MATKO HIRE

PLANT RISK ASSESSMENT – Kubota Excavator KX040 - 4

Completed by: Steve Laidlaw, OHS Services :		Date: 6 February 2024
Owner of plant: Matko Hire		
Owner's representative present: Chris Smith		
Role: Manager		
Vendor's address: 1101 – 1107 Raglan Parade, Warrnambool, Vic. 3280		
Plant/Equipment name : **Excavator**		
Make/Description: **Kubota KX040 - 4**		
Serial number: NA	Date of purchase: 2021	
Registration Required: No	Registration No: N/A	Reg Expiry Date: N/A
Operator's training/licence requirements: Must be fully competent & qualified to operate		
Manufacturer's Handbook available: Yes	Location: In cabin of excavator or main office/online	Maintenance/Service Agreement: No
If Yes, servicing company's name: Matko Hire mechanics complete servicing		
Maintenance Frequency: Every 250hrs		

DATE	DESCRIPTION OF SERVICE
	See owner company's service records main office

Is there a documented Safe Operating Procedure? Yes - Manufacturer's Operator's Manual

Noise Assessment completed? No

Date	Level dBA	dBC	Comment
			See manufacturer's information

CURRENT EMERGENCY SYSTEM	
Certified rollover protection	Travel alarm & horn, spotlights on cabin, external mirrors
Seat belts	Fire extinguisher, breaking glass hammer
Safety hydraulic lever	Hazard warning stickers (eg. external: boom pinch points)
Top flashing beacon & lights	Operational hazard stickers control panel

CURRENT GUARDING
Engine & exhaust guarding

POSSIBLE HAZARD TYPES	LIKELIHOOD OF OCCURRENCE				POSSIBLE CONSEQUENCE				RISK RATING			
	Highly Unlikely	Unlikely	Likely	Very Likely	Insignificant	Minor Injury	Major Injury	Extreme	Low	Moderate	High	Acute
1. **Entanglement**												
1.1 Can any materials become entangled with moving parts of the plant	✔				✔				✔			
2. **Crushing**												
2.1 Can anyone be crushed due to:												
a. Material falling off plant	✔				✔				✔			
b. Unexpected movement of plant	✔						✔				✔	
c. Lack of capacity for plant to be slowed or stopped	✔				✔				✔			
d. The plant tipping or rolling over		✔						✔				✔
e. Part of the plant collapsing		✔					✔				✔	
f. coming in contact with moving part of the plant during testing, operation etc.		✔					✔				✔	
g. being thrown off or under plant		✔						✔				✔
h. being trapped between plant & materials or fixed structures		✔					✔				✔	
3. Cutting, Stabbing & Puncturing												
3.1 Can anyone be cut, stabbed or punctured due to:												
a. coming in contact with moving parts of the plant testing, operation etc.		✔					✔				✔	
b. coming in contact with sharp/flying objects	✔					✔			✔			
c. the plant, parts of or work pieces disintegrate	✔					✔			✔			
d. work pieces being ejected	✔				✔				✔			
e. the mobility of the plant		✔					✔				✔	
f. uncontrolled or unexpected movement of plant		✔					✔				✔	

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4. Shearing												
4.1 Can any body parts be sheared between two parts of the plant	✔				✔				✔			
5. Friction												
5.1 Can anyone be burnt due to contact with moving parts or surfaces, or material handled by plant	✔				✔				✔			
6. Striking												
6.1 Can anyone be struck by moving objects due to:												
a. uncontrolled or unexpected movement of plant		✔					✔				✔	
b. the plant, parts off or work pieces disintegrate		✔					✔				✔	
c. work pieces being ejected		✔				✔			✔			
d. mobility of the plant		✔					✔		✔		✔	
7. High Pressure Fluid												
7.1 Can anyone come into contact with fluids under high pressure, due to plant failure or misuse.		✔				✔			✔			
8. Electrical												
8.1 Can anyone be injured by electrical shock or burnt due to:												
a. the plant contacting live electrical conductors			✔				✔					✔
b. the plant working too close to electrical conductors			✔				✔					✔
c. overload of electrical circuits	✔				✔				✔			
d. damaged or poorly maintained leads and cables	✔				✔				✔			
e. damaged electrical switches	✔				✔				✔			
f. water near electrical equipment	✔				✔				✔			
g. lack of isolation procedures	✔				✔				✔			

