PLANT HAZARD & RISK ASSESSMENT FOR SCISSOR TYPE MEWP - REVJ

ASSESSMENT	PROJECT	
Plant Hazard and Risk Assessment Worksheet for Scissor Type EWP		
	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	Contact phone no:	
	Date Assessment	

PCBU DETAILS:		PRINCIPAL CONTRACTOR DETAILS:	
Name: All Access Hire Pty Ltd		Name:	
ABN: 51 604 978 556		ABN:	
Office address: 6 Blue Rock Drive, Luscombe 4207		Office address:	
Phone: 0407 710 717	Mobile: 0407 710 717	Phone:	Mobile:

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 All Access Hire. Operator Daily safety checks as outlined in the “EWP Safety Check & Routine Maintenance Logbook" are to be carried out prior to commencement of work.	provided to Principal Contractor:		
	PLANT & EQUIPMENT		
	Make:	Model:	
	Serial Number:	– UNIT	

Person(s) responsible for monitoring and managing activity:	Paul Cannan	**Position Held:**	Manager	**Signature:**	Paul Cannan		
Person(s) responsible for reviewing the Assessment:	Paul Cannan	**Position Held:**	Director	**Last worksheet review date:**	01/07/2023	**Signature:**	pc
WHS Legislation / ACT:	Work Health & Safety ACT 2011 Work Health &Safety Regulation 2011 WHSQ (2021) COP Managing the Work Environment & Facilities			**Codes or Standards Applicable to the Assessment:**	AS 2359.12 – 1996 Powered Industrial Trucks Hazardous Areas AS 2359.2 – 2013 Powered industrial trucks – Operations AS 2359.6 – 2013 AS 2359.14 - 2005 COP Managing the Risk of Plant in Workplace 2021 WHSQ (2021) COP Managing the Work Environment & Facilities Safety of machinery AS/NZS 4024.1801, AS/NZS 4024.1803, AS/NZS 4024.1601 AS/NZS 1891.1:2020 Personal equipment for work at height Confined Space Code Of Practice December 2021		

PLANT HAZARD & RISK ASSESSMENT FOR SCISSOR TYPE MEWP REVJ

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 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

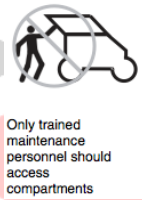
Use Risk Calculator 1.

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.

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	Scissor stack. Entry gate to platform. Inspection doors at machine base.	O,M	M	Guarding. Gate Return Springs. Gas struts.	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	Scissor stack. Inspection doors at machine base.	O,M	M	Guarding. Gas struts.	Safety Decals. Operators Manual. Keep hands and limbs free from scissor stack area 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. Never operate outside of the MEWP guardrails stowed or raised. Clear demarcated exclusion zones to be set up around active working areas of the MEWP. Safety Decals. Avoid congested work areas. Remain within the platform at all times whilst operating the MEWP. Do NOT lower the platform unless the area below is	L	Y	3,4,5

							clear of personnel & obstructions. Be aware of crushing hazards when grasping the platform guardrail. Ensure work platform floor is clear of debris so a clear line of site through the platform floor is kept at all times. 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.			
1.5	Being trapped beneath the plant or materials and fixed structures  Crush hazard	Y	When lowering the platform. When lowering outriggers (If Equipped)	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. Never operate outside of the MEWP guard rails Clearly demarcated exclusion zones to be set up around active working areas of the MEWP. Safety Decals. Avoid congested work areas. Remain within the platform at all times whilst operating the EWP. Do NOT lower the platform unless the area below is clear of personnel & obstructions. Ensure work platform floor is clear of debris so a clear line of site through the platform floor is kept at all times. 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	Engine area of plant. Engine fan. Electrical Motors	M	H	Shrouds. Covers Engine start isolation ie: Battery isolator E Stop Ignition Key Removed	Only licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals. Ensure safe clearances are maintained as per AS4024:1801, 1802, 1803, AS4024:1601.	L	Y	3,4,5
1.7	Entanglement of body parts, hair, clothing, jewellery, tools, cleaning brushes, rags, etc, in moving parts	Y	Engine area of plant. Engine fan.	M	H	Shrouds. Covers Engine start isolation ie: Battery isolator E Stop Ignition Key Removed	Only licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals. Avoid wearing loose fitting clothing. Never remove guards or shrouding at any time.	L	Y	3,4,5
1.8	Contact with moving parts during testing, operation, maintenance, etc.	Y	Engine area of plant. Engine fan. Electrical Motors	M	H	Shrouds. Covers Engine start isolation ie: Battery isolator E Stop Ignition Key	Only licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals. Plant to be isolated by ways such as Estops, Battery isolator (if equipped), Removal of ignition key 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)	Y	Various areas of plant. All hydraulic hoses. All hydraulic cylinders. All hydraulic valve assemblies Accumulators	O,M	E	Shrouds. Covers. Mechanical relief valves	Operator NOT to carry out any repairs. Only suitably licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals	L	Y	3,4,5

