy Considerations** | | | | | | | | | | | |
| Is the plant/equipment connected to services such as hazardous chemicals? | | |  |  | |  | |  | | | |
| Is the plant/equipment connected to fluids at high or low temperatures and/or pressures? | | |  |  | |  | |  | | | |
| Other factors? | | |  |  | |  | |  | | | |
| **CORRECTIVE ACTIONS** | | | | | | | | | | | |
| **Complete action plan below if there are known controls for the hazards identified above.**  **If there are no known controls complete Risk Assessment (004F).** | | | | | | | | | | | |
| **List the corrective actions** | | | | | **Priority**  **(H, M, L)** | | | | **By Whom** | | **By When** |
| 1. | | | | |  | | | |  | |  |
| 2. | | | | |  | | | |  | |  |
| 3. | | | | |  | | | |  | |  |
| **Sign Off** | | | | | | | | | | | |
| **Assessment Team** | **Name** | **Job Title** | | | | | **Signature** | | | **Date** | |
| **Team Leader** |  |  | | | | |  | | |  | |
| Team Member |  |  | | | | |  | | |  | |
| Team Member |  |  | | | | |  | | |  | |

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| **I take responsibility for ensuring all corrective actions are completed and followed up to review effectiveness.** | |
| **Manager:**  *name, position and signature* | **Date:** |
| **Team Leaders Comments** | |
|  | |

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| **Risk Assessment Matrix** | | | **LIKELIHOOD** | | | | |
| **Rare** | **Unlikely** | **Possible** | **Probable** | **Almost Certain** |
| **A** | **B** | **C** | **D** | **E** |
| **CONSEQUENCES** | **Catastrophic** | **5** | **Medium 11** | **Medium 16** | **High 20** | **High 23** | **High 25** |
| **Major** | **4** | **Low 7** | **Medium 12** | **Medium 17** | **High 21** | **High 24** |
| **Moderate** | **3** | **Low 4** | **Low 8** | **Medium 13** | **Medium 18** | **High 22** |
| **Minor** | **2** | **Low 2** | **Low 5** | **Low 9** | **Medium 14** | **Medium 19** |
| **Insignificant** | **1** | **Low 1** | **Low 3** | **Low 6** | **Low 10** | **Medium 15** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Consequences that could occur from the incident** | | | **Likelihood of the incident occurring** | | |
| **1** | **Insignificant** | First aid treatment | **A** | **Rare** | Hasn’t occurred |
| **2** | **Minor** | Medical Treatment | **B** | **Unlikely** | Has occurred |
| **3** | **Moderate** | Significant non-permanent injury | **C** | **Possible** | Occasionally occurred |
| **4** | **Major** | Permanent Injury | **D** | **Probable** | Occurred several times |
| **5** | **Catastrophic** | Death / Permanent disabling injury | **E** | **Almost Certain** | Has occurred often |

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| **Risk Level** | **Risk Score** | **Timeframe for Implementation of Control Measures** |
| **High** | **20 - 25** | Act Immediately or within 24 hours to lower the risk to an acceptable level or as low as reasonably practicable. |
| **Medium** | **11 - 19** | Act within 21 days to reduce the risk to an acceptable level or as low as reasonably practicable. |
| **Low** | **1 - 10** | Act within 60 days to reduce the risk to an acceptable level or as low as reasonably practicable. |