MATKO HIRE
PLANT RISK ASSESSMENT - Red Roo Wood Chipper

Completed by: Steve Laidlaw, OHS Services :		Date: 18.1.23
Owner of plant/equipment: Matko Hire		
Owner's representative present: Chris Smith		
Role: Director		
Location address: 1101 – 1107 Raglan Parade, Warrnambool Vic 3280		
Plant/Equipment name : **Wood Chipper – (100mm)**		
Make/Description: **Red Roo C 100**		
Serial number: NA	Date of purchase: Approx. 2017	
Registration Required: Yes	Registration No: Y55 - 865	Reg Expiry Date: NK
Operator's training/licence requirements: Must be fully competent & qualified to operate		
Manufacturer's Handbook available: Yes	Location: Container on plant	Maintenance/Service Agreement: No
If Yes, servicing company's name: NA -Serviced internally		
Maintenance Frequency: As required or according to manufacturer's instructions		

DATE	DESCRIPTION OF SERVICE
	Servicing & maintenance completed by the company's mechanic.
	Records kept in workshop / administration 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
			Hearing protection required

CURRENT EMERGENCY SYSTEM
Hazard warning stickers on surfaces

CURRENT GUARDING
Engine, exhaust & belt 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	NA				NA				NA			
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	NA				NA				NA			
h. being trapped between plant & materials or fixed structures	NA				NA				NA			
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	NA				NA				NA			
d. work pieces being ejected				✓			✓					✓
e. the mobility of the plant	NA				NA				NA			
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 the plant	✓					✓			✓			
b. the plant, parts of or work pieces disintegrating	✓					✓			✓			
c. work pieces being ejected				✓			✓					✓
d. mobility of the plant	NA				NA				NA			
7. High Pressure Fluid												
7.1 Can anyone come into contact with fluids under high pressure, due to plant failure or misuse.	NA				NA				NA			
8. Electrical												
8.1 Can anyone be injured by electrical shock or burnt due to:												
a. the plant contacting live electrical conductors	NA				NA				NA			
b. the plant working too close to electrical conductors	NA				NA				NA			
c. overload of electrical circuits	NA				NA				NA			
d. damaged or poorly maintained leads and cables	NA				NA				NA			
e. damaged electrical switches	NA				NA				NA			
f. water near electrical equipment	NA				NA				NA			
g. lack of isolation procedures	NA				NA				NA			

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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 struck services eg. Gas pipeline	NA				NA				NA			
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:	Not Applicable											
a. uneven or slippery work surfaces	NA				NA				NA			
b. poor housekeeping, e.g. spillage not cleaned up	NA				NA				NA			
c. obstacles placed in the vicinity of the plant	NA				NA				NA			
10.2 Can anyone fall from height due to:	NA											
a. lack of a proper platform	NA				NA				NA			
b. lack of proper stairs or ladders	NA				NA				NA			
c. lack of guardrails or other edge protection	NA				NA				NA			
d. unprotected holes, penetrations or gaps	NA				NA				NA			
e. poor floor or walking surfaces, e.g. not slip resistant	NA				NA				NA			
f. steep walking surfaces	NA				NA				NA			
g. collapse of the supporting structure	NA				NA				NA			

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

12. Other information

How is the plant cleaned?

- High pressure water cleaner
- 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)

- Non - wood objects being fed into chipper, causing jams or ejection of disintegrated material

Other comments / notes:

- Opening on top of drive shaft guard next to motor is potentially an entrapment hazard- Rated as high risk

- All hazards identified in this assessment, including 'High' or 'Acute' risk ratings, relate to the operation of the plant. For the purposes of the ratings provided, it is assumed that that the 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
  - ensure the plant is well maintained and regularly serviced
  - check and continually monitor site conditions for hazards to themselves and bystanders such as pedestrians
  - ensure that during operations, all pedestrians or 'bystanders' are kept outside the operating danger zone of the plant
  - immediately shut down the plant in the event of a breakdown which requires repair, and that if ignored could escalate into a major safety incident
  - Wear appropriate personal protective clothing & equipment

PLANT RISK ASSESSMENT MATRIX

Step 1:Determine Likelihood

What is the possibility that the effect will occur?

	Criteria	Description
Very likely	Expected in most circumstances	Effect is a common result
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 safe operating procedures change.
1 L: Low	**Record and monitor** Proceed with work. Review regularly, or if safe operating procedures change.