

## Plant Risk Assessment - Excavator

All OHS, Environmental & Quality risks associated with plant operating on projects & workplaces must be assessed & have controls allocated in accordance with the Hierarchy of Control in this Plant Risk Assessment. This document contains a list of prompt points to assist in identifying hazards of this item of plant. Additional points may be identified in the plant specific OEM manual. Each prompt point shall be assessed against different lifecycle phases of the plant, including delivery, loading, unloading operation, maintenance service and inspections. Controls and responsibility for applying the management method shall be recorded. This document is to be reviewed by the project leader or the site/plant manager, and direct supervisor of the plant item. The scoring system provides a tool to measure the perceived level of risk. Any activity with a residual risk rating "> 13 Unacceptable" must be abandoned and safer alternative solution found and re-assessed.



The findings of this Plant Risk Assessment must be communicated to all stakeholders involved in operation of the plant item, and used when developing and subsequent review of the SWMS's for the item.

Company Name: M&K Plant Hire Services Pty Ltd


Address: 311 Redland Bay Road, Capalaba Qld 4157

ABN: 65 676 448 543

### PROJECT DETAILS

PROJECT:		PLANT TYPE:	EXCAVATOR	 <p>PO Box 895, Capalaba Qld 4157 T: 07 3245 4414 F: 07 3245 1027 <a href="mailto:bookings@mandkplanthire.com.au">bookings@mandkplanthire.com.au</a></p>
JOB ADDRESS:		MAKE/ MODEL:		
JOB DESCRIPTION:	HIGH RISK ACTIVITY – EXCAVATIONS AS DIRECTED	SERIAL NO:		
PERIOD OF TIME: (MAX 12 MONTHS)			APPROVED BY: Peter McGhie, Director	
RELEVANT WORKERS MUST BE CONSULTED IN THE DEVELOPMENT, APPROVAL AND COMMUNICATION OF THIS PLANT RISK ASSESSMENT				SIGNATURE: 
PERSON INVOLVED WITH WORKS:	MACHINE OPERATOR		DATE: 24.05.24 Next Rev 24.05.25 Rev 3.1	

### REVIEWED BY PRINCIPAL CONTRACTOR

PRINCIPLE CONTRACTOR NAME AND POSITION:		PRINCIPLE CONTRACTOR SIGNATURE:	
DATE:	CONTACT PHONE NUMBER:		

<b>Application:</b> OHS Environment Quality	<b>Probability:</b> 5 = Almost Certain 4 = Probable 3 = Moderate 2 = Unlikely 1 = Rare 5 = Almost Certain 4 = Probable 3 = Moderate 2 = Unlikely 1 = Rare 5 = Almost Certain 4 = Probable 3 = Moderate 2 = Unlikely 1 = Rare	<b>Consequence:</b> 5 = Multiple/Singular Fatality 4 = Nonfatal but permanent damage 3 = Damaged no return to work (LTI) 2 = Damaged return to work restricted duties(MTI) 1 = Damaged immediate return to work (FAI) 5 = Reputation 4 = Future work 3 = Wide Spread 2 = Local 1 = Insignificant 5 = Failure 4 = Long Term defect 3 = Major cost 2 = Minor 1 = Acceptable
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**1- 6 Acceptable**
**7 - 12 Acceptable with strict Control Measures or Short Duration**
**13 - 25 UNACCEPTABLE**

### HIERARCHY OF CONTROLS



**NOTE:** The above 'Hierarchy of Controls' must be considered and applied as part of the risk assessment process. Where ELIMINATION cannot be reasonably applied then, SUBSTITUTION, ENGINEERING, ADMINISTRATION & PPE can be considered as preferred controls in descending order.

