PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

PCBU DETAILS:		**PRINCIPAL CONTRACTOR DETAILS:**	
Name: EziLift Australia Pty Ltd		Name:	
ABN: 57 167 654 275		ABN:	
Office address: PO Box 500 Campbelltown NSW 2560		Office address:	
Phone:	Mobile: 048888394	Phone:	Mobile:

ASSESSMENT	**PROJECT**	
Plant Hazard and Risk Assessment Worksheet for Duct Lifter / Material Hoist / Centre Lifter		
	Work location:	
	Works manager:	
This risk assessment should be used in conjunction with the operator's manual for the equipment being used. The purpose of this risk assessment is to identify the risks associated with this item of plant and identify the risk control measures that are in place on the plant. No professional judgment has been made on the effectiveness of these control measures by EziLift Australia. Operator Daily safety checks as outlined in the Operators Manual are to be carried out prior to commencement of work.		
	Contact phone no:	
	Date Assessment provided to Principal Contractor:	

WHS Legislation / ACT:	Work Health & Safety ACT 2011 Work Health & Safety Regulation 2011 Safe Work Australia (2011) Code of Practice Managing the Work Environment and Facilities	**Codes or Standards Applicable to the Assessment:**	AS 1418.8 Codes of Practice for Moving Plant Safe Work Australia (2011) Code of Practice Managing the Work Environment and Facilities Safe Clearances AS4024.1801,AS1802,AS1803 / AS4024.1601 Confined Space Code Of Practice December 2011

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

PLANT ACTIVITY TEST

	Activity	Areas of plant Accessed	Activity performed by	Frequency of activity	Isolation required (Y or N)	SWMS or document reference	Comments
A.	**Delivery and set up of plant on site**						
	Transport Driver	All	Driver	AR	Y	YES	Isolation required if left unattended
B.	**Operation (including inspection, pre-start checks, storage)**						
	Operator	All	Operator	D	N	YES	Prior to start of each shift
C.	**Service, maintenance and repairs (includes cleaning)***						
	Qualified Service Personel	All	Technician	3 monthly	Y	YES	3 Monthly or as required / requested
D.	**Decommissioning / removal from site**						
	Transport Driver	All	Driver	AR	Y	YES	Isolation required if left unattended
	Operator	All	Operator	AR	Y	YES	Isolation required if left unattended

* Include any maintenance and servicing activities that will be carried out on site.

Frequency of activity codes					
D	Daily	W	Weekly	2W	Fortnightly
M	Monthly	AR	As required	S	Required at start up/commissioning only

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

PLANT RISK ASSESSMENT

ASSESSING THE RISK

STEP 1: Consider what might happen when a hazard is encountered (consequences), and how likely it is that an exposure to the risk(s) from the hazard will occur (likelihood).
STEP 2: Use the appropriate Risk Level Calculator to determine the Risk Level to persons who may be exposed to the hazards.
STEP 3: Determine the most effective control measures. (Consult the hierarchy of risk control measures when carrying out this step).

RISK LEVEL CALCULATION

Use Risk Calculator 1.

PLANT RISK ASSESSMENT CHECKLISTS – LEGEND

Column	Details
Column 2	Indicate whether the risk or safety concern listed in Column 1 does or does not apply to the plant.
Column 3	Provide details of where the hazard exists on the plant.
Column 4	Indicate the "lifecycle" when exposure to risk will occur: C = commissioning; D = delivery; O = operation; M = servicing and maintenance; R = removal from site.
Column 5	Record preliminary consequence, likelihood and risk level with present risk controls (if any) in place.
Column 6	Determine and record the relevant plant (engineering) controls
Column 7	Determine and record the relevant operator (administrative) controls
Column 8	Record residual consequence, likelihood and risk rating after controls identified in Columns 6 and 7 have been applied.
Column 9	Determine if residual risk level is acceptable taking into account risk evaluation criteria and ALARP principles.
Column 10	Provide reference to corrective action number that corresponds with an appropriate corrective action to be applied to the plant (provide details in the "additional information/corrective actions" table at end of document).