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 **2.1 Cont.**	Plant stability – tipping, roll over  Tip-over hazard	Y	Plant onsite. Uneven work area. Loading / Unloading of plant all locations. Traversing across terrain that exceeds allowable limits. Use of Outriggers.	D,O,M,R	E	Plant outriggers. Pot hole guards. Limit Switches Tiltcone	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 MEWP may traverse or be used. Plant may NOT be traversed or operated on uneven terrain, unstable surfaces or angles that exceed OEM recommendations. Occupants, equipment & materials must NOT exceed maximum platform capacity. All Loads are to be evenly distributed throughout the platform at ALL times. Do NOT exceed the maximum side force allowable on the platform. Do NOT raise the platform unless the machine is on a firm, level surface. Do NOT use the plant in	L	Y	3,4,5

							wind conditions greater than that stated by the OEM. Test the function of the oscillating axle as per OEM recommendations in the operators manual prior to use. Ensure the outriggers are deployed on firm / compacted ground and the combined weight of the plant, persons and tooling do not exceed the floor point loading recommended by the OEM. Do NOT modify the plant in any way without authorization from AAH.			
2.2	Operator protection in event of roll over (ROPS) or plant tipping over	N	-	-	-	-	-	-	-	-
2.3	Falling from or being thrown from plant	Y	Ejection or falling from platform stowed or raised.	D,O,M,R	E	Guard Rails. Entry Gate. PFPE – Harness/s PPE	A SWMS / JSA and/or a Risk Assessment is to be carried out identifying if the need for a harness/s is required due task at hand prior to commencing work by the operator. Do NOT sit, stand or climb on the platform guardrails. Maintain a firm footing on the platform at all times. Do NOT climb down the platform when raised. Close the entry gate before operating the MEWP. Do NOT operate the MEWP if the guardrails have not been fitted.	L	Y	4,5,6

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
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
2.4	Inability to slow down, stop, or immobilise plant or restrict	N	-	-	-	-	-	-	-	-

	certain plant movements									
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 driving or operating. Be aware of extended platform conditions when moving plant. Check work area for overhead obstructions and other possible hazards. Observe and use color coded direction arrows on controls and platform for drive and steer functions. 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 MEWP.	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 Over speed Overloading Failure to Stop	D,O,M,R	E	Outriggers. Stabilizers. Hand Control Guarding	When transporting the MEWP always load/unload as per guidelines listed in the EWPA “Load restraint Guide”. Always assess the site ground conditions prior to using the MEWP. Do NOT raise the platform unless the machine is on a firm, level surface.	L	Y	3,4,5

							Do NOT use the plant in wind conditions greater than that stated by the OEM. Test the function of the oscillating axle as per OEM recommendations in the operator's manual prior to use. Never "tie off" the plant to any structure. All materials and tooling on the work platform are to be kept in an orderly and secure manner at all times. The MEWP is not to be used as a goods lifting device outside of OEM recommendations. Drive speeds are to be maintained as per AS1418.10. Operator Daily safety checks as outlined in the "EWP Safety Check & Routine Maintenance Logbook" are to be carried out prior to commencement of work. Refer Appendix 1.5.			
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	Battery Isolator. E Stop. Ignition Key. Control panel covers.	Always ensure that the MEWP has had both platform and ground control E stops depressed, the ignition key removed and battery isolator (if fitted) turned to the "OFF" position when not in use. Lock all control panel doors.	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	Y	Site Surfaces	D,O,M,R	L	Non-marking tires. Preservation mats.	A separate SWMS / JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator.	L	Y	3,4

							Consideration for use of machinery with non-marking tires on finished surfaces should be taken into account. Preservation mats should be used in situations where grounding surfaces require protection. They are NOT to be used as supporting structures for equipment.			