No.	Application	Process	Potential safety, environmental & quality hazards (what can go wrong)	Initial Risk Rating			Control Measures	Residual Risk Rating			Responsible (To ensure Management Method is applied)
				P X	C =	T		P X	C =	T	
1.	OHS	Are there any human energy hazards through posture, repetitive movements, strained movements or awkward position?	No				Ensure seat is suitably adjusted and in good condition. Regular rest breaks should be taken. Where possible operators should be rotated for prolonged tough digging. Operate machine in seated position only.				Operator
2.	OHS ENV	Are there operating control hazards for the plant (e.g. control function not identified, shape or colour inappropriate, difficult to understand)	No				Labels and controls should be maintained and in a clean and serviceable condition at all times.				Operator
3.	OHS	Can any person slip while ascending or descending the plant?	Yes	2	2	4	Plant must be parked on suitable flat ground; plant engine must not be operational whilst being accessed. Plant must be Use handholds and non-slip steps, maintain three points of contact at all times. Always face plant during access and departure. Never carry objects in hand during access.	1	1	2	

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4.	OHS	Can any person fall from the plant?	Yes	2	2	4	Operate machine in seated position. Seat belt must be worn during operation. Non-slip steps and footings must be in place. Use Handholds and non-slip steps. Maintain three points of contact. Floors to remain free from damage and debris whilst in use.	1	2	2	Operator
5.	OHS	Can any person be struck by a load falling or by uncontrolled lowering or movement?	Yes	2	4	8	Never lift or swing bucket above anyone or over machines. Operator must not exceed boom rated capacity at any time during operation. Beeipers, horns and flashing lights must be used whilst plant is operational. Brakes must be operational and daily prestart completed prior to operation.	1	4	4	Operator
6.	OHS	Can any person be struck by an object or material falling	Yes	2	4	8	R.O.P.S. certified compliant with AS2294 for all earthmoving equipment.	1	4	4	Operator
7.	OHS	Can the plant collide with people, other plant or fixed objects?	Yes	2	2	4	Supervised plant to ensure that safe working clearance zone applies	1	1		Operator
8.	OHS	Can the plant rollover or become unstable?	Yes	2	1	2	Ensure level workplace area at all times	1	1	1	Operator
9.	OHS	Can anyone be struck or impaired by objects or fragments ejected from the plant?	Yes	2	3	6	Plant must be clearly identifiable to nearby pedestrians. Exclusion zones and or barriers should be used. Work area should be clear of any pedestrians.	1	3	3	Operator
10.	OHS ENV	Can any person be harmed by the energy of fluid under pressure? (e.g. hydraulic fluid, compressed air, high pressure water)	Yes	2	4	8	Plant must be maintained as per manufacturer's manual and repairs carried out by qualified persons. Inspection of hoses and protections system should be conducted regularly to ensure hoses are free from damage	1	3	3	Operator

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11.	OHS	Are all attachments compatible with the plant? (e.g. quick hitches, lifting points, lifting devices)	Yes	1	2	2	Made to fit with safety pins in use	1	1	1	Operator
12.	OHS	Can anyone come in contact with moving parts?	Yes	2	4	8	Ensure moving parts have guards and have clear legible hazard labels and can easily be seen during plant operation. By-standers should be kept clear of work area and moving parts.	1	2	2	Operator
13.	OHS	Can any shearing occur? (e.g. between moving parts)	Yes	2	3	6	Moving parts must be clearly labelled and easily seen at all times. Guards must not be removed whilst engine is running.	1	3	3	Operator
14.	OHS	Can vibration cause harm, through indirect contact or plant becoming unstable?	Yes	2	2	4	Ensure plant is regularly maintained by qualified persons and daily pre-start checks must be carried out.	1	2	2	Operator
15.	OHS	Can friction occur that will harm any person?	Yes	2	3	6	PPE equipment must be worn during operation and maintenance. Guards must be fitted to moving parts. Maintenance should only be carried out once plant has cooled. Avoid heat contact with pressurised lines. Flammable materials must be clearly labelled at all times.	1	3	3	Operator
16.	OHS	Can the plant come into contact with overhead powerlines?	Yes	2	2	4	Supervised assessment of area whilst operating. Plant should not load closer than 3m to electrical hazards.	1	1	1	Operator
17.	OHS	Can the plant come into contact with underground services? (e.g. electrical, gas, telecomm, water)	Yes	4	1	4	Work permits with all services detailed prior to commencing with a spotter. PPE must be worn when working with services.	1	1	1	Operator