HIERARCHY OF RISK CONTROLS

Preference	Control	Description
1 (best – preferred control)	**ELIMINATION**	**Eliminate** the risk – remove the hazard that is causing the risk completely. Only if it is not reasonably practicable to eliminate the risk, minimise it by (in descending order) –
2	**SUBSTITUTION**	Substitute the hazard giving rise to the risk with something giving rise to a lesser risk
3	**ISOLATION**	Isolate the hazard from any person who may be exposed to it (e.g., barriers, etc)
4	**ENGINEERING CONTROLS**	Implement engineering controls (e.g., guards, speed controls, etc) to reduce risk
5	**ADMINISTRATIVE CONTROLS**	Develop procedures to minimise exposure to a hazard (e.g., limit exposure times, post warning signs)
6 (least effective control)	**PERSONAL PROTECTION**	Use protective clothing and equipment (PPE) to limit harmful effects on workers from a hazard.

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

1	**Crushing, being drawn into, entanglement, shearing, friction or impact**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
1.1	Nip points / pinch points 	Y	Machine mast sections. Fold down stabilizers (if fitted). Winch Assembly.	O,M	M	Winch covers Mast guards. Locking pins / clasps.	Safety Decals. Operators Manual.	L	Y	4,5
1.2	In-running rollers / Gear sets	N	-	-	-	-	-	-	-	-
1.3	Crushing due to parts of plant closing or collapsing	Y	Mast Sections. Loads on forks.	O,M	M	Inertia brakes.	Safety Decals. Operators Manual. Keep hands and limbs free from mast and load area's at all times.	L	Y	4,5
1.4	Trapping between plant and materials or fixed structures	Y	Between all parts of plant and structure / materials whilst in use	C,D,M,O, R	E	Barricading. Use of truck winch for loading / unloading. Use of spotters. Traffic Control	Loading & Unloading of plant to be done in designated area/s only. SWMS / JSA and or Risk Assessment to be carried out including / identifying job task at hand prior to commencing work. Clear demarcated exclusion zones to be set up around active working areas of the Material Hoist. Safety Decals. Avoid congested work areas. Do NOT lower the platform unless the area below is clear of personnel & obstructions. Also consider the use of high impact/visibility fencing,	L	Y	3,4,5

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

							signage, spotters or traffic control management if deemed necessary via a JSA/SWMS or Risk Assessment.			
1.5	Being trapped beneath the plant or materials and fixed structures	Y	When lowering the platform.	O,M	E	Barricading. Use of spotters. Traffic Control	A SWMS/JSA and/or a Risk Assessment is to be carried out including / identifying job task at hand and note related dangers prior to commencing work by the operator. Clearly demarcated exclusion zones to be set up around active working areas of the Material Hoist. Safety Decals. Avoid congested work areas. Ensure load is centered and appropriately secured on the lifting platform prior to lifting or lowering. Do NOT lower the platform unless the area below is clear of personnel & obstructions. Also consider the use of high impact/visibility fencing, signage, spotters or traffic control management if deemed necessary via a JSA/SWMS or Risk Assessment.	L	Y	3,4,5
1.6	Body or body parts caught between moving components	Y	Winch assembly. Winch cable. Mast assembly.	M	H	Shrouds. Covers. Guards.	Only licensed & approved technicians are to carry out repairs as per OEM recommendations. Safety decals. Ensure safe clearances are maintained as per AS4024:1801, 1802, 1803, AS4024:1601. Never remove guards or shrouding at any time.	L	Y	3,4,5
1.7	Entanglement of body parts, hair, clothing, jewellery, tools, cleaning brushes, rags, etc, in moving parts	Y	Winch assembly. Winch cable. Mast assembly.	M	H	Shrouds. Covers. Guards.	Only licensed & approved technicians are to carry out repairs as per OEM recommendations.	L	Y	3,4,5

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

							Safety decals. Avoid wearing loose fitting clothing. Never remove guards or shrouding at any time.			
1.8	Contact with moving parts during testing, operation, maintenance, etc.	Y	Winch assembly. Winch cable. Mast assembly.	M	H	Shrouds. Covers. Guards.	Only licensed & approved technicians are to carry out repairs as per OEM recommendations. Safety decals. Plant to be isolated and “tagged out of service” prior to commencement of repairs & maintenance.	L	Y	3,4,5
1.9	Friction due to contact with moving parts, surfaces or materials	N	-	-	-	-	-	-	-	-
1.10	Cutting due to sharp tools, components or work materials	N	-	-	-	-	-	-	-	-
1.11	Accumulation of energy inside machinery (liquid /gas under pressure, vacuum, elastic energy) Note: energy listed in Section 5)	N	-	-	-	-	-	-	-	-