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	Guard Rails Toe Guards Self latching Gate	All materials and tooling on the work 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. The MEWP is NOT to be used as a goods lifting device outside of OEM recommendations. Do NOT lift equipment or materials external to the working platform of the MEWP. Never operate or carry out work outside of the MEWP guardrails stowed or raised. Exclusion area to be set up around active working area of MEWP.	L	Y	3,4,5
3.2	Failure of plant or components with loss of contents and/or load	N	-	-	-	-	-	-	-	-
3.3	Projectiles / ejected work pieces or items	Y	Platform of Plant	O	E	Guard Rails Toe Guards Self latching Gate	All materials and tooling on the work platform are to be kept in an orderly and secure manner at all times. No loose items to be allowed	L	Y	3,4,5

							on platform stowed or raised. The MEWP is not to be used as a goods lifting device outside of OEM recommendations. Do NOT lift equipment or materials external to the working platform of the MEWP. Never operate or carry out work outside of the MEWP guardrails stowed or raised. Exclusion area to be set up around active working area of MEWP.			
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	Hydraulic Relief Valves. Platform weight sensing cells.	Occupants, equipment & materials must NOT exceed maximum platform capacity. All Loads are to be evenly distributed throughout 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	Y	Engine area of plant.	O,M	M	Lockable engine covers.	Warning Decals. Only licensed & approved	L	Y	3,4,5

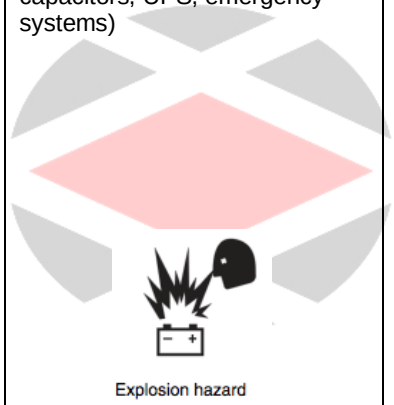
	oils, grease, coolants, solvents, etc. and/or biological agents					All fluid contained within compartments.	technicians are to carry out repairs as per OEM recommendations & schedules. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Refer 1.4, 1.6, 1.7 & 1.8.			

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)  Skin injection hazard	Y	Various areas of plant. All hydraulic hoses. All hydraulic cylinders. All hydraulic valve assemblies	D,O,M,R	E	Shrouds. Ducting. Covers. Mechanical relief valves	Operator NOT to carry out any repairs. Only correctly licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals Refer Appendix 1.6	L	Y	3,4,5
5.2	Fluids under pressure: High to very high pressures (over 4,000 psi or 27.6 mPa)	Y	Various areas of plant. All hydraulic hoses. All hydraulic cylinders. All hydraulic valve assemblies	D,O,M,R	E	Shrouds. Ducting. Covers. Mechanical relief valves	Operator NOT to carry out any repairs. Only correctly licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals Refer Appendix 1.6	L	Y	3,4,5
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	Pot hole retention springs	D,O,M,R	M	Shrouds. Covers. Retaining Clips	Operator NOT to carry out any repairs.	L	Y	3,4,5
5.6	Residual energy / pressure in system	Y	Various areas of plant. All hydraulic hoses. All hydraulic cylinders. All hydraulic valve assemblies	D,O,M,R	E	Shrouds. Covers. Mechanical relief valves	Operator NOT to carry out any repairs. Only correctly licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals	L	Y	3,4,5

