

## **RISK MANAGEMENT REPORT**

TYPE	Dump Truck - Site
MAKE	Yanmar
MODEL	4x4
REGISTRATION	56467D
CHASSIS / VIN	00008

Report Number	ST 20230210-1118
Date	10-Feb-2023
Created By	Neil Hofland
Assessor	Neil Hofland
Assist. Assessor(s)	
Completed By	Neil Hofland
Owner	David Stanton Plant Hire Australia Pty Ltd.
Item ID	2212 / 2240
WULP	No
Item Category No#	8131 / 8141
Supplier Unit No.	DUM031
Assessment Purpose	Plant in use - Rail Corridor (NSW)
State	NSW



# **TABLE OF CONTENTS**

**SECTION 1** 

#### **IMPORTANT INFORMATION**

Contains information outlining the scope and any limitations applicable to this Risk Management Report

**SECTION 2** 

## **MACHINE DETAILS**

Contains standard machine specifications and details of any extras fitted

**SECTION 3** 

#### **RISK ANALYSIS, RISK EVALUATION & RISK TREATMENT**

Contains details of the technique used to calculate risk ratings, time frame and risk treatments. Please refer to this information when reviewing and interpreting the information in section 4 & 5

**RISK TREATMENTS REQUIRED** 

**SECTION 4** 

Contains detailed information regarding the risk treatments to be implemented including hazard, risk rating, time frame, relevant standards & legislative references

**SECTION 5** 

#### **RISK TREATMENTS IN PLACE**

Contains detailed information regarding the risk treatments in place including hazard, risk rating, relevant standards & legislative references

**SECTION 6** 

#### **IMAGES AND NOTES**

Contains images & any relevant information entered by the assessor





#### **SECTION 1** IMPORTANT INFORMATION

This report generated by Plant Assessor™ © Online Safety Systems on Tuesday, 14 Feb 2023 9:46 AM

All operators of this item of plant must read and understand this report prior to operating this item of plant. This report pertains to this item of plant as it appeared on the day of inspection.

The safety hazards associated with the operating and maintaining of this item of plant have been identified as far as practical by visual inspection. The condition of this item of plant will change with use. No physical testing has been conducted (eg. Wire rope tests, stress tests, structural/non-destructive tests, noise tests, vibration tests, brake tests, insulation tests etc.) unless stated otherwise in the notes.

Controls outlined in both section 4 & 5 of this report must be maintained at all times whilst this item of plant is in operation. Any information contained in the notes section of this report shall be read in conjunction with section 3. Any information relating to the standard features have been supplied via the manufacturer and shall be used as a guide only until verified.

Additional Risk Assessment may be required, specific to the operating environment, for this item of plant. All operators and maintenance personnel must be appropriately trained in the use & maintenance of this item of plant.

For further information regarding this report contact Online Safety Systems on 1300 72 88 52

#### **SECTION 2** MACHINE DETAILS

	Manufacturers specified noise level dBA	
- NOISE TEST RESULTS	2. Ambient noise level dBA	
	3. Noise level - Operator position (high idle) dBA	
	4. Noise level - Operator position (low idle) dBA	
- NOISE TEST RESULTS	5. Noise level LHS dBA @ m (high idle)	
	6. Noise level Front dBA @ m (high idle)	
	7. Noise level RHS dBA @ m (high idle)	
	8. Noise level Rear dBA @ m (high idle)	
	Fuel Tank Capacity (Litres)	
CAPACITIES	Heaped capacity (m3)	
	Hydraulic Oil Tank Capacity (Litres)	
	Dump angle (deg)	
	Height (mm)	
	Length (mm)	
DIMENSIONS/WEIGHTS	Loading Height (mm)	
	Turn circle diameter, outside corner (mm)	
	Unladen weight (kg)	
	Width (mm)	
DRIVES	Drive	
	Engine Displacement (Litres)	
	Engine Hours	
ENGINE	Engine Make & Model	
ENGINE	Engine Number	
	Number of Cylinders	
	Power (kW@rpm)	
HYDRAULICS	Hydraulic Oil Flow (I/min)	
HIDRAULICS	Hydraulic Oil Pressure (Bar)	
SAFETY STRUCTURES	FOPS Serial No.	
SAI ETT STRUCTURES	ROPS Serial No.	
SPEEDS	Number of speeds, F/R	
STEERING	Steering system	
TRANSMISSION	Maximum speed (km/h)	
TRANSMISSION	Transmission	
TVDEC	Tyre Size	
TYRES	Tyres, front/rear	
	Dump speed, raiser/lower (sec)	
WORK CAPABILITIES	Gradeability - Degrees/(%)	
	Payload (kg)	
	•	•