2	**Movement of plant**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Refer ence	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
2.1	Plant stability – tipping, roll over	Y	Plant onsite. Uneven work area. Loading / Unloading of plant all locations. Traversing across terrain that exceeds allowable limits. Misuse of attachments.	D,O,M,R	E	Plant outriggers (if fitted). Load charts.	A separate SWMS / JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator – This should include ground condition and surrounding areas where the Material Hoist may traverse or be used.	L	Y	3,4,5

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

2.1 Cont.			Use of unapproved and or certified attachments.				Plant may NOT be traversed or operated on uneven terrain, unstable surfaces or angles that exceed OEM recommendations. All Loads are to be evenly distributed across the platform at ALL times. Do NOT exceed the maximum side force allowable on the platform. Do NOT exceed the maximum lift capacity allowable on the platform. Do NOT exceed the maximum allowable attachment lift capacity. Do NOT raise the platform unless the machine is on a firm, level surface. Do NOT use the plant in wind conditions greater than that stated by the OEM. Ensure the outriggers are deployed on firm / compacted ground and the combined weight of the plant, do not exceed the floor point loading recommended by the OEM. Do NOT modify the plant in any way without authorization from the OEM.			
2.2	Operator protection in event of roll over (ROPS) or plant tipping over	N	-	-	-	-	-	-	-	-
2.3	Falling from or being thrown from plant	N	-	-	-	-	-	-	-	-

2	**Movement of plant (continued)**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Refer ence	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

2.4	Inability to slow down, stop, or immobilise plant or restrict certain plant movements	N	-	-	-	-	-	-	-	-
2.5	Collision with persons, traffic or objects	Y	Plant Surrounding structures. Traffic. Pedestrian Traffic.	D,O,M,R	E	Barricading.	A separate SWMS / JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator with consideration taken into account from material such as the – Codes of Practice Traffic Management in the Workplace. Be aware of limited sight distance and blind spots when operating. Check work area for overhead obstructions and other possible hazards. Also consider the use of high impact/visibility fencing, signage, spotters or traffic control management if deemed necessary via a JSA/SWMS or Risk Assessment. Clearly demarcated exclusion zones to be set up around active working areas of the Material Hoist.	L	Y	3,4,5
2.6	Uncontrolled or unexpected movement of plant, components or materials (e.g., slewing, luffing, lifting, driving etc)	Y	Plant. Overloading.	D,O,M,R	E	Outriggers. Stabilizers. Lockable wheels and or casters.	When transporting the Material Lift always ensure Mast Brake is engaged and wheels locked. Always assess the site ground conditions prior to using the Material Hoist. Do NOT raise the platform unless the machine is on a firm, level surface. Do NOT use the plant in wind conditions greater than that stated by the OEM. Never “tie off” the plant to any structure.	L	Y	3,4,5

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

							Always engage wheel brakes when the Material Hoist is in use. DO NOT transport loads at height – Always lower the platform fully before relocating a load on the platform or tynes.			
2.7	Parts of the plant collapsing	N	-	-	-	-	-	-	-	-
2.8	Inability to restrict plant or prevent plant moving into hazardous areas (as required for specific tasks)	N	-	-	-	-	-	-	-	-
2.9	Unauthorised access to or operation of plant (or specific components)	Y	Plant controls	O,M	E	-	Always ensure the plant is secured away from unauthorized use when not in use.	L	Y	3,4,5
2.10	Remote activation or automatic start up of plant or components	N	-	-	-	-	-	-	-	-
2.11	Damage to surfaces, etc, caused by plant movement or operations	N	-	-	-	-	-	-	-	-

3	**Being struck by falling objects / ejected materials**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Refer ence	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
3.1	Falling objects	Y	Platform of Plant.	O	E	Load Guard	All materials on the lifting platform are to be kept in an orderly and secure manner at all times. No loose items to be allowed on platform stowed or raised. Do NOT lift equipment or materials external to the working perimeters of the Material Hoist. Exclusion area to be set up around active working area of Material Hoist.	L	Y	3,4,5
3.2	Failure of plant or components with loss of contents and/or load	N	-	-	-	-	-	-	-	-