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18.	OHS	Can the plant create an electrical hazard? (e.g. poor insulation, poor earthing, contact with electrical contractors)	Yes	2	4	8	Plant must regularly maintained by qualified persons and free from potential hazards e.g., fuel and oil leaks and overheating. Batteries should be fitted with sturdy covers that allow for adequate ventilation.	1	4	4	Operator
19.	OHS	Can any person come into contact or be harmed by extremes of temperature? (e.g. flame, heat or cold)	Yes	2	3	6	By-standers must be kept clear of work area. Maintenance should be carried out only once engine has cooled. PPE must be worn during maintenance. Ensure plant is regularly maintained by qualified persons and daily pre-start checks must be carried out.	1	3	3	Operator
20.	OHS	Can operating inspecting or maintaining the plant expose any person to weather extremes? (e.g. heat, cold, humidity, wet)	Yes	2	3	6	Appropriate controls must be worn e.g. Hat, sunscreen, dust mask.	1	3	3	Operator
21.	OHS ENV	Can fumes or vapours or exhaust affect the operator or persons nearby? (e.g. in basements and poorly ventilated areas)	Yes	2	2	4	Correct ventilation and fume reduction equipment to be set prior to commencing work. Avoid contact with hazardous substances.	1	1	1	Operator
22.	OHS ENV	Are there any other chemical hazards? (e.g. leaks splashes from the plant item or the workplace)	No								

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23.	OHS	Does the plant emit radiation? (e.g. welding, electromagnetic rays, x-rays, microwaves, ultra violet, infrared, lasers)	No								
24.	OHS ENV	Can noise from the plant damage the operator or those nearby? (noise levels of the plant must be known)	Yes	1	2	2	PPE must be worn whilst plant is operational. By-standers/workers within 3m should wear hearing protection.	1	1	1	Operator
25.	OHS ENV	Can operating, inspecting or maintaining the plant create dust that causes breathing hazards or decreased visibility?	Yes	2	3	6	PPE must be worn whilst plant is operational e.g. Dust mask where excessive dust is present, dust control measures should be implemented by Contractor. All mirrors and lighting must be clean and fully functional.	1	3	3	Operator
26.	OHS ENV	Can an explosion or fire occur? (e.g. from vapour, gas, emissions, dust, fuel)	Yes	2	4	8	Inspect and maintain machine on regular basis, daily prestart checks must be carried out. PPE must be worn. All plant must have tagged and tested fire extinguishers fitted.	1	4	4	Operator
27.	OHS ENV	Are there any local site hazards where the plant will be operating, maintained, serviced or inspected?	No								

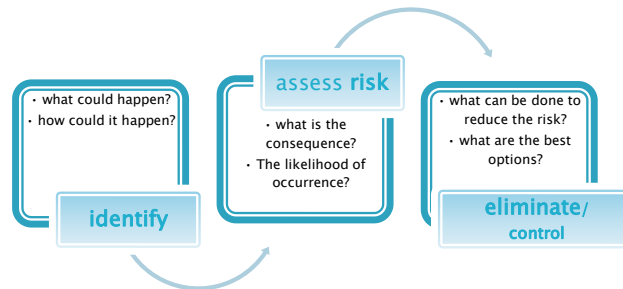
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28.	OHS	Will the plant be used for purposes (e.g. lifting) that require additional controls such as anti burst valves, weight gauges to be fitted?	No								
29.	OHS	Pre-Start check	Unplanned movement  Exposure to hazardous substances	3	2	6	<ul style="list-style-type: none"> <li>• Ensure the equipment is fundamentally stable i.e. chalk if necessary</li> <li>• Ensure you have read &amp; understood the control measures and emergency procedures on the MSDS for all oils and lubricants associated with the equipment.</li> <li>• Carry out a 360 degree check around the equipment using the plant specific pre-start check sheet</li> <li>• Ensure all guards are fitted and serviceable</li> <li>• Ensure pressure is released from all systems prior to checking the levels</li> </ul>	1	1	1	Operator