MACHINE DETAILS



Yanmar Dump Truck - Site Registration Assessed By Date

## **SECTION 3** RISK ANALYSIS / RISK EVALUATION

RI:	RISK ANALYSIS						
.◄	← CONSEQUENCE →						
LIKELIHOOD ———		1. INSIGNIFICANT Dealt with by in house first aid	2. MINOR Treated by medical professionals, hospital out patients	3. MODERATE Significant non permanent injury overnight hospital stay	4. MAJOR Extensive permanent injury eg. Loss of fingers, extended hospital stay	5. CATASTROPHIC Death, permanent disabling injury eg. Loss of hand, quadriplegia	
LIKELI	A. Almost certain to occur in most circumstances	MEDIUM 8	HIGH 16	HIGH 18	CRITICAL 23	CRITICAL 25	
<b>↓</b>	B. Likely to occur frequently	MEDIUM 7	MEDIUM 10	HIGH 17	HIGH 20	CRITICAL 24	
	C. Possibly and likely to occur at sometime	LOW 3	MEDIUM 9	MEDIUM 12	HIGH 19	HIGH 22	
	D. Unlikely to occur but could happen	LOW 2	LOW 5	MEDIUM 11	MEDIUM 14	HIGH 21	
	E. May occur but only in rare circumstances	LOW 1	LOW 4	LOW 6	MEDIUM 13	MEDIUM 15	

LUATION	CRITICAL	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below.		
RISK EVAL				
	MEDIUM  Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the treatment table below. Permanent risk treatments must be implemented within one month.			
LOW  Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within three months.				

MENT	Selecting the most appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory and other requirements. (Source AS/NZS ISO 31000:2009)				
REAT	Eliminate Eliminate the risk source.				
RISKT	Substitute Provide an alternative that is capable of performing the same task which is safer.				
	Engineering	Provide or construct a physical barrier or guard.			
	Administration Develop policies, procedures, practices and guidelines in consultation with employees to mitigate the risk. Provide training, instruction and supervision about the risk source.				
	Personal protective Provide personal protective equipment to protect the individual from the risk source.				





#### **SECTION 4** RISK TREATMENTS REQUIRED

This section of the report pertains to hazards created by use of this item of plant which currently do not have risk treatments in place. The risk treatments recommended in this section have been developed based on relevant Australian Standards, health & safety legislation, the hierarchy of risk treatment in accordance with the guidelines set forth in AS/NZS ISO 31000 – Risk Management and various other sources. The recommended risk treatment measures must be developed, implemented and validated as effective prior to the operation, maintenance or testing of this item of plant. Treatments applied must be dated and initialled adjacent the recommendations. All operators must read and understand the entire contents of this section prior to operating this item of plant.

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	Time Frame	Due Date	Date Rectified	Initial
NOMINATED OPERATION OPERATION ONLY	CRITICAL 24	MEDIUM 15	Immediate	10-Feb-23		

#### **Risk Treatment Required: Operator Competency**

**OPERATION** 

Only persons who are qualified, trained and experienced and/or hold the relevant certification/license can operate this item of plant. If there is not a competent/licensed person available for operation of this item of plant then only persons who are supervised by a competent/licensed person can operate this item of plant.

Legislation: State Health & Safety Legislation & Regulation

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations

#### **SECTION 5** RISK TREATMENTS IN PLACE

This section of the report pertains to risk treatments currently in place on this item of plant. This section must be read in conjunction with the safety section of the manufacturers handbook. All operators must read and understand the entire contents of this section prior to operating this item of plant. These treatments or equivalent must remain in place at all times whilst this item of plant is in operation.

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
AGE	INCORRECT OPERATION	HIGH 22	MEDIUM 15
STORAG	Risk Treatments in Place: Plant Security  This item of plant is fitted with the appropriate locking devices and or vandal proof guarding  These must be employed whenever this item of plant is left unattended.		
	References: RMS G22, AS7502-		
			ı
IVERY	CRUSHING	HIGH 22	MEDIUM 15
DELIV	Risk Treatments in Place: SWMS Loading/Unloading Ensure that all operators follow approved SWMS/SOP when loading and unloading this mad tilt tray.	chine to and from a flat top tru	ck or trailer, low loader or
	References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act	& Regulations	
	CRUSHING	HIGH 22	MEDIUM 15
	Risk Treatments in Place: SWMS Load Restraint Ensure that all operators follow the approved SWMS/SOP when restraining this machine for	r transport.	
	References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act	& Regulations	





NON COMPLIANCE HIGH 22

#### Risk Treatments in Place: Pre-hire Contractor Inspection

HAZARD(S)

A record is available to show that this item of plant has been inspected to ensure that it complies with the manufacturer's requirements and is safe for use for the hire period.