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

3.3	Projectiles / ejected work pieces or items	Y	Platform of Plant	O	E	Load Guard	All materials on the lifting platform are to be kept in an orderly and secure manner at all times. No loose items to be allowed on platform stowed or raised. Do NOT lift equipment or materials external to the working perimeters of the Material Hoist. Exclusion area to be set up around active working area of Material Hoist.	L	Y	3,4,5
3.4	The plant, parts of plant or work pieces disintegrating	N	-	-	-	-	-	-	-	-

4	**Hazardous events (other)**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
4.1	Overloading of plant or components	Y	Plant platform	O	H	Inertia Brakes	Equipment & materials must NOT exceed maximum platform capacity. All Loads are to be evenly distributed across the platform at ALL times. Do NOT exceed the maximum side force allowable on the platform. Obey safety decals.	L	Y	3,4,5
4.2	Inadequate mechanical strength of parts	N	-	-	-	-	-	-	-	-
4.3	Failure of loading controls	N	-	-	-	-	-	-	-	-
4.4	Inadequate design / selection of pulleys, drums, chains, ropes, etc.	N	-	-	-	-	-	-	-	-
4.5	Abnormal conditions of assembly, testing, use, maintenance	N	-	-	-	-	-	-	-	-
4.6	Exposure to hazardous materials/chemicals, such as	N	-	-	-	-	-	-	-	-

	oils, grease, coolants, solvents, etc. and/or biological agents									

5	**Systems under pressure (hydro, hydraulic, pneumatic, compressed air)**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
5.1	Fluids under pressure: Low to moderate pressures (up to 4,000 psi or 27.6 mPa)	N	-	-	-	-	-	-	-	-
5.2	Fluids under pressure: High to very high pressures (over 4,000 psi or 27.6 mPa)	N	-	-	-	-	-	-	-	-
5.3	Gas or air under hazardous pressures (i.e., store in pressure vessels or pressurized by system)	N	-	-	-	-	-	-	-	-
5.4	Striking due to damage or failure of high pressure hoses / couplings / tyres	N	-	-	-	-	-	-	-	-
5.5	Energy stored in springs or items under tension	Y	Winch cable.	D,O,M,R	M	Shrouds. Covers.	Operator NOT to carry out any repairs. DO NOT operate without safety shrouds in place.	L	Y	3,4,5
5.6	Residual energy / pressure in system	N	-	-	-	-	-	-	-	-

6	**Electrical**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
6.1	Contact with or proximity to plant electrical circuits or parts at Extra Low Voltage (under 50V AC or 120V DC)	N	-	-	-	-	-	-	-	-

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

6.2	Contact with or proximity to plant electrical circuits or parts at LOW or HIGH voltages (50-1000V AC or 120-1500V DC)	N	-	-	-	-	-	-	-	-
6.3	Contact with or working in close proximity to “live” electrical conductors (i.e., LV, or HV power transmission lines, etc)	Y	Plant. Surrounding Structures.	D,O,M,R	E	Barricades Insulators	A separate SWMS/JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator specifically detailing work near power lines. Reference the Codes of Practice (Work Near Overhead Power lines 2006) Section 4.4.2 for alternate ways of reducing or eliminating the risk. Refer section 5.8 of AS 2550.10-005 to establish safe working distances, no go zones and use of spotters. Consult local authorities before commencement of work near power lines. Look up and live throughout. Dial before you dig. Be aware of your surroundings.	L	Y	3,4
6.4	Overloading of circuits (i.e., electrical / electronic systems including control circuits)	N	-	-	-	-	-	-	-	-
6.5	Energy sources – identification and isolation of systems	N	-	-	-	-	-	-	-	-
6.6	Contact with or working in proximity to “live” electrical conductors or control devices	Y	Plant Surrounding Structures.	D,O,M,R	E	Barricades Insulators	A separate SWMS/JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator specifically detailing work near power lines. Reference the Codes of Practice (Work Near Overhead Power lines 2006) Section 4.4.2 for alternate	L	Y	3,4

