



SAFETY MANAGEMENT SYSTEM

Plant and Equipment Risk Assessment

Equipment Location:	Hired From All Master Hire Stores	Equipment:	Concrete Grinders - Petrol	Approved By:	Steven Jose
		Manufacturer Details	Various	Signature:	

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)
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Entanglement					
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	HIGH	<input checked="" 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>Do not lean or reach into under guarded area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Tie loose hair up/back</i> <i>Wear appropriate PPE whilst operating this machine</i>	LOW

Crushing					
Can anyone be crushed due to: <ul style="list-style-type: none"> ▪ 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 immobilized? ▪ 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? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<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</i> <i>Obey all warning decals</i> <i>Do not operate with persons (by standers) near machine</i> <i>Use spotter in restricted areas</i> <i>Do not leave machine unattended while running</i> <i>Ensure machine is securely tied down while transporting</i> <i>Place machine on level ground for operating</i> <i>Work up and down on incline; not across</i> <i>DO NOT use this machine on an incline or slope greater than 5°</i> <i>Wear appropriate PPE whilst operating this machine including Hi Vis clothing</i>	LOW

Cutting, Stabbing and Puncturing

<p>Can anyone be cut, stabbed or punctured due to?</p> <ul style="list-style-type: none"> ▪ 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? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HIGH	<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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not lean or reach into under guarded area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Ensure all safety guards and fixtures are in place and working correctly</i> <i>Before operation conduct a safety check to ensure all working pieces are under good condition</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing, hands and footwear)</i></p>	LOW
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Shearing

<p>Can anyone's body parts be:</p> <ul style="list-style-type: none"> ▪ Sheared between two or more parts of the plant, or between a part of the plant and a work piece or structure? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HIGH	<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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not lean or reach into cutting drum area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Avoid all protrusions from concrete surface e.g. pipes, reinforcing material etc.</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	MEDIUM
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Friction

<p>Can anyone be burnt, gain abrasions etc. due to:</p> <ul style="list-style-type: none"> ▪ Contact with moving parts or surfaces of the plant, or material handled by the plant? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Allow motor and other components to cool before servicing</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW
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Striking					
<p>Can anyone be struck by moving objects due to:</p> <ul style="list-style-type: none"> ▪ 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? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HIGH	<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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Use prop provided to support elevated base when conducting inspection or maintenance</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	MEDIUM
High Pressure Fluid					
<p>Can anyone come into contact with?</p> <ul style="list-style-type: none"> ▪ Fluids under high pressure in normal use, in the instance of plant failure? 	<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		
Electrical					
<p>Can anyone be injured by electrical shock or burnt due to:</p> <ul style="list-style-type: none"> ▪ 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 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HIGH	<input checked="" 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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not operate in areas with overhead/underground wiring or other obstructions</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW
Explosion					
<p>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?</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	HIGH	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Ensure motor is turned off and allowed to cool before refuelling</i> <i>Ensure appropriate PPE is used (e.g. eye protection, hearing and footwear)</i></p>	MEDIUM

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Slipping, Tripping and Falling					
<p>Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:</p> <ul style="list-style-type: none"> ▪ 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? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Inspect work area before operating machinery and ensure a clear work area</i> <i>Ensure dust and rubble is removed during grinding</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW
High Temperature					
<p>Can anyone:</p> <ul style="list-style-type: none"> ▪ Come into contact with objects at high temperature? ▪ Come into contact with hot fluids? ▪ Be injured by fire? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<input type="checkbox"/> Elimination <input type="checkbox"/> Substitution <input checked="" type="checkbox"/> Isolation <input checked="" type="checkbox"/> Engineering <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> PPE	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Do not lean or reach into under guarded area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW
Temperature and Thermal Comfort					
<p>Can anyone suffer ill-health due to:</p> <ul style="list-style-type: none"> ▪ Exposure to high or low temperatures? ▪ Failure of air conditioning equipment? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<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	<p><i>Follow manufacturers' instructions</i> <i>Obey all warning decals</i> <i>Take regular breaks/rests</i> <i>Maintain normal hydration levels</i> <i>Exercise/stretch regularly</i> <i>Schedule work with climatic conditions in mind e.g. early morning or late afternoon during hot temperature days</i> <i>Do not operate beyond your personal capabilities</i> <i>Wear appropriate PPE (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW

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Suffocation					
<p>Can anyone be suffocated due to:</p> <ul style="list-style-type: none"> ▪ Lack of oxygen, or atmospheric contamination? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<input checked="" 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	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Position and operate in well ventilated place</i></p> <p><i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW
Ergonomics					
<p>Can anyone be injured due to:</p> <ul style="list-style-type: none"> ▪ Poorly designed seating? ▪ Repetitive body movements? ▪ Constrained body posture or the need for excessive effort? ▪ Design deficiency causing physical or personal stress? ▪ Inadequate or poorly placed lighting? ▪ Lack of consideration given to human error or human behavior? ▪ Mismatch of the plant with human traits and natural limitations? ▪ Other factors? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	LOW	<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	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Take regular breaks/rests</i></p> <p><i>Exercise/stretch regularly</i></p> <p><i>Do not operate beyond your personal capabilities</i></p> <p><i>Use suitably designed and secured loading/unloading procedures</i></p> <p><i>Observe and use proper manual handling techniques</i></p>	LOW
Transportation					
<p>Can anyone be injured by this equipment falling or driven off vehicle or trailer while loading, unloading or transportation?</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<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	<p><i>Follow manufacturers' instructions</i></p> <p><i>Obey all warning decals</i></p> <p><i>Ensure engine and fuel is switched off</i></p> <p><i>Ensure equipment, attachments and sundry items are securely tied down</i></p> <p><i>Maintain vehicle and/or equipment in good working order - report any malfunction or damage to Master Hire immediately and stop using equipment where it is reasonable to foresee further risk to persons or damage to equipment</i></p> <p><i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i></p>	LOW

Operational					
Can anyone be injured by this equipment	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MEDIUM	<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 equipment is on stable ground and clear of obstructions</i> <i>Ensure adequate ventilation</i> <i>Ensure waste is collected and disposed in compliance with applicable regulations</i> <i>Ensure safety gears, levers, switches etc. are engaged/disengaged appropriately before starting/operating</i> <i>Ensure machine is switched off before making any adjustments</i> <i>Do not lean or reach into cutting drum area with motor running</i> <i>Do not do any servicing or maintenance with motor running</i> <i>Avoid protrusions from concrete surface e.g. pipes, reinforcing material etc.</i> <i>Do not operate on steep slope</i> <i>Ensure appropriate PPEs are used (e.g. protection for breathing, eyes, hearing and footwear)</i>	LOW
Other Hazards					
Can anyone be injured or suffer ill-health from exposure to: <ul style="list-style-type: none"> • Chemicals? • Toxic gases or vapors? • Fumes? • Dust? • Noise? • Vibration? • Radiation? • Other Factors? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	LOW	<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</i> <i>Obey all warning decals</i> <i>Ensure waste is collected and disposed in compliance with applicable regulations</i> <i>Ensure equipment is appropriately labeled and meet the relevant State Legislative requirements</i> <i>Ensure appropriate system is used to control dust that may contain asbestos or silica above safe limits</i> <i>Use appropriate extraction unit/method and monitoring system to ensure safe air quality and disposal of waste</i> <i>Maintain equipment in good working order - report any malfunction or damage</i>	LOW

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

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

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

Step 3 Determine the risk score

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.