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)	Y	Plant Batteries up to 24volts. Electrical motors. Circuit wiring.	M	E	Lockable access covers. Sheathing. Conduit	Operator NOT to carry out any repairs. Only correctly licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Safety decals. When checking battery electrolyte levels correct PPE should be worn at all times including – Acid proof gloves, full face protection,etc.	L	Y	4,5,6

							Refer Appendix 1.4 for information regarding Wet Lead Acid Batteries.			
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. Refer appendix 1.3 for Approach Distances.	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

							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. Refer appendix 1.3 for Approach Distances.			
6.7	Residual / stored energy in electrical systems (i.e., batteries, capacitors, UPS, emergency systems)  	Y	Plant Batteries. Battery Charger Unit.	M	E	Lockable access covers.	Operator NOT to carry out any repairs. Only correctly licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Technicians are to be inducted into AAH SWMS "Inspecting & Changing batteries in MEWP's" prior to commencing any work. Safety decals. When checking battery electrolyte levels correct PPE should be worn at all times including – Acid proof gloves, full face protection,etc. Inspections should always be carried out in a well ventilated are free of naked flames and sparks. Refer Appendix 1.4 for MSDS information regarding Wet Lead Acid Batteries.	L	Y	4,5,6
6.8	Electrical systems intrinsically safe where plant applications involve hazardous atmospheres	N	-	-	-	-	-	-	-	-

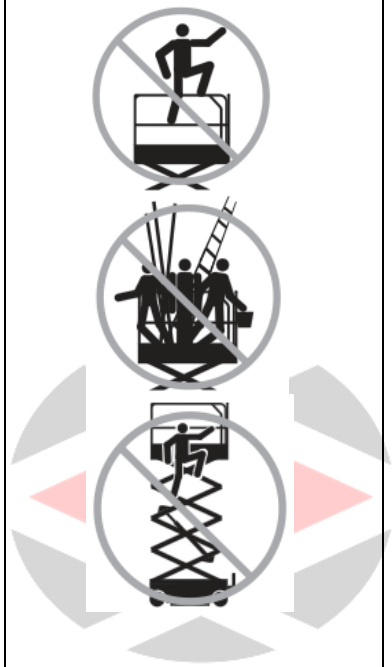
7	**Fire / explosion**									
Refer ence	Column 1 Risk or Safety concern	Column 2 Potential hazard Y / N	Column 3 Location & nature of hazard	Column 4 Lifecycle (C,D,O, M,R)	Column 5 Preliminary risk (C,H,M,L,I)	Column 6 Plant (engineering) controls	Column 7 Operator/ Procedural controls	Column 8 Residual risk (C,H,M,L, I)	Column 9 Risk level acceptable Y / N	Column 10 Corrective action reference
7.1	Components susceptible to high temperatures, overheating or unsafe thermal loading	N	-	-	-	-	-	-	-	-
7	**Fire / explosion (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
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  No smoking	Y	Plant fuel tank and or fuel lines. Plant engine. Fueling Containers	O,M	E	Fuel tank vents. Line guarding.	MEWP to be fueled in accordance with site regulations. A separate JSA/SWMS or Risk Assessment is suggested for this process. Plant to be turned off and isolated prior to fueling. Exhaust and/or component temperature should be taken into account before fueling and the appropriate time given for components to cool if required. Fuel only from authorized containers or means such as a fuel bowser. Fuel in a well ventilated area. A MDS should be on hand in relation to product being handled. Do NOT smoke during fueling process. Ensure means of spill	L	Y	4,5,6

							containment are on hand for any spills. Always wear the appropriate PPE whilst fueling plant such as gloves, eyewear, face mask. AAH staff to complete tasks as per SWMS “Fueling Plant & Equipment Using Fuel Cans, Mounted Tanks & Bowsers”. Refer Appendix 1.8 for details.			
7.5	Over-pressurisation, catastrophic failure within pressurized system	N	-	-	-	-	-	-	-	-
7.6	Interference with remote detonation equipment	N	-	-	-	-	-	-	-	-