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

							ways of reducing or eliminating the risk. Refer section 5.8 of AS 2550.10-005 to establish safe working distances, no go zones and use of spotters. Consult local authorities before commencement of work near power lines. Look up and live throughout Dial before you dig. Be aware of your surroundings.			
6.7	Residual / stored energy in electrical systems (i.e., batteries, capacitors, UPS, emergency systems)	N	-	-	-	-	-	-	-	-
6.8	Electrical systems intrinsically safe where plant applications involve hazardous atmospheres	N	-	-	-	-	-	-	-	-

7	**Fire / explosion**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
7.1	Components susceptible to high temperatures, overheating or unsafe thermal loading	N	-	-	-	-	-	-	-	-
7	**Fire / explosion (continued)**									

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

Refer ence	Column 1 Risk or Safety concern	Column 2 Potential hazard Y / N	Column 3 Location & nature of hazard	Column 4 Lifecycle (C,D,O, M,R)	Column 5 Preliminary risk (C,H,M,L,I)	Column 6 Plant (engineering) controls	Column 7 Operator/ Procedural controls	Column 8 Residual risk (C,H,M,L, I)	Column 9 Risk level acceptable Y / N	Column 10 Corrective action reference
7.2	Ignition sources – plant design (i.e., flame, sparks, heating elements)	N	-	-	-	-	-	-	-	-
7.3	Ignition sources – process and/or plant operation (e.g., ejected work pieces, electrical discharge, sparks)	N	-	-	-	-	-	-	-	-
7.4	Flammable or explosive atmosphere	N	-	-	-	-	-	-	-	-
7.5	Over-pressurisation, catastrophic failure within pressurized system	N	-	-	-	-	-	-	-	-
7.6	Interference with remote detonation equipment	N	-	-	-	-	-	-	-	-

8	**Slips, trips, falls**									
Refer ence	Column 1 Risk or Safety concern	Column 2 Potential hazard Y / N	Column 3 Location & nature of hazard	Column 4 Lifecycle (C,D,O, M,R)	Column 5 Preliminary risk (C,H,M,L,I)	Column 6 Plant (engineering) controls	Column 7 Operator/ Procedural controls	Column 8 Residual risk (C,H,M,L, I)	Column 9 Risk level acceptable Y / N	Column 10 Corrective action reference
8.1	Working / access surfaces on plant uneven, slippery or obstructed	N	-	-	-	-	-	-	-	-
8.2	Falls from designated access (ladders, stairs, walkways) on the plant	N	-	-	-	-	-	-	-	-
8.3	Falls from elevated areas on plant (fall height under 2m) due to size, location, lack of fall	N	-	-	-	-	-	-	-	-

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

	protection, unprotected holes, openings, penetrations or gaps)									
8.4	Falls from elevated areas on plant (fall height over 2m) due to size, location, lack of fall protection, unprotected holes, openings, penetrations or gaps)	N	-	-	-	-	-	-	-	-
8.5	Falls due to collapse of supporting structure (e.g., mobile crane boom, batch plant, tower crane)	N	-	-	-	-	-	-	-	-

9	**Atmospheric conditions/ contaminants**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Refer ence	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
9.1	Atmospheric contaminants associated with plant operation (exhaust emissions, gases, thermal fumes, etc)	N	-	-	-	-	-	-	-	-
9.2	Atmospheric contaminants created through work/material (dusts, fibres)	N	-	-	-	-	-	-	-	-
9.3	Contaminants / toxic materials produced	N	-	-	-	-	-	-	-	-
9.4	Confined spaces associated with the plant	N	-	-	-	-	-	-	-	-
9.5	Unsafe oxygen levels	N	-	-	-	-	-	-	-	-

10	**Working environment/ ergonomics (e.g., visibility, noise, vibration, manual handling)**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Refer ence	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