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9. Explosion												
9.1 Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances, triggered by the operation of the plant or by material handled by the plant. Only if ruptured or stuck services eg. Gas pipeline			✔				✔					✔
10. Slipping, Tripping and Falling												
10.1 Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:												
a. uneven or slippery work surfaces		✔					✔				✔	
b. poor housekeeping, e.g. spillage not cleaned up	N/A											
c. obstacles placed in the vicinity of the plant	N/A											
10.2 Can anyone fall from a height due to:												
a. lack of a proper platform	N/A											
b. lack of proper stairs or	N/A											
c. ladders	N/A											
d. lack of guardrails or other edge protection	N/A											
e. unprotected holes, penetrations or gaps	N/A											
f. poor floor or walking surfaces, e.g. slip resistant	N/A											
g. steep walking surfaces	N/A											
h. collapse of the supporting structure	N/A											

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11. Ergonomic												
11.1 Can anyone be injured due to:												
a. poorly designed seating	✔				✔				✔			
b. repetitive body movement		✔			✔				✔			
c. constrained body posture, e.g. excessive effort	✔				✔				✔			
d. designed deficiency causing mental stress	✔				✔				✔			

12. Other information

How is the plant cleaned?

- In accordance with manufacturer's instructions

Do guards have to be removed to clean the plant? No

Are there any reasonably foreseeable abnormal operating conditions? (e.g. jam ups)

- Operating on steep or slippery slopes increases the likelihood of rollover
- Striking overhead or underground services

Other comments / notes:

- Standard attachments: Bucket set, ripper & small grading blade

- Although the machine has a safety hydraulic lever which must be engaged for the hydraulics to operate, unattached seatbelts do not de-activate the machine. There is a possibility that if the cabin door was open, the machine is fully operational and would expose the operator to the possibility of being thrown out and crushed in a rollover.

- Those hazards which have been given 'High' or 'Acute' risk ratings in this assessment relate to the operation of the plant rather than to this static risk assessment. For the purposes of the ratings provided, it is assumed that that operators will have appropriate high level controls in place. These would include only being operated by qualified and competent operators who :
    - operate the plant in accordance with the manufacturer's instructions & safe operating procedures
    - complete pre-start checklists
    - check and continually monitor site conditions for hazards to themselves and bystanders such as pedestrians

PLANT RISK ASSESSMENT MATRIX

Step 1:Determine Likelihood

What is the possibility that the effect will occur?

	Criteria	Description
Almost certain	Expected in most circumstances	Effect is a common result
Very Likely	Will probably occur in most circumstances	Effect is known to have occurred at this site or it has happened
Unlikely	Could occur at some time	Effect is not likely to occur, operators have not heard of it happening
Highly unlikely	May occur only in exceptional circumstances	Effect is practically impossible

Step 2:Determine Consequence

What will be the expected effect?

Level of Effect	Example of each level
Insignificant/ Acceptable	No effect – or so minor that effect is acceptable
Minor Injury	First Aid treatment only; no lost time injury
Major Injury	Hospital admittance; extensive injuries; lost time injury > 7 days; Permanent Total Disability injury; death
Extreme Injury	Multiple Permanent Total Disability injuries; death or multiple deaths

Step 3: Determine the risk score

	Consequence			
Likelihood	**Insignificant**	**Minor**	**Major**	**Extreme**
Very Likely	**3 High**	**3 High**	**4 Acute**	**4 Acute**
Likely	**2 Moderate**	**2 Moderate**	**4 Acute**	**4 Acute**
Unlikely	**1 Low**	**1 Low**	**3 High**	**4 Acute**
Highly Unlikely	**1 Low**	**1 Low**	**3 High**	**3 High**

Step 4: Record risk score on worksheet

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

Score	Action
4 A: Acute	**DO NOT PROCEED.** Requires immediate attention. Introduce further high-level controls to lower the risk level. Re-assess before proceeding.
3 H: High	**Review before commencing work**. Introduce new controls and/or maintain high-level controls to lower the risk level. Monitor frequently to ensure control measures are working.
2 M: Moderate	**Maintain control measures.** Proceed with operating plant. Monitor and review regularly, or if operating procedures change.
1 L: Low	**Record and monitor** Proceed with work. Review regularly, and if the plant o safe operating procedures change.