References: ISO31000

LOW 6 LOW 1

#### Risk Treatments in Place: Road & Traffic Authority Registration

This item of plant is currently registered with the road & traffic authority. Registration (conditional or full) must be current at all times whilst this item of plant is in operation in the rail corridor.

References: AS7502-

Risk To Hydraul of plant Refere



#### Risk Treatments in Place: Hydraulic steering speed advisory label

Hydraulic steering maximum speed warning label fitted to operator area. Operators must not exceed this speed at any time whilst operating this item of plant.

References: RMS G22

INCORRECT OPERATION HIGH 22 MEDIUM 15

#### Risk Treatments in Place: Operation Handbook

The manufacturer's operation handbook has been supplied for this item of plant.

This handbook must be available at all times to all potential operators and supervisory staff. All potential operators must read and be familiar with this handbook prior to operating.

A complete risk assessment/Job Safety Analysis must be undertaken covering all operating processes and environments associated with this item of plant. SWMS should be produced for specific tasks associated with use of this item of plant.

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations

INCORRECT OPERATION HIGH 22 MEDIUM 15

#### Risk Treatments in Place: Pre-op Checklist Dump Truck - Site

A pre-operational checklist is available for this Dump Truck - Site. All operators must complete this checklist prior to operating this Dump Truck - Site.

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations

INCORRECT OPERATION HIGH 22 MEDIUM 15

#### Risk Treatments in Place: SOP Dump Truck - Site

Safe Operation Procedures are available for this Dump Truck - Site. The information in the Safe Operation Procedures must be followed at all times whilst operating this Dump Truck - Site.

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations



**INCORRECT OPERATION** 

HIGH 22

Prelim. Risk Rating

**Residual Risk Rating** 

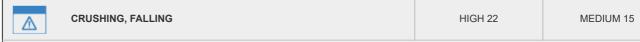
HIGH 21

MEDIUM 15

#### Risk Treatments in Place: Control Labels

All controls including all levers, buttons, pedals, switches etc. are clearly labelled as to their purpose and method of operation. These labels must be maintained in a clean and serviceable condition at all times.

References: AS/NZS4024.1905



## Risk Treatments in Place: Passenger Seat Label

This item of plant is fitted with a clear hazard warning label re: Operator only, No passengers. Passengers must not be carried at anytime. This label must be clear and legible at all times whilst this item of plant is in operation.

Legislation: State Health & Safety Legislation & Regulation

References: AS1319-





Make Yanmar

Model 4x4

Type Dump Truck - Site

Registration Assessed By Date

56467D Neil Hofland 10-Feb-2023

Page 5 of 15

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
CRUSHING	HIGH 22	MEDIUM 15

#### Risk Treatments in Place: ROPS Label

The warning label stating that the ROPS must not be damaged at any time (including cuts, drill holes and welds) must be present, clean and legible at all times.

References: ISO3471

CRUSHING

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: ROPS seat belt label

This item of plant is fitted with a ROPS and has an advisory label stating that "seatbelts must be worn".

This label must be present, clean and legible at all times.

All operators and passengers must wear seatbelts whilst on this item of plant.

References: AS2294, ISO3471



**ELECTROCUTION** 

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Electrical Approach Distances

This item of plant has a hazard warning label re: overhead electrical hazards and minimum approach distances fitted. These distances must be adhered to strictly. These labels and tables must be present, clear and legible at all times.

Spotters are required when working within 5 metres of the minimum approach distance of any live electrical apparatus.

Any encroach within the minimum approach distances must only occur if the following provisions have been met -

- 1. The machine is designed to work within the minimum approach distances
- 2. Permission has been granted by the electricity company and
- 3. Safe systems of work have been documented and approved.

References: ISO31000



COLLISION

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Phone Use label

This item of plant is fitted with an instruction label advising that mobile phones must not be used whilst operating this machine. Accordingly all operators must not use a mobile phone at any time whilst operating machine. If phone use is necessary then operator must place machine in park configuration in a safe position prior to phone use. Operators MUST adhere to this advice at all times.

This label must be clear and legible at all times whilst this item of plant is in operation.