10.1	Lighting conditions (e.g., illumination, glare, etc)	Y	Plant working area. Auxiliary lighting Sources.	O,M	H	Light stands. Platform lighting.	Lighting levels should be monitored via use of a lux meter to ensure that adequate lighting is provided throughout the use of the Material Hoist at all times. External light stands, temporary or fixed lighting should be available at all times during the use of the Material Hoist. Operator should stop work if they feel lighting conditions are NOT sufficient. In situations of extensive illumination or glare appropriate PPE should be considered such as tinted safety glasses, wide brim hats and implemented via a toolbox talk. Reference to Table 1 appendix 1.1 should be made if a SWMS identifies lighting concerns.	L	Y	3,4,5,6
10.2	Restricted visibility or work area (e.g., operating position/layout, generation of dust, etc)	Y	Plant Platform	O	H	Barricading. Use of spotters. Traffic Management	A separate SWMS / JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator specifically detailing work environment conditions that may adversely affect the use of the MEWP. Be aware of limited sight distance and blind spots when operating. Check work area for overhead obstructions and other possible hazards. Always barricade work areas when working in public or high traffic zones. Also consider the use of fencing, signage and spotters or traffic control management.	L	Y	3,4,5

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

							Clearly demarcated exclusion zones to be set up around active working areas of the Material Hoist.			
10.3	Injury due to poorly designed, located or faulty seating.	N	-	-	-	-	-	-	-	-
10.4	User error through poor design of controls (e.g., human factor principles, replacement, marking of or functioning of controls)	N	-	-	-	-	-	-	-	-
10.5	Manual handling risks due to heavy or awkward loads, repetitive lifting, sudden jerky movements, etc)	N	-	-	-	-	-	-	-	-
10.6	Repetitive activity, forceful exertions, static or awkward posture	N	-	-	-	-	-	-	-	-
10.7	Noise levels exceeding recommended exposure levels (Leq 85 dB(A) (8h))	N	-	-	-	-	-	-	-	-
10	**Working environment/ ergonomics (e.g., visibility, noise, vibration, manual handling) (continued)**									
Refer ence	Column 1 Risk or Safety concern	Column 2 Potential hazard Y / N	Column 3 Location & nature of hazard	Column 4 Lifecycle (C,D,O, M,R)	Column 5 Preliminary risk (C,H,M,L,I)	Column 6 Plant (engineering) controls	Column 7 Operator/ Procedural controls	Column 8 Residual risk (C,H,M,L, I)	Column 9 Risk level acceptable Y / N	Column 10 Corrective action reference
10.8	Adverse effects on communication with others on or near plant	N	-	-	-	-	-	-	-	-
10.9	Vibration (e.g., personal exposure, impact on structures, etc)	N	-	-	-	-	-	-	-	-
10.10	Introduction of moisture, water, or contaminants to work areas or systems	N	-	-	-	-	-	-	-	-
10.11	Radiation – ionising (i.e., UV, X ray, Gamma, etc)	N	-	-	-	-	-	-	-	-
10.12	Radiation – non-ionising (I.e., RF, microwave, infrared, laser, etc)	N	-	-	-	-	-	-	-	-

11	**Temperature extremes**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
11.1	Open flame, steam, heated air	N	-	-	-	-	-	-	-	-
11.2	Exposure to high or low temperature extremes (thermal comfort)	N	-	-	-	-	-	-	-	-
11.3	Contact with hot or cold plant components or materials	N	-	-	-	-	-	-	-	-

12	**Transport / movement of plant**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
12.1	Loading / unloading of plant	Y	Transport	D,R	E	Tie down points. Truck winch.	A separate SWMS / JSA or Risk Assessment should be completed prior to movement of plant via transport. Transport driver to hold EWPA “T” ticket. Loading & Unloading of plant to be done in designated area/s only. Exclusion area to be set up around loading / unloading zone. Avoid congested work areas.	L	Y	3,4,5