8	**Slips, trips, falls**									
	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
8.1	Working / access surfaces on plant uneven, slippery or obstructed 	Y	Plant Platform Access Steps	D,O,M,R	M	Non slip surface on platform and entry to plant. Entry/Exit Handrails.	Ensure access and work areas of plant are kept clean and tidy and free of debris at all times whilst in use. Try to as far as reasonably practicable remove foreign material such as mud or oil from footwear prior to entering the MEWP. Maintain good footing and a hold on to guard rails whilst the MEWP is in use. Maintain good footing and use access handles whilst entering / exiting the MEWP. Do NOT stand, sit or climb on MEWP handrails at any time. Do NOT use auxiliary equipment such as ladders or scaffolding from the MEWP platform to gain further reach.	L	Y	4,5,6

							Operator to ensure correct footwear is worn at all times such as rubber soled steel cap boots. Always maintain a minimum of three points of contact at all times whilst in accessing or using the MEWP.			
8.2	Falls from designated access (ladders, stairs, walkways) on the plant	Y	Plant access ladders	D,O,M,R	M	Non slip surface on entry to plant. Entry/Exit Handrails.	Ensure access and work areas of plant are kept clean and tidy and free of debris at all times whilst in use. Try to as far as reasonably practicable remove foreign material such as mud or oil from footwear prior to entering the MEWP. Maintain good footing and use access handles whilst entering / exiting the MEWP. Do NOT enter or exit the MEWP in any other manner than that designated by the OEM. Operator to ensure correct footwear is worn at all times such as rubber soled steel cap boots. Safety Decals. Always maintain a minimum of three points of contact at all times whilst in accessing or using the MEWP.	L	Y	4,5,6
8.3	Falls from elevated areas on plant (fall height under 2m) due to size, location, lack of fall protection, unprotected holes, openings, penetrations or gaps)	Y	Plant Platform	D,O,M,R	E	Guard Rails Harness Lanyard Points Self closing entry gates	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 require the use of full body harnesses for use in fall prevention. Guardrails should be fitted at ALL times throughout the use of the MEWP and must NOT be altered in any way. Try to as far as reasonably practicable remove foreign	L	Y	4,5,6

							material such as mud or oil from footwear prior to entering the MEWP. Maintain good footing and use access handles whilst entering / exiting the MEWP. Do NOT enter or exit the MEWP in any other manner than that designated by the OEM. Do NOT exit the MEWP whilst elevated. Operator to ensure correct footwear is worn at all times such as rubber soled steel cap boots. Ensure access and work areas of plant are kept clean and tidy and free of debris at all times whilst in use. Safety Decals. Always maintain a minimum of three points of contact at all times whilst in accessing or using the MEWP. Do NOT stand, sit or climb on MEWP handrails at any time. Do NOT use auxiliary equipment such as ladders or scaffolding from the MEWP platform to gain further reach. Reference to the National Code Of Practice for "Prevention of falls in General Construction" item 6.0. should be referenced.			
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)	Y	Plant Platform	D,O,M,R	E	Guard Rails Harness Lanyard Points Self closing entry gates	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 require the use of full body harnesses for use in fall prevention. Current Australian Standards	L	Y	4,5,6

							should be taken into consideration in the preparation of these including AS/NZS 1891.1:2007 Industrial fall arrest systems & devices – Harnesses & Ancillary equipment. Guardrails should be fitted at ALL times throughout the use of the MEWP and must NOT be altered in any way. Try to as far as reasonably practicable remove foreign material such as mud or oil from footwear prior to entering the MEWP. Maintain good footing and use access handles whilst entering / exiting the MEWP. Do NOT enter or exit the MEWP in any other manner than that designated by the OEM. Do NOT exit the MEWP whilst elevated. Operator to ensure correct footwear is worn at all times such as rubber soled steel cap boots. Ensure access and work areas of plant are kept clean and tidy and free of debris at all times whilst in use. Safety Decals. Do NOT stand, sit or climb on MEWP handrails at any time. Do NOT use auxiliary equipment such as ladders or scaffolding from the MEWP platform to gain further reach.			
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)	Y	Plant engine exhaust	D,O,M,R	E	Exhaust system mufflers. Catalytic convertors. Spark Arrestor	MEWP is to be operated in a well-ventilated area at all times. 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 require the use of confined space procedures. Reference should be made to “Confined Spaces Code of Practice December 2021” Note 3.1. Regular monitoring of air quality should be taken into consideration. Substitute plant and or equipment should be taken into consideration where quality of air is NOT to be compromised. PPE such as breathing apparatuses may be a consideration in review to a separate SWMS or JSA.	L	Y	1,2,3,4,5,6
9.2	Atmospheric contaminants created through work/material (dusts, fibres)	N	-	-	-	-	-	-	-	-
9.3	Contaminants / toxic materials produced	Y	Plant engine exhaust	D,O,M,R	E	Exhaust system mufflers. Catalytic convertors. Spark Arrestor	MEWP is to be operated in a well-ventilated area at all times. 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 require the use of confined space procedures.	L	Y	1,2,3,4,5,6