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30.	OHS	Start / Operate	Unplanned movement Entanglement Component failure Co2 emissions Slipping Shearing Falls from height Falling objects from height Rollover	3	3	9	<ul style="list-style-type: none"> <li>Never operate machinery unless you are trained &amp; competent to do so</li> <li>Prior to starting any machine you must have first received familiarisation training</li> <li>Prior to starting you must have read and understood the operators manual</li> <li>Ensure all controls and levers are in neutral prior to starting</li> <li>Ensure the correct is worn as stated in the operators handbook and requirements</li> <li>Ensure equipment is started in a well ventilated area</li> <li>Ensure exhaust fumes are downwind of any bystanders</li> <li>Operators to ensure all access points are free from grease or any other contaminants.</li> <li>Never position yourself between moving objects</li> <li>Ensure any tools / materials are secured to the plant</li> </ul>	1	1	1	Operator
31.	OHS	Inspection	Unplanned movement Exposure to hazardous substances	2	2	4	<ul style="list-style-type: none"> <li>Ensure all pre start checks are carried out</li> <li>Ensure all levers are in neutral and pressure released</li> <li>Ensure equipment is either blocked pinned or braced as per manufacturer's instructions</li> <li>Ensure you have read &amp; understood the control measures and emergency procedures on the MSDS for all oils and lubricants associated with the equipment.</li> </ul>	1	1	1	Operator



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32.	OHS ENV	Maintenance	Unplanned movement Exposure to hazardous substances Environmental Dermatological	2	2	4	<ul style="list-style-type: none"> <li>• Ensure all pre start checks are carried out</li> <li>• Ensure all levers are in neutral and pressure released</li> <li>• Ensure equipment is isolated and either blocked, pinned or braced as per manufacturer's instructions &amp; guidelines</li> <li>• Ensure you have read &amp; understood the control measures and emergency procedures on the MSDS for all oils and lubricants associated with the equipment.</li> <li>• Use drip trays</li> <li>• Report and clean up spills immediately</li> <li>• Use jugs and funnels to prevent spillages</li> <li>• Use gloves and/or barrier creams</li> <li>• Wash hands before hand to mouth contact i.e. eating drinking or smoking</li> <li>• Change work clothing if contacted with oils &amp; Lubricants</li> </ul>	1	1	1	Operator
33.	OHS ENV	Re-fuelling	Fire & explosion	2	4	8	<ul style="list-style-type: none"> <li>• DO NOT refuel the motor while it is in running or hot.</li> <li>• DO NOT refuel the motor in the vicinity of sparks, a naked flame or a person smoking.</li> <li>• DO NOT refuel in confined areas without adequate ventilation</li> <li>• DO NOT refuel from any container unless it is an approved storage container that is fitted with a pouring spout.</li> <li>• Use a funnel</li> <li>• Secure rammer in upright position for refuelling operation, preferably on purpose built trolley</li> <li>• DO NOT over fill the fuel tank and avoid spilling petrol when refuelling. If spillage occurs, ensure that the area is dry before starting the motor.</li> <li>• Replace the fuel tank cap securely after refuelling.</li> <li>• Allow time for vapours to clear before starting motor.</li> <li>• Make sure a fire extinguisher is nearby and fully charged</li> </ul>	1	1	1	Operator