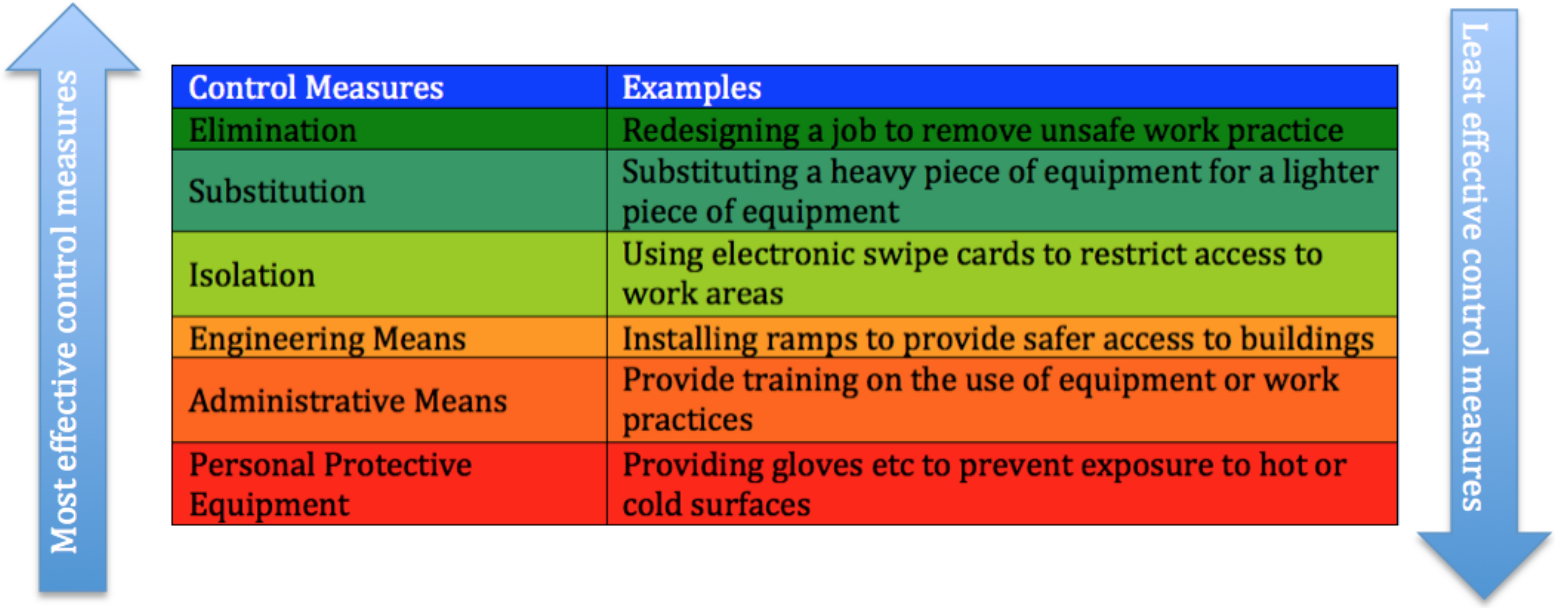
PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

12.2	Stability and security of plant and components during transport	Y	Transport	D,R	E	Tie down points. Truck winch.	A separate SWMS / JSA or Risk Assessment should be completed prior to movement of plant via transport. Transport driver to hold EWPA “T” ticket. Plant should be secured by means outlaid by the OEM. Transport brake should be engaged throughout the transport process.	L	Y	3,4,5
12.3	Factors affecting road movement of plant (license, escort, permits, etc).	N	-	-	-	-	-	-	-	-
13	**Operator Licensing**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	Operator/ Procedural controls	Residual risk (C,H,M,L, I)	Risk level acceptable Y / N	Corrective action reference
13.1	Non Ticketed Operated	N	-	-	-	-	-	-	-	-

ADDITIONAL INFORMATION / CORRECTIVE ACTIONS

Reference	Additional information / Details of corrective actions

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B



Control Measures	Examples
Elimination	Redesigning a job to remove unsafe work practice
Substitution	Substituting a heavy piece of equipment for a lighter piece of equipment
Isolation	Using electronic swipe cards to restrict access to work areas
Engineering Means	Installing ramps to provide safer access to buildings
Administrative Means	Provide training on the use of equipment or work practices
Personal Protective Equipment	Providing gloves etc to prevent exposure to hot or cold surfaces

RISK LEVEL CALCULATOR (1)

The risk associated with a hazard is related to the severity of a single incident, and the frequency and duration of exposure to the hazard. In many instances, other hazards present may increase the risk of an individual hazard.
STEP 1: Consider how likely a risk is encountered, and what might happen.
STEP 2: Use the risk level calculator to determine the likely risk level (outcome) to persons who may be exposed to the hazards.
STEP 3: Identify and develop effective control measures. (Consult the hierarchy of risk control measures when carrying out this step).

