



# SAFETY MANAGEMENT SYSTEM

## Plant and Equipment Risk Assessment

<b>Equipment Location:</b>	<b>Hired From All Master Hire Stores</b>	<b>Equipment:</b>	<b>Harness</b>		<b>Approved By:</b>	<b>Steven Jose</b>
					<b>Signature:</b>	
		<b>Manufacturer Details</b>	<b>Various</b>			

Hazard	Action Required Yes/No	Risk Level (Refer to risk matrix)	Hierarchy of Control	Hazard and Risk Treatment (Complete Hazard Report Form)	Risk Level after Risk Treatment (Refer to risk matrix)
<b>Entanglement</b>					
Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Check harness for signs of wear and tear, and ensure all rings are in good order</i>	LOW
<b>Crushing</b>					
Can anyone be crushed due to: <ul style="list-style-type: none"> <li>▪ Material falling off the plant?</li> <li>▪ Uncontrolled or unexpected movement of the plant or its load?</li> <li>▪ Lack of capacity for the plant to be slowed, stopped or immobilized?</li> <li>▪ The plant tipping or rolling over?</li> <li>▪ Parts of the plant collapsing?</li> <li>▪ Coming in contact with moving parts of the plant during testing, inspection, use, maintenance, cleaning or repair?</li> <li>▪ Being thrown off or under the plant?</li> <li>▪ Being trapped between the plant and materials or fixed structures?</li> <li>• Other factors?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure travel of moving plant/vehicle (forward or reversing) is clear of all personnel</i> <i>Use spotter in restricted areas</i> <i>Ensure all plant and attachments are tied down securely</i>	
<b>Cutting, Stabbing and Puncturing</b>					
Can anyone be cut, stabbed or punctured due to? <ul style="list-style-type: none"> <li>▪ Coming in contact with sharp or flying objects?</li> <li>▪ Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?</li> <li>▪ Plant, parts of the plant or work pieces disintegrating?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	LOW	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure appropriate PPE is used (e.g. protection for eyes, hearing and footwear)</i>	LOW

<ul style="list-style-type: none"> <li>▪ Work pieces being ejected?</li> <li>▪ The mobility of the plant?</li> <li>▪ Uncontrolled or unexpected movement of the plant?</li> <li>▪ Other factors?</li> </ul>					
<b>Shearing</b>					
Can anyone's body parts be: <ul style="list-style-type: none"> <li>▪ Sheared between two or more parts of the plant, or between a part of the plant and a work piece or structure?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions          Obey all warning decals          Wear appropriate PPE          Establish safe working practices</i>	<b>LOW</b>
<b>Friction</b>					
Can anyone be burnt, gain abrasions etc. due to: <ul style="list-style-type: none"> <li>▪ Contact with moving parts or surfaces of the plant, or material handled by the plant?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions          Obey all warning decals          Attach harness securely to anchor points and use appropriate fall equipment to break fall, rather than hands          Wear appropriate PPE e.g. gloves</i>	<b>LOW</b>
<b>Striking</b>					
Can anyone be struck by moving objects due to: <ul style="list-style-type: none"> <li>▪ Uncontrolled or unexpected movement of the plant or material handled by the plant?</li> <li>▪ Plant, parts of the plant or work pieces disintegrating?</li> <li>▪ Work pieces being ejected?</li> <li>▪ Mobility of the plant?</li> <li>▪ Other factors?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>High Pressure Fluid</b>					
Can anyone come into contact with? <ul style="list-style-type: none"> <li>▪ Fluids under high pressure in normal use, in the instance of plant failure?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Electrical</b>					
Can anyone be injured by electrical shock or burnt due to: <ul style="list-style-type: none"> <li>▪ The plant contacting live electrical conductors?</li> <li>▪ Plant working close to electrical conductors?</li> <li>▪ Overload of electrical circuits?</li> <li>▪ Damaged or poorly maintenance electrical leads or cables?</li> <li>▪ Damaged electrical switches?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>HIGH</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions          Obey all warning decals          Ensure all overhead/underground wiring or other obstructions have been located and disconnected prior to commencing work          Note: ALL electrical work must be carried out by a qualified</i>	<b>MEDIUM</b>

# SAFETY MANAGEMENT SYSTEM

## Plant and Equipment Risk Assessment

<ul style="list-style-type: none"> <li>▪ Water near electrical equipment?</li> <li>▪ Lack of isolation procedures?</li> <li>▪ Other factors</li> </ul>				<i>and suitably licensed electrician</i>	
<b>Explosion</b>					
Can anyone be injured by fuels such as gases, vapors, liquids, dusts or other substances being ignited triggered by the operation of the plant or by materials handled by the plant?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Slipping, tripping and Falling</b>					
Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: <ul style="list-style-type: none"> <li>▪ Uneven or slippery work surfaces?</li> <li>▪ Poor housekeeping, such as shavings in the vicinity of the plant, spillage not cleaned up?</li> <li>▪ Obstacles being placed in the vicinity of the plant?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>ACUTE</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions          Obey all warning decals          Wear appropriate footwear          Ensure harness is attached securely to anchor points          Inspect anchor points to ensure their suitability          Ensure there is an exclusion zone beneath workspace which is free of people          Do not wrap lanyards/rope around beams – attach them to the correct anchorage points          Continually monitor co-workers harness and ensure it is still correctly positioned          Treat all roofs as fragile until aware of their condition to prevent falls</i>	<b>HIGH</b>
<b>High Temperature</b>					
Can anyone: <ul style="list-style-type: none"> <li>▪ Come into contact with objects at high temperature?</li> <li>▪ Come into contact with hot fluids?</li> <li>▪ Be injured by fire?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Temperature and Thermal Comfort</b>					
Can anyone suffer ill-health due to: <ul style="list-style-type: none"> <li>▪ Exposure to high or low temperatures?</li> <li>▪ Failure of air conditioning equipment?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions          Obey all warning decals          Be aware of body responses to adverse/extreme weather conditions (hot/cold)</i>	