References: AS1319-, ISO31000



POISONING, EXPLOSION, BURNS

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Tank ID Label

The tank(s) on this item of plant have clear, legible label(s) identifying their contents, and if appropriate any necessary controls re: the contents. These must be present, clear and legible at all times. (this includes radiator, hydraulic and petrol/diesel tanks)

References: Work Health & Safety Act & Regulations-, Occupational Health & Safety Act & Regulations



COLLISION

HIGH 22

HIGH 21

#### Risk Treatments in Place: Reverse Camera

This item of plant is fitted with a reverse camera.

This camera and screen must be fully functional at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201

Assessor Comments: Open cab



COLLISION

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Left Hand Drive Label

This item of plant has a hazard warning label re: left hand drive, at the rear. It must be present, clear and legible at all times.

References: ISO31000





Make Yanmar

Model 4x4

Type Dump Truck - Site

Registration Assessed By Date

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	
FIRE	HIGH 21	MEDIUM 15	

#### Risk Treatments in Place: Fire Extinguisher

This item of plant is fitted with an approved and maintained fire extinguisher. Fire extinguisher(s) must be present and fully functional at all times. They must be readily accessible to the operator. Regular inspections must also be carried out in accordance with the manufacturer's requirements and AS 1851 – 1995



CRUSHING

HIGH 21

MEDIUM 15

#### Risk Treatments in Place: Articulated Joint Crush Label

This item of plant has clear hazard warning labels re: crush zone, keep clear, that are attached to each side of the articulated joint. These must be present, clear and legible at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, ISO20474-



**HEARING LOSS** 

HIGH 19

MEDIUM 14

#### Risk Treatments in Place: Hearing Protection Label - Operator

The hazard warning label(s) re: wearing of hearing protection attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation.

References: AS3781-, AS/NZS1269



**CRUSHING, STRIKING, COLLISION** 

HIGH 19

MEDIUM 14

#### Risk Treatments in Place: Tail Swing Label

The rear of this item of plant has a hazard warning label re: general plant movement, tail swing, keep clear. It must be present and fully functional and serviceable at all times.

References: ISO20474-



**ENTANGLEMENT, SHEARING, BURNS** 

MEDIUM 14

MEDIUM 13

#### Risk Treatments in Place: Engine Guard Label

The engine fan and alternator belts, pulleys and gears are guarded. These guards have clear legible hazard warning labels re do not open or remove guards while engine is running. These labels must be present, legible and easily seen at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, AS1319-



CRUSHING

MEDIUM 14

MEDIUM 13

#### Risk Treatments in Place: Crush Zone

This item of plant has hazard warning labels re: Crushing, keep all body parts clear, adjacent all crush zones. These labels must be present and fully functional and serviceable at all times.

References: AS/NZS4024.1201, AS1319-



**CRUSHING, COLLISION** 

MEDIUM 12

LOW 6

#### Risk Treatments in Place: Warning Device (horn)

This item of plant is fitted with a fully functional audible warning device such as a horn. This must be easily accessed by the operator, and easily identifiable by nearby pedestrians.

All operators should ensure the warning devices are functional at the start of each shift, by completing pre-start checklists. Warning devices should operate automatically where appropriate (eg reversing)

References: ISO7731, ISO9533



**BURNS** 

MEDIUM 12

MEDIUM 12

#### Risk Treatments in Place: Open Cabin

Dust, exhaust fumes, chemical fumes, sunstroke and sunburn pose serious risk to the operator both short and long term. The appropriate controls for all of these hazards must always be available whilst this item of plant is in operation. If these controls e.g. hats, sunscreen, dust masks etc are not available then operation of this item of plant must cease until these are made available to all operators.

References: ISO31000





Make Yanmar

Model 4x4

Type Dump Truck - Site

Registration Assessed By Date

COMPLIANCE

DESIGN



#### Risk Treatments in Place: UHF Radio

This item of plant is fitted with a UHF radio. All operators must be familiar with the specific site protocols for use of this device. This device must meet the following criteria at all times whilst this item of plant is in operation -

- Is permanently and sturdily mounted to the item of plant
- Is fitted with an external aerial
- Is audible to the operator during normal machine operation
- Is fully functional

References: ISO31000

Assessor Comments: Open cab



COLLISION

MEDIUM 9

I OW 5

#### Risk Treatments in Place: Recovery Point Label

This item of plant is fitted with a hazard warning label adjacent the recovery tow point which states "Recovery tow point – Read manufacturer's towing instructions before towing". Failure to do so could result in DEATH or SERIOUS INJURY.

This label must be clear and legible at all times whilst this item of plant is in operation.