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34.	OHS ENV	Storage	Unplanned movement  Exposure to hazardous substances  Environmental	2	2	4	<ul style="list-style-type: none"> <li>• Ensure equipment is parked/stored on firm level ground</li> <li>• Ensure equipment is secured to prevent unauthorised Use</li> <li>• Ensure equipment is fundamentally stable to prevent any unplanned movement i.e. chalk</li> <li>• Place drip tray under engine compartment</li> </ul>	1	1	1	Operator



Plant / Equipment / Materials Used:		Personal Protective Equipment Used:	
Excavator	√	Safety Helmet (as required)	√
		Safety Boots	√
		High visibility clothing Long Pants & Long Sleeves	√
		Safety Glasses	√
		Gloves (as required)	√
		SPF 30+ sunscreen	√
		Dust mask (as required)	√
Engineering Details / Approvals / Certificates	Certificate of Competency as required for prescribed work Applicable Class Drivers License (Driver)		
Maintenance Checks	Machine and vehicles – visual inspection prior to use and in accordance with manufacturer’s instructions and recommendations. Machine and vehicles – servicing and maintenance as per supplier’s instructions and relevant Australian Standards.		
Training / Competencies / Qualifications to perform work	General Safety Induction Training (Construction Industry) Site Specific Inductions (as required) Certificate of Competency for prescribed work Competency displayed by operator / assessed – with operators manual Safe Work Method Statements and Safe Work Procedures Training Applicable Class Drivers License (Driver)		
Relevant Legislation, Applicable Codes of Practice (OHS and Environmental)	Qld Workplace Health and Safety Act 2011 / 2024 Environmental Protection Act 1994 Qld Workplace Health and Safety Regulation 2011 Environmental Protection Regulation 2019 Managing Risks of Plant In The Workplace COP 2021 Environmental Protection Water, Noise, Air Waste Policies 2019 Excavation Work COP 2021 How To Manage Work Health & Safety Risks 2021 Work Health and Safety Consultation, Co-operation and Co-ordination COP 2021 Managing respirable crystalline silica dust exposure in construction and manufacturing of construction elements Code of practice 2022	Electrical Safety COP 2021 Managing Noise & Prevention of Hearing Loss COP 2021 Managing the Risks of Hazardous Chemicals in The Workplace 2021 Managing Risks of Falls at Workplaces COP 2021 First Aid In The Workplace COP 2021 Hazardous Manual Tasks COP 2021 Labelling of Workplace Hazardous Chemicals COP 2021 Working near overhead and underground electric lines – Electrical safety code of practice 2020 Traffic management for construction or maintenance work Code of Practice 2008	
Monitoring / Evaluation	Measurement and evaluation will be an ongoing process performed principally by: <ul style="list-style-type: none"> <li>• On site monitoring by Operations Manager;</li> <li>• Formal site safety inspections against pre-determined criteria;</li> <li>• Formal incident investigations; and</li> <li>• Consultation with employees and contractors.</li> </ul>		
Consultation & Communication	M & K Plant Hire (AUST) actively consult with workers and subcontractors in the following forms: <ul style="list-style-type: none"> <li>• Site visits by Supervisor, Operations Manager Directors;</li> <li>• Staff meetings.</li> <li>• Correspondence to subcontractors;</li> <li>• Tool box talks used to induct employees and subcontractors;</li> </ul>		
Supervisory Arrangements (tick all that apply)	<input type="checkbox"/> Audits <input type="checkbox"/> Spot Checks <input checked="" type="checkbox"/> Suitably qualified supervisors for job <input type="checkbox"/> Direct on site supervision <input type="checkbox"/> Remote site – Communication systems for job		

**Declaration by Employees and Contractors**

- We, the undersigned, acknowledge that:
- This plant risk assessment has been developed in consultation with us; and
- We have been trained in the contents of this plant risk assessment and are fully conversant with the safety procedures and precautions; and
- We will work in accordance with the procedures listed in the plant risk assessment

<b>Name</b>	<b>Occupation</b> <i>(plant operator, labourer)</i>	<b>Years Experience</b>	<b>Signature</b>	<b>Date</b>