							Reference should be made to “Confined Spaces Code of Practice December 2021” Note 3.1. Regular monitoring of air quality should be taken into consideration. Substitute plant and or equipment should be taken into consideration where quality of air is NOT to be compromised. PPE such as breathing apparatuses may be a consideration in review to a separate SWMS or JSA.			
9.4	Confined spaces associated with the plant	N	-	-	-	-	-	-	-	-
9.5	Unsafe oxygen levels	Y	Plant engine exhaust Charging of plant batteries	D,O,M,R	E	Exhaust system mufflers. Catalytic convertors. Enclosures	MEWP is to be operated in a well-ventilated area at all times. 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 require the use of confined space procedures. Reference should be made to “Confined Spaces Code of Practice December 2021” Note 3.1. Regular monitoring of air quality should be taken into consideration. Substitute plant and or equipment should be taken into consideration where quality of air is NOT to be compromised. PPE such as breathing apparatuses may be a consideration in review to a separate SWMS or JSA. Charging of electric machines should always be carried out in a well	L	Y	1,2,3,4,5,6

							ventilated area free from naked flames and sparks. Reference to Appendix 1.4 MSDS.			

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
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
10.1	Lighting conditions (e.g., illumination, glare, etc)	Y	Plant working platform 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 MEWP at all times. External light stands, temporary or fixed lighting should be available at all times during the use of the MEWP. 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 driving or operating.	L	Y	3,4,5

							Be aware of extended platform conditions when moving plant. Check work area for overhead obstructions and other possible hazards. Observe and use colour coded direction arrows on controls and platform for drive and steer functions. 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. Clearly demarcated exclusion zones to be set up around active working areas of the MEWP.			
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))	Y	Plant Engine Area	O, M	H	-	Reference to Table 1 appendix 1.2 should be made if a SWMS identifies noise concerns.	L	Y	4,5,6
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	N	-	-	-	-	-	-	-	-

	near plant									
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
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	Y	Plant engine. Plant exhaust.	D,O,M,R	M	Guarding. Engine Covers.	Operator NOT to carry out any repairs. Only correctly licensed & approved technicians are to carry out repairs as per OEM recommendations. Technicians are to be inducted into AAH SWMS "Repair & Maintenance of an EWP" prior to commencing any work. Allow sufficient time for any componentry to cool before carrying out maintenance, repairs or inspections. All exhaust shields and guards are to remain in place during operation of the MEWP. Use correct PPE if required to carry out maintenance, repairs or inspections – this may include heatproof gloves and protective glasses.	L	Y	3,4,5,6

							Safety decals.			