References: ISO31000

# 

**CRUSHING, COLLISION** 

CRITICAL 24

MEDIUM 15

#### Risk Treatments in Place: Park Brake

This item of plant is fitted with a fully functional park (hand) brake which meets the following requirements –

- 1. Is separate to the service brakes
- 2. Has a device which maintains the brake in the on position until intentionally disengaged &
- 3. Requires at least two separate and distinct movements to disengage the park brake.

The park brake must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme.

References: AS2958

Assessor Comments: Not Tested.

As per OEM service guidelines.

As per daily pre-operational checklist.



COLLISION

CRITICAL 24

MEDIUM 15

#### Risk Treatments in Place: Road/Rail Reverse Movement Awareness Alarm

This item of plant is fitted with a reverse movement awareness alarm. This alarm must meet the following criteria at all times whilst this item of plant is in operation. Failure to meet any of these criteria requires immediate stand down until rectified.

- 1. Is automatically operated when reverse gear is selected
- 2. Is mounted with unobstructed vision to the rear of the machine
- 3. and the alarm either -
- a. Responds to surrounding noise levels to be clearly audible over the units noise. (smart alarm) and
- b. Regardless of being a smart alarm has a base sound pressure level (SPL) not less than 87dB(A) measured at a distance of one metre

References: ISO7731, ISO9533





	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
- T	STRIKING, BURNS	HIGH 22	MEDIUM 15

#### Risk Treatments in Place: Hydraulic Hoses

This item of plant has hydraulic hoses. These hoses must be inspected each day or before each use for wear and tear. If there are visible signs of wear immediate action must be taken to control the risk arising from this wear. These inspections must be documented.

Hydraulic fluid at high pressure can penetrate the skin, never use any part of your body to check for leaks. If oil penetrates the skin seek medical advice immediately. Always use a piece of cardboard or similar to check for suspected leaks.

Hydraulic pressure can be stored and is a hazard. Before disconnection or connection of hydraulic hoses complete the following steps -

- 1. Stop engine
- 2. Keep all bystanders clear of the work area
- 3. Refer to operators manual as to methods to release pressure
- 4. Wait 5 minutes

References: AS4024, AS2671



#### **CRUSHING, COLLISION**

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Hold To Run Tipping Body Controls

The tipping body controls are the "hold to run" type.

Operators and maintenance staff MUST NEVER attempt to bypass this important safety feature. Failure to comply with this instruction may lead to serious injury or death.

References: AS1418.8



#### **CRUSHING, COLLISION**

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Loose Items - Operator Work Area

All items that could cause harm to the operator in the event of a collision or rollover are securely restrained.

References: ISO31000



#### CRUSHING, ENTANGLEMENT, STRIKING, COLLISION

HIGH 22

MEDIUM 15

#### **Risk Treatments in Place: Neutral Start**

This item of plant has neutral start control in place. It must be fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS4024.1603



#### CRUSHING

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Seat Belt

This item of plant is fitted with an operator seat belt. This seat belt must be free from damage, and permanently and sturdily attached at all times whilst this item of plant is in operation. Operators must use this seat belt at all times during operation.

References: ISO6683

If you can't see my mirrors I CAN'T SEE

#### POOR VISIBILITY, COLLISION

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Operator Mirrors

The operator rear view mirrors fitted to this item of plant must be fully functional and kept clean at all times. There must always be at least one mirror on each side to provide rear vision to the operator to avoid striking bystanders and objects.

References: AS/NZS4024.1201, ISO14401.1



**CRUSHING** 

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Earthmoving ROPS

A Roll Over Protective Structure (ROPS) to AS 2294, ISO 3471, ISO 12117.1 or 2 or SAE J1040 is fitted to this item of plant. A permanent label stating this standard must be attached to the structure at all times. It must also carry a warning label re: wearing of seat belts at all times whilst this item of plant is in operation, and accordingly seat belts must be worn at all times during operation.

References: AS2294, ISO3471





Make Yanmar Model 4x4 Type Dump Truck - Site Registration Assessed By Date

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating		
STRIKING, BURNS	HIGH 22	MEDIUM 15		
Risk Treatments in Place: Hydraulic Hose Failure Shield				
This item of plant is fitted with a sturdy, permanent shield(s) between the hydraulic hoses and any body parts of the operator to provide protection				
during a hose or component failure. This shield(s) must be present and fully functional at all times whilst this item of plant is in operation.				
<b>References:</b> AS4024, ISO4413, AS2671				



CRUSHING, ENTANGLEMENT, SHEARING, BURNS, PINCHING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Safe Operator Location

This machine is designed so that the operator is isolated from all danger zones whilst at the operator position. This condition must exist at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201



POOR VISIBILITY, COLLISION

HIGH 22

MEDIUM 15

**Risk Treatments in Place: Machine Lights** 

This item of plant is fitted with self contained lighting. All of these lights must be fully functional and serviceable whilst this item of plant is in operation in areas of reduced light. If any of these lights stop working the operation must cease immediately and the faulty light be repaired before operation can continue in the areas of reduced light.

References: ISO20474-



**ENTANGLEMENT** 

HIGH 22

MEDIUM 15

**Risk Treatments in Place: Engine Guards** 

The engine fan and alternator belts, pulleys and gears are guarded. These guards must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1601



CRUSHING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Articulated Joint Locking Device

This item of plant is fitted with a safety locking device to the articulated joint (either a locking arm or cylinder locking devices) and clear, legible instruction labels on both sides of the articulated joint which state that either of these devices must be engaged during any maintenance to the articulated joint. These must be present, serviceable and employed at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, AS1319-



CRUSHING

HIGH 22

MEDIUM 15

Risk Treatments in Place: Tipping Body Prop

The tipping body on this item of plant is fitted with a mechanical safety support and instruction label. These must be fully functional and serviceable at all times. The support must be used when accessing the area under the tipping body for maintenance or any other purpose.

References: AS1418.8



COLLISION

HIGH 22

MEDIUM 15

Risk Treatments in Place: Beacon

This item of plant is fitted with a safety beacon. This beacon must meet the following criteria at all times whilst this item of plant fitted is in operation -

- Is visible up to 200m in all directions (allowing for intermittent obstruction from the plant structure whilst the plant is in operation)
- Is fitted in the most appropriate location on machine to maximise visibility without risking continual damage

NOTE: more than one beacon may be fitted to meet these criteria.

References: ISO20474-



**OPERATIONAL MALFUNCTION** 

HIGH 22

LOW 2

Risk Treatments in Place: Plant Modification

The plant is in original condition.





HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
ENTRAPMENT	HIGH 21	MEDIUM 15

#### Risk Treatments in Place: Two Operator Exits

The operator cabin/work area on this item of plant has a minimum of two (2) possible exits. These must be functional and accessible at all times whenever the item of plant is manned, whether during operation or maintenance activities.

References: AS5327



**ENTRAPMENT** 

HIGH 21

MEDIUM 15

#### Risk Treatments in Place: Emergency Exits

The emergency exits for this item of plant meet the following requirements -

- 1. Clearly and legibly labelled
- 2. Instructions for use are clear and legible and located adjacent the exit
- 3. Any required tools required for use are available e.g. Emergency hammers

These exits must be legibly labelled and fully functional at all times whenever the item of plant is manned, whether during operation or maintenance activities.

References: ISO31000



**CRUSHING** 

HIGH 21

LOW 5

#### Risk Treatments in Place: FOPS General

This item of plant is fitted with a Level I Falling Objects Protective Structure (FOPS). This structure is designed to protect the operator from small falling objects (e.g. bricks, small concrete blocks, hand tools)

Before operating this item of plant a task based risk assessment must be conducted to determine the level of FOPS required.

Level I - withstands 1,365 joules (e.g. 20kgs @ 7m drop, 70kgs @ 2m drop)

- operations such as highway maintenance, landscaping and other construction site services

Level II - withstands 11,600 joules (e.g. 200kgs @ 6m drop, 394kgs @ 3m drop)

- operations such as site clearing, overhead demolition or forestry

This task risk assessment must be undertaken before each operation, in particular when the item of plant is moved to a new location, even if it is within the same site.

References: AS2294, ISO3449, ISO10262



#### INCORRECT OPERATION

HIGH 20

MEDIUM 14

#### Risk Treatments in Place: Intuitive Controls

The controls fitted to this item of plant are orientated so that the movement of the control is consistent with the action of the machine e.g. moving a control lever to the left results in the machine turning to the left. This design feature must be maintained at all times whilst this item of plant is in operation.

References: AS/NZS4024.1906



**STRAINS** 

HIGH 19

LOW 5

#### **Risk Treatments in Place: Controls Ergonomics**

All controls including all levers, buttons, pedals, switches etc, are placed near the operator work position and are easy to reach and operate during the execution of the operator's normal duties. This applies for all persons within the 95th percentile of the normal population distribution.

References: AS/NZS4024.1901



**INCORRECT OPERATION, SLIPPING** 

HIGH 17

LOW 6

#### Risk Treatments in Place: Control Levers/Pedals/Buttons

All controls including all levers, buttons, pedals, switches etc. must be kept non-slip and free from damage at all times.

References: AS/NZS4024.1901





Make Yanmar Model 4x4 Type Dump Truck - Site

Registration Assessed By Date

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
SLIPPING		MEDIUM 12	LOW 6

#### Risk Treatments in Place: Operator Work Area Access/Egress

Safe access and egress to the cabin/work area(s) must be maintained at all times whilst this item of plant is in operation. It must be non slip, free from damage, located at a height so as to not cause undue body stresses and strains with three points of contact available to personnel at all times.

All personnel must -

- 1. Always face the item of plant during access and egress.
- 2. Always maintain three points of contact during access and egress.
- 3. Never carry an object(s) in his/her hand(s) during access and egress.
- 4. Never jump off machine.

#### References: AS5327



**FALLING, SLIPPING** 

MEDIUM 12

LOW 6

#### Risk Treatments in Place: Access/Egress Instruction Label

An instruction label is fitted adjacent access/egress areas to advise all personnel of the following -

- 1. Always face the item of plant during access and egress.
- 2. Always maintain three points of contact during access and egress.
- 3. Ensure the steps are clean.
- 4. Never jump off machine.

This label must be clear and legible at all times whilst this item of plant is in operation.

#### References: ISO31000

BATTERY COVER

**ELECTRIC SHOCK, BURNS** 

MEDIUM 12

LOW 6

#### **Risk Treatments in Place: Battery Cover**

All batteries fitted to this item of plant are constrained to prevent displacement & fitted with a permanent sturdy cover which allows for ventilation. The constraint and cover must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201



COLLISION

MEDIUM 12

LOW 6

#### Risk Treatments in Place: Rail Corridor Plant Reflectors

This item of plant fitted with external reflectors which meet the following requirements -

- 1. Reflector placement must highlight the extremities of plant
- 2. Rear minimum 2 x red reflectors
- 3. Sides minimum 3 x orange reflectors.

These reflectors must be present, clean and free from damge at all times whilst this item of plant is in operation.

#### References: AS7502-



COLLISION

MEDIUM 12

LOW 6

#### Risk Treatments in Place: Rail Corridor Reflective Tape - Plant

This item of plant is fitted with reflective tape to the rear which meets the following requirements -

- 1. Placement must highlight extremities of plant
- 2. Where possible must be between 400mmm & 1500mm from ground level
- 3. Where possible must be 100mm tall & must not be less than 250mm
- 4. Tape is coloured contrasting red and orange.

References: AS7502-





Make Yanmar Model 4x4 Type Dump Truck - Site Registration Assessed By Date 56467D Neil Hofland 10-Feb-2023

Page 12 of 15

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
*	INCORRECT OPERATION, SLIPPING	MEDIUM 9	LOW 4

#### **Risk Treatments in Place: Work Area Floors**

All work area floors are non-slip and free from damage & debris.

Floor area must remain non-slip and free from damage & debris, including rubbish, tools and other items, at all times whilst this item of plant is in use.

References: AS/NZS4024.1201, ISO20474-



**STRAINS** 

MEDIUM 9

LOW 1

#### Risk Treatments in Place: Operator Seat

The operator seat fitted to this item of plant must remain free from damage and tears, and be permanently and securely fitted at all times.

References: AS/NZS4024.1401, ISO20474-



**BURNS** 

MEDIUM 9

LOW 5

#### **Risk Treatments in Place: Exhaust**

The engine exhaust on this item of plant is fitted with a guard to prevent injury to any person and control the risk of initiating a fire. It must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201



**CRUSHING, COLLISION** 

**CRITICAL 25** 

MEDIUM 15

#### **Risk Treatments in Place: Brakes**

The brakes fitted to this item of plant must be fully functional at all times whilst this item of plant is in operation. The brakes must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme.

References: AS2958

Assessor Comments: Not Tested.

As per OEM service guidelines.

As per daily pre-operational checklist.



**CURRENT OR PREVIOUS STRUCTURAL DAMAGE** 

CRITICAL 25

MEDIUM 15

#### Risk Treatments in Place: Structural Integrity

Regular checks for structural damage must be undertaken. Look for cracks in frames/chassis (current or repaired), bends or damage to structural components, etc.



**CRUSHING, COLLISION** 

CRITICAL 24

HIGH 21

### Risk Treatments in Place: Mechanical Condition

This item of plant is in an acceptable general and mechanical condition. Ensure that a maintenance & inspection regime is in place to ensure that this is the case at all times whilst this item of plant is in operation.



**INCORRECT OPERATION** 

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Maintenance Manual

The manufacturer's maintenance manual(s) has been supplied for this item of plant

These manual(s) must be available at all times to all users and maintenance staff of this item of plant. All users and maintenance staff must read and be familiar with these handbook(s) prior to maintaining or repairing this item of plant.

A complete risk assessment/JSEA must be undertaken covering all inspection, maintenance, servicing and transportation requirements of this piece of plant prior to use.

A full assessment of the competence of people using the book(s) must also be undertaken

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations





Make Yanmar Model 4x4 Type Dump Truck - Site Registration Assessed By Date



#### **Risk Treatments in Place: Tyres**

The tyres and wheel components must be inspected as part of a "pre start" checklist. These inspections must be documented as part of your plant safety programme.

References: ISO31000

Assessor Comments: 25 - 50%.



STRIKING, BURNS

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: Hydraulic Damage

The hydraulic hoses to this item of plant are free from damage and protected against damage arising from contact with the plant structure. Ensure that hoses are free from damage and that protection is in place at all times whilst this item of plant is in operation. Inspection of the hydraulic hoses and protection system should be conducted regularly and documented as part of your plant safety programme.

References: AS4024, ISO4413, AS2671

**Assessor Comments:** Not assessed



**CRUSHING** 

HIGH 22

MEDIUM 15

#### Risk Treatments in Place: ROPS Damage

The Roll Over Protective Structure (ROPS) fitted to this item of plant must remain free from damage at all times whilst this item of plant is in operation.

References: AS2294, ISO3471



INCORRECT OPERATION

HIGH 22

LOW 2

#### Risk Treatments in Place: RMS Start Requirements

The engine to this item of plant must be easy to start (frequent jump starting is not acceptable), reliable, not over heat and provide sufficient power for the unit's intended purpose at all times whilst this item of plant is in operation. Any failure to meet these criteria must be repaired within 1-7 days.

References: RMS G22



**OPERATIONAL MALFUNCTION** 

HIGH 22

LOW 2

#### Risk Treatments in Place: Major Fluid Leaks

This item of plant must remain free from leaks at all times whilst in operation (this includes engine, transmission, cooling system, air, fuel, drive line, wheel hubs, steering and hydraulics). Development of a major leak will require this item of plant to be stood-down until repaired. Minor leaks detected must be repaired within 1-14 days.

References: ISO31000



**OPERATIONAL MALFUNCTION** 

HIGH 21

MEDIUM 15

#### **Risk Treatments in Place: Service Records**

Service and maintenance records are available for this item of plant.

These records must continue to be managed and available at all times as part of your service and maintenance programme. (This programme includes the undertaking of regular inspections of the item of plant with specific reference to all OEM prescribed, scheduled and non scheduled service and maintenance requirements).

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

**POLLUTION** 

LOW 1

LOW 1

#### Risk Treatments in Place: RMS Engine Smoke Requirements

This item of plant's engine exhaust smoke shall not be visible for continuous periods of more than 10 seconds whilst this item of plant is in operation. (Clean Air Act 1981) Failure to achieve this must be repaired within 1-7 days.

References: RMS G22

#### **SECTION 6 IMAGES AND NOTES**

**IMAGES** 





Make Yanmar Model 4x4 Type Dump Truck - Site Registration Assessed By Date 56467D Neil Hofland 10-Feb-2023

Page 14 of 15

## **NOTES**

- No Notes Available -







# **RISK MANAGEMENT REPORT**

TYPE	Dump Truck - Site	Report Number	ST 20230210-1118
MAKE	Yanmar	Date	10-Feb-2023
MODEL	4x4	Created By	Neil Hofland
REGISTRATION	56467D	Assessor	Neil Hofland
CHASSIS / VIN	80000	Assist. Assessor(s)	
		Owner	David Stanton Plant Hire Australia Pty Ltd.
		Item ID	2212 / 2240
		WULP	No
		Item Category No#	8131 / 8141
		Supplier Unit No.	DUM031
		Assessment Purpose	Plant in use - Rail Corridor (NSW)
		State	NSW

# **OPERATOR ACKNOWLEDGEMENT**

I the undersigned acknowledge that I have read and understand the risk management report described above. I also acknowledge that I have received a copy of this risk management report.

<u>DATE</u>	<u>NAME</u>	COMPANY/POSITION	<u>SIGNATURE</u>



Dump Truck - Site

<u>DATE</u>	<u>NAME</u>	COMPANY/POSITION	<u>SIGNATURE</u>



Dump Truck - Site

Type

Registration

Assessed By

Date

ST 20230210-1118