<b>Suffocation</b>					
Can anyone be suffocated due to: <ul style="list-style-type: none"> <li>▪ Lack of oxygen, or atmospheric contamination?</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Ergonomics</b>					
Can anyone be injured due to: <ul style="list-style-type: none"> <li>▪ Poorly designed seating?</li> <li>▪ Repetitive body movements?</li> <li>▪ Constrained body posture or the need for excessive effort?</li> <li>▪ Design deficiency causing physical or personal stress?</li> <li>▪ Inadequate or poorly placed lighting?</li> <li>▪ Lack of consideration given to human error or human behavior?</li> <li>▪ Mismatch of the plant with human traits and natural limitations?</li> <li>▪ Other factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Take regular breaks/rests</i> <i>Exercise/stretch regularly</i> <i>Do not operate beyond operators personal capabilities</i> <i>Use suitably designed and secured loading/unloading procedures</i>	<b>LOW</b>
<b>Transportation</b>					
Can anyone be injured by this equipment falling or driven off vehicle or trailer while loading, unloading or transportation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input type="checkbox"/> Engineering <input type="checkbox"/> Administration <input type="checkbox"/> PPE		
<b>Operational</b>					
Can anyone be injured by this equipment	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>MEDIUM</b>	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure appropriate PPEs are used (e.g. eye protection, hearing and footwear)</i> <i>Ensure plant/vehicle is switched off before making any adjusts</i> <i>Ensure hold-to-run controls provided for machine are working properly</i> <i>Do not operate on steep slope</i> <i>Ensure handles and other adjustable parts are set right for the operator</i> <i>Ensure guards cover the entire width of</i>	<b>LOW</b>

# SAFETY MANAGEMENT SYSTEM

## Plant and Equipment Risk Assessment

				<i>the rotating parts</i>	
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<b>Other Hazards</b>					
Can anyone be injured or suffer ill-health from exposure to: <ul style="list-style-type: none"> <li>• Chemicals?</li> <li>• Toxic gases or vapors?</li> <li>• Fumes?</li> <li>• Dust?</li> <li>• Noise?</li> <li>• Vibration?</li> <li>• Radiation?</li> <li>• Other Factors?</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>LOW</b>	<input checked="" type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<i>Follow manufacturers' instructions          Obey all warning decals          Check for overhead/underground utilities (gas, water, electrical) before operation          Ensure equipment is appropriately labeled and meet the relevant State Legislative requirements          Maintain plant/vehicle in good working order - report any malfunction or damage to Master Hire immediately and stop using plant/vehicle where it is reasonable to foresee further risk to persons or damage to equipment</i>	<b>LOW</b>

<b>Further Comments:</b>	<b>A Specific Risk Assessment on site must be undertaken prior to plant operation?.</b> <b>This equipment must only be driven/operated by competent persons and holders of the appropriate license</b>

<b>Checklist:</b>	<input checked="" type="checkbox"/> <i>Manufacturers' manuals referenced</i> <input checked="" type="checkbox"/> <i>Copy kept in Master Hires' Risk Management File</i>
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### Hazard / Risk Matrix

Reference: Workplace Health and Safety Queensland - Risk Assessment - Supplement 2  
Risk Management Code of Practice 2007

**Step 1 Determine Likelihood – What is the possibility of the event happening?**

	Criteria	Description
<b>Almost certain</b>	Expected in most circumstances.	Event is a common problem
<b>Likely</b>	Will probably occur in most circumstances.	Event is known to have occurred at this site or it has happened
<b>Possible</b>	Might occur at some time	Event could occur at the site or I've heard of it happening
<b>Unlikely</b>	Could occur at some time	Event is not likely to occur at the site or I have not heard of it happening
<b>Rare</b>	May occur only in exceptional circumstances	Event is practically impossible.

**Step 2 Determine Consequence - What will be the result if it happens?**

**Step 3 Determine the risk score**

Classification	Example detail description
<b>Insignificant</b>	No injuries
<b>Minor</b>	First aid treatment only; spillage contained at site.
<b>Moderate</b>	Medical treatment; spillage contained but with outside help.
<b>Major</b>	Extensive injuries; loss of production
<b>Catastrophic</b>	Death; toxic release of chemicals



**SAFETY MANAGEMENT SYSTEM**

**Plant and Equipment Risk Assessment**

Likelihood	CONSEQUENCE				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	3 High	3 High	4 Acute	4 Acute	4 Acute
Likely	2 Medium	3 High	3 High	4 Acute	4 Acute
Possible	1 Low	2 Medium	3 High	4 Acute	4 Acute
Unlikely	1 Low	1 Low	2 Medium	3 High	4 Acute
Rare	1 Low	1 Low	2 Medium	3 High	3 High

**Step 4 Record risk score against the job sequence steps**

(Note – Risk scores have no absolute value and should only be used for comparison and to engender discussion.)

Score	Action
4 A: Acute	ACT NOW – Urgent – do something about the risks immediately. Requires immediate attention.
3 H: High	Highest management decision is required urgently.
2 M: Medium	Follow management instructions.
1 L: Low	OK for now. Record and review if any equipment/ people/ materials/ work processes or procedures change.