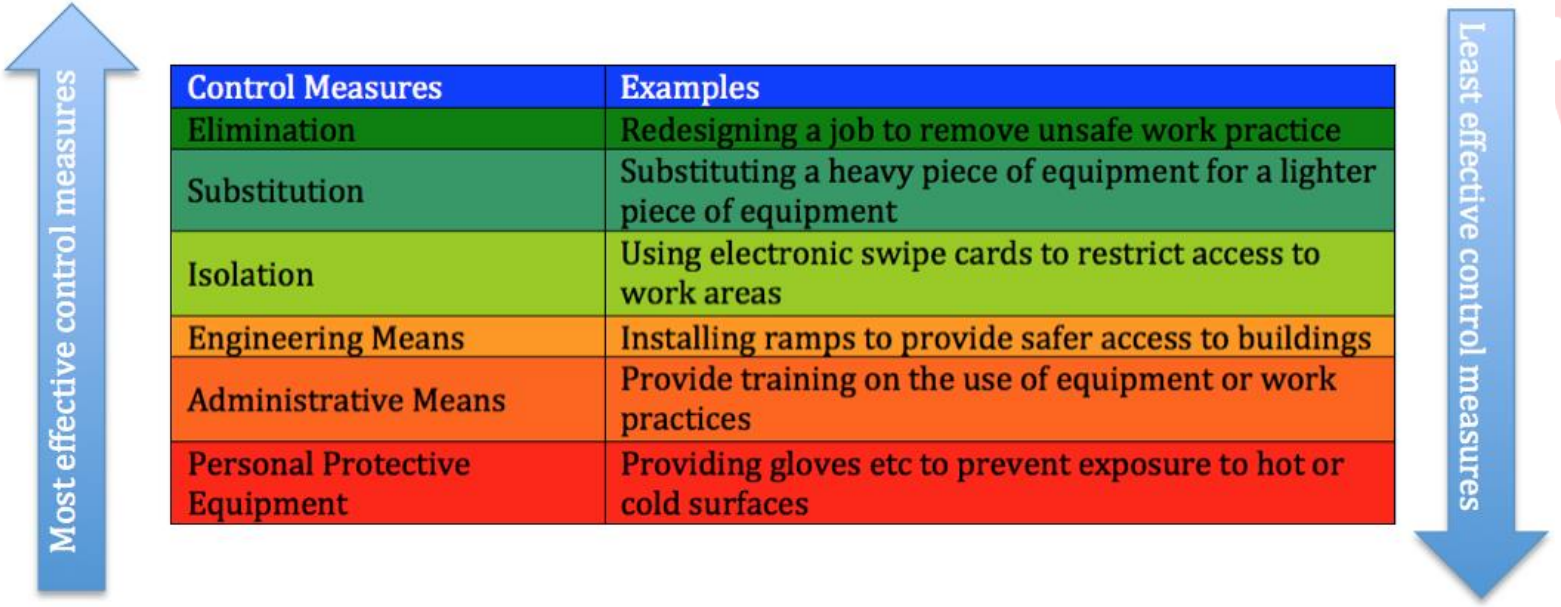
12	**Transport / movement of plant**									
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Reference	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminary risk (C,H,M,L,I)	Plant (engineering) controls	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
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. Plant should be switched off	L	Y	3,4,5

							and isolated throughout the transport process.			
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
Refer ence	Risk or Safety concern	Potential hazard Y / N	Location & nature of hazard	Lifecycle (C,D,O, M,R)	Preliminar y 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 	Y	Maintenance Transport Operation of Plant	C,D,O,M, R	E	Operators manual. Decals	**All operators to have EWPA association YELLOW CARD for the following:** **Trailer mounted boom lift. (TL)** **Self Propelled boom lift. (BL)** **Vertical Lift (VL)** **Scissor Lift (SL)** **Truck Mounted boom (TM)** **Transporting (load restraint) (T)** **If you require the use of a boom type EWP with a height or reach over 11 meters or more, you must hold a valid National Licence to Perform High Risk Work Class WP issued by a Work Health & Safety Regulator.** **<u>Prior to using, check with the EWPA or state regulator.</u>** **<u>Ticketed operator to read and understand operating manual prior to use.</u>** **A VOC may also be required as a site-specific regulation.** **Site-specific regulations regarding licencing should be taken into consideration before**	L	Y	4,5,6

							operating the MEWP.			

ADDITIONAL INFORMATION / CORRECTIVE ACTIONS

Reference	Additional information / Details of corrective actions



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**
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:	
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:

Strike out if not applicable APPENDIX 1.2

LIGHTING REPORT	
Test by *(print)*:	Date:
Signature:	
Lux Meter used:	

Results – Operator's station

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:

This Hazard & Risk Assessment has been developed through consultation with our employees, manufacturers and other third party information and has been read, understood and signed by all employees undertaking the works:			
Print Names:		**Signatures:**	**Dates:**