LEVEL OF CONSEQUENCES	LIKELY CONSEQUENCES OF EVENT OCCURRING *What is the likely outcome of an exposure to the risk?*	RISK LEVEL (OUTCOME)				
		Almost certain	Likely	Possible	Unlikely	Rare
Catastrophic (C)	Fatality or permanent disability; toxic release of chemicals, long-term environmental impact; loss of facilities; very high $ loss	**E**	**E**	**E**	**E**	**H**

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

High (H)	Long-term illness or serious injury; serious medium-term environmental effects; major property damage; loss of production; high $ loss	**E**	**E**	**E**	**H**	**M**
Moderate (M)	Medical treatment requiring up to several days off work; spillage contained with outside assistance; significant property damage; med – high $ loss	**E**	**H**	**M**	**M**	**L**
Low (L)	Minor injury requiring First-Aid; spillage contained on site; moderate property damage; low-med. $ loss	**H**	**H**	**M**	**M**	**L**
Insignificant (I)	No injuries; minor property or environmental damage; very low $ loss	**H**	**M**	**L**	**L**	**L**

LIKELIHOOD OF EVENT OCCURRING *How likely is it that an exposure will occur?*		**DETERMINATION OF RISK CONTROL ACTIONS**	
		RISK LEVEL (OUTCOME) (from matrix)	**ACTION REQUIRED** (refer to the hierarchy of risk controls)
Almost certain	Event is expected to occur in most circumstances		
Likely	Event will probably occur in most circumstances	**E** (EXTREME)	**URGENT** - Immediate action required to control risk.
Possible	Event might occur at some time	**H** (HIGH)	Highest management decision required urgently.
Unlikely	Event could occur at some time	**M** (MEDIUM)	Follow management instructions regarding risk.
Rare	Event may occur only in exceptional circumstances	**L** (LOW)	These risks may not require immediate attention - monitor.

LIKELIHOOD OF EVENT OCCURRING – Consider the following:	**LIKELY CONSEQUENCES OF EVENT OCCURRING** – Consider the following:	**HIERARCHY OF RISK CONTROLS**
How often is the task/activity performed? How many people are exposed to the hazard? How long is the exposure? Are engineering controls preventing exposure at present? Does workplace layout and condition affect exposure? Are abnormal conditions which may result in a greater exposure reasonably foreseeable? What are the results of any biological or atmospheric monitoring? Do workers have appropriate skills and knowledge to perform tasks? Do current work practices expose workers to a hazard? Are there other contributing factors?	What are the consequences in the short term? What are the consequences in the long term? What is the history of injuries related to exposure to the hazard? How close are workers to the hazard? What is the energy level of the hazard (i.e., weight, voltage, volume, height above ground, temperature, amplitude, concentration, aggressive state)? If a substance is hazardous, what are the health effects associated with – Inhaling it Ingestion (swallowing) it Skin contact, or Eye contact?	1. **Eliminate** the risk. If it is not reasonably practicable to eliminate the risk, minimise it by (in descending order) – 2. **Substitution** 3.**Isolation** 4. **Engineering Means** 5. **Administrative Controls** 6. **Personal protective equipment (PPE)**

TABLE 1

Strike out if not applicable APPENDIX 1.1

NOISE REPORT	
Equipment Type:	Serial/Asset No.
Make:	Model:
Test by *(print)*:	Date:
Signature:	

Strike out if not applicable APPENDIX 1.2

LIGHTING REPORT	
Test by *(print)*: Signature:	Date:
Lux Meter used:	
Results – Operator's station	

PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV B

Sound Level Meter Unit Used:	
Manufactures specified noise level:	dBA
Background level:	dBA

Results – Operator's Station

dBA	High Idle	dBA	Low Idle

(Equipment Operating)

Comments:

Results – Bystander Position:

Front	dBA
Rear	dBA
Left	dBA
Right	dBA

At 7 metres from side of equipment – Equipment Operating (High Idle)

Comments:

At controls	Lux
At emergency control	Lux
In front/over task	Lux
Left side task	Lux
Right side task	Lux

Comments:

Results – Surroundings:

Clearly seen by others?	• Yes	• No
Decrease lighting in walkways?	• Yes	• No
Decrease lighting to other workstations?	• Yes	• No

Comments: