Risk Rating

Risk Assessment & Method Statement

Task/ activity: Plant and Equipment Maintenance

Task/ activity description:

Activities undertaken to keep the workplace, its structures, equipment and facilities in good repair and operating efficiently and safely, related to many tasks as repairing, replacing, servicing, cleaning, inspecting and testing.

Likely to be effected: Operatives, sub-contractors, visitors

Risk Scoring = multiply severity by probability SxP=R		
Severity	**Probability**	**Risk Category**
5 Fatality or disaster	5 Highly likely	
4 Major injury, damage or loss	4 Very likely	High = 15-25
3 Reportable injury or occurrence	3 Likely	Medium = 9-14
2 Minor injury, less than 3 days lost time or minimal loss	2 Unlikely	Low = 1-8
1 Minor injury, no lost time or damage	1 Very unlikely	

Hazard	Control measures to be taken to reduce risk	Scoring		Risk rating
		S	P	
Lack of Hazard / Risk Awareness	• All Operatives before commencing any plant & equipment maintenance must be given job specific training by the Plant Manager or In-House Trainer. • All Operatives must be trained on the risk assessments & be able to access them in their Spoken Language. • All operatives must be inducted and informed of typical workplace hazards.	**4**	**2**	**8**
Contact with machinery- entanglement, crush, amputation -Fatality -Major injury	• Employees involved in maintenance work must be fully familiar with plant and must have sufficient job specific knowledge about design and purposes of machinery. • All maintenance works to be undertaken only by fully trained, competent, and authorised staff. • All machinery and tools to be operated in compliance with manufacturers' recommendations and safety guidance provided by the Company. • "Lock out, tag out and try out procedure'' must be understood and followed when task requires direct access to the machinery. *(Risk Assessments carried out)*	**5**	**3**	**15**

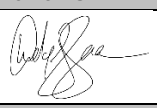
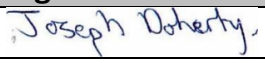
	• All electrical tools to be inspected regularly and maintained in good working order. All defects must be actioned immediately, do not use defective equipment. • Guarding hazardous moving parts is a legal requirement, guards must be replaced after maintenance activities. • Non-essential staff to be excluded from working areas to minimize exposure to risk with physical barriers in place where necessary.			
Lifting operations- - Moving load, falling object - Fatality - Major injury	• Only trained, competent and approved persons and authorised to carry out lifting operations. • Competent person must assess the lifting operation. Taking care to assess the task. • Never exceed the safe working load of the lifting equipment or attachment. • Pre-use checks must be completed by the trained, competent operator on lifting equipment and attachments prior to the work. • Load must be handled only from safe distance using guiding ropes. • Working under suspended load is strictly forbidden. • Adequate PPE must be used such as impact gloves, safety boots and hard hats. • Unnecessary personnel must be removed from the working area, and the area cordons off if necessary. • Always carry out a test lift to ensure the centre of gravity and the load is safe to lift. • Lifting equipment must be inspected by a competent third party at appropriate intervals.	**5**	**2**	**10**
Vehicle/Pedestrian contact- - Fatality - Major injury	• If Maintenance staff need to access the floor of the plant this must planned, communicated and controlled. • When accessing their working area, must obey "5 Metres Rule". • Subcontractors to be inducted prior to being shown around site. • Two-way radios must be used in areas with vehicle activity. • Work area to be separated from moving vehicles with Concrete Barriers, Cones and Red / White barriers. • All mobile plant operators to be aware of maintenance work carried out in vicinity of their traffic routes.	**5**	**3**	**15**

	• Hi-vis vests, bump caps and safety footwear must be worn all the time. Additional Tasks will dictate PPE *(Eye Protection, Ear Protection, Dust Masks, Safety Harnesses)*			
Electricity **-**Electrocution -electric shock	• Only competent, qualified and authorised specialists (e.g. electricians) are authorized to work on electrical systems. • Fixed electrical testing is carried out annually. • All power tools and machinery must be inspected before use, taking care to inspect the cables, plugs, etc. • The employee must avoid leaving trailing cables and not leave them in the path of vehicle movements. • Isolation and the LOTO process should be used if there is a chance of electrocution or machinery starting up.	**5**	**2**	**10**
Manual handling **-**Musculoskeletal disorders -Entrapment	• Lifting, moving, pushing or pulling activities are to be assessed and planned by a competent person. • Mechanical means of lifting, with safe lifting equipment and a competent operator is to be assessed and used wherever possible. All maintenance operatives to be trained in safe lifting techniques. • Lifting equipment to be inspected by a competent third party at appropriate intervals. • Where possible, manual handling to be avoided or reduced. Team lifting undertaken as needed, planned and controlled by one person.	**3**	**2**	**6**
Falling object – Propped work piece, entrapment - Fatality - Major injury	• Always assess the task when you need to support/ prop something. • Take care when selecting props/ supports and ensure it is suitable for the task. • If you are unsure, discuss with your supervisor/ manager. • If using a prop, always use a secondary or even third method of securing the item. • Never put your hand or any other body part in harm's way. • If you need to move a propped object ensure it is safe to do so use a sling or tool from a safe distance. • Take particular care of cylinder-shaped items. beware it doesn't move. • • Do not take chances or short cuts.	**5**	**2**	**10**

Working at height - Falls from height - Fatality	• Only trained and authorised personnel allowed to work at height. • Planning process must consider types of fall hazards, risk reduction, limitation of fall arrest equipment and emergency rescue planning. • Access equipment (ladders, mobile elevating working platforms, etc.) and safety equipment kept in good working order and inspected regularly. • All operations supervised and two-way radio communication maintained. • Additional equipment ready to use in case of emergency. • Employees must wear harnesses for all work at heights from MEWPs.	**5**	**2**	**10**
Fire -Smoke inhalation -Burns -Critical loss	• "Hot Work Permit" must be obtained before any hot works starts. • Adequate provision of firefighting equipment available. All maintenance staff trained in fire safety procedures and familiar with locations of fire extinguishers and other firefighting equipment. • All staff familiar with fire evacuation routes. Evacuation plan displayed and accessible for all employees and visitors. Fire routes must be always clear and free from obstacles. • Trained Fire Wardens assigned to each shift. • Alarm must be raised immediately. • Protect life as a priority.	**5**	**2**	**10**
Critical human error - Fatality - Major injury	• Only authorised trained and competent persons are to undertake any task to reduce the risk of critical human error to minimum. • Works must be supervised by a competent person. • All relevant persons must have sufficient knowledge of the hazards and required precautionary measures specific to the task. • Suitable and competent supervision is in place while any undertaking hazardous task. • Working hours must be suitable and reviewed to avoid tiredness at work. • Any task must be properly planned by a competent person and the safe method of work communicated to all relevant parties.	**4**	**2**	**8**
Confined spaces **-**Loss of consciousness – lack of oxygen	• No confined spaces working unless no other method of work can be established.	**5**	**2**	**10**

-Explosion/Fire -Entrapment	• The task is planned and assessed by a competent person and the task is agreed with maintenance supervisor or plant manager. • All jobs that involve confined space working must be thoroughly planned and assessed by a competent person. • Control measures must be put in place (at least two operatives, radio communication maintained). • Work must be supervised with an appropriate recuse plan communicated to the involved persons.			
Slips/Trips/Falls -Major injury -Minor injury	• Safe access and egress must be maintained the employees must ensure the work area is cleaned throughout and loose waste material to be removed on a regular basis. • Maintenance staff to plan the route to the location of work the tools, equipment and consumables. • After completion of task all debris must be cleaned up to maintain safe access to the plant. Fire routes and walkways clear an unobstructed. • Spills to be dealt with immediately.	**3**	**2**	**6**
Noise	• Noise assessments are undertaken at appropriate intervals. • Staff provided with appropriate hearing protection and instructed to wear and maintain their PPE. • Signage is displayed to reinforce its uses. • PPE is enforceable.	**3**	**2**	**6**
Lone Working	• Lone working is not permitted when working on machinery. • Maintenance must always be completed in teams of a minimum of two. • Ensure to communicate regularly with the other operative while you work.	**5**	**1**	**5**
Contact with chemicals -Dermatitis	• Direct contact with Plant consumables like greases, diesel oil, paints, varnishes and welding fumes and gases needs to be avoided. Proper PPE, including safety glasses and gloves, must be worn. • COSHH sheets and Material Safety Data Sheets available. • Provision of First Aid adequate. First aid kits available at various locations.	**3**	**2**	**6**

Approval and review

Assessor:	Signature:	Position:	Date:
Wesley Jameson		Health & Safety Manager	Sep 2025
Approved by:	**Signature:**	**Position:**	**Date:**
Joseph Doherty		Chief Executive Officer	Sep2025
Reviewed on:	**Sep 2025**	**New version number:**	**4**
Date of next review:	**Sep 2026, or as an when required**		

PPE Requirements

- Gloves, safety helmets, safety boots, eye protection

Method statement

Planning:

All Maintenance work will be thoroughly planned before Commencing.

- Selection of suitable Operatives for the task (trained, competent, ability, knowledge)
- Work at Height (use of harness, boom lift, scissor lift, ladders, step ladders)
- Use of Equipment & Tools (Electric Power Tools, Air Power Tools, Hand Held Tools)
- Hot Works / Fire Watchman for Duration (Fire Hose / Fire Extinguishers in Place)
- Lock Out Procedure (All Machines Locked out as per Risk Assessment before Maintenance commences)
- Identification of First Aiders on Maintenance shifts
- Monitor & Manage PPE requirements for the Site

Physical:

- All tools and equipment will be selected to suit the task.
- In the event of any blockages, these will be firstly cleared with push sticks at a distance. Where this is unsuitable, the machinery will be shut down & locked out as per Machine Risk Assessment
- Lock-off procedure will be followed whenever certain task requires direct access to the moving parts of machinery.
- Any work at height will be Supervised by Plant Manager / Supervisor and controlled by working inside of Scissor Lift, Boom Lift, inside of handrails or the use of fall arrest equipment.
- “Hot work” (grinding, welding etc.) will not be carried out in vicinity of flammables or combustibles. Whenever “hot work” is being done, permit must be obtained before work starts, Area to be cleared of Combustible Material, Area Dampened down, Fire Watch Man in Place for the duration of the Works & for Minimum 6-hour Fire Watch
- Guards, Safety Chain / Strap and trip devices will be in place before work starts.
- Any defective guards will be reported & repaired during planned maintenance.

- Any Defective Tools will be Reported to Plant Manager before Use & removed from Service until repaired or replaced
- Eye and ear protection will be used where required
- Electrical supply will be fitted & Maintained by a Competent Certified Electrician,
- First aid facilities will be provided as necessary.

Managerial / Supervisory:

- All Work will have a Designated Supervisor to manage the Operatives & the Task
- Toolbox Talk will be carried out by Supervisor before Work Commences
- All unauthorised personnel will be kept out of the area of work.
- Safe access & egress to the work area will be maintained at all times.
- All electrical appliances will be operated by trained and experienced operatives, according to manufacturers' recommendations and safety instructions.
- The operators will be reminded to keep work areas clear of obstructions and of the need to wear PPE required.

Training:

- Personnel involved in the maintenance will be briefed on the use of the machine and the use of need for guards and tripping devices, and the potential for injury at the machine.
- Any manual handling will be planned before work commences. Where possible, lifting aids will be used to avoid manual lifting.
- Where any queries arise, Operators must consult their Supervisor before continuing.
- All tools and equipment will be selected to suit the task.
- Safe access & egress to the work area will be maintained at all times.
- Lock-off procedure will be followed whenever work is required on machines
  In the event of any blockages, these will be firstly cleared with push sticks at a distance. Where this is unsuitable, the machinery will be shut down & locked out.
- Any work at height will be supervised and controlled by working inside of handrails or the use of fall arrest equipment.
- "Hot work" (grinding, welding etc.) will not be carried out in vicinity of flammables or combustibles. Whenever "hot work" is being done, permit must be obtained before work starts
- All unauthorised personnel will be kept out of the area of work.
- All electrical appliances will be operated by trained and experienced operatives, according to manufacturers' recommendations and safety instructions.

Isolation and Lock-Out Procedure

PREPARATION

- Before any equipment is shut down the responsible person will review the works area and give a briefing to their direct team performing the work with the equipment and lockout process.
- They must consider the type and amount of energy that powers the equipment or is created by it, the hazards it creates and how it can be controlled.
- Refer to the risk assessment that is to be reviewed as part of this step.

NOTIFY

- The responsible person MUST notify ALL affected individuals via radio or in person.
- This may require additional demarcation notification such as physical barriers and signage.

TURN OFF/SHUTDOWN

- The equipment is shut down as per the normal procedure, which, in turn, will follow the manufacturers guidelines.
- The shutdown is in a methodical manner to avoid adding hazards arising from an emergency stop.

ISOLATION

- Isolation points are clearly identified in procedures and labelled on equipment.
- Energy isolation devices are installed. These will block the equipment from the energy source. Use these to isolate all energy sources and secondary supplies.
- Visually check that the isolation is successful in stopping moving equipment and, where visible, contactors have parted.
- Finally, check that access to the work area remains restricted and access points have not been inadvertently created during the previous steps.

LOCKOUT AND TAGOUT

- Energy isolation devices should be locked out and tagged using the provided red "LOCKED OUT" padlocks, or the key fob system (MDR).
- Use the key fob system to lock out a particular piece of machinery (MDR). The key fob should then be placed in the pocket of the operative. The machinery cannot be restarted until that same key fob has been scanned a second time to unlock.
- If it is not possible to lock out an energy source, then an alternative method and information tag must be applied as a means of protection.
- Only the responsible person may remove the Lock-out padlocks, or energy isolation device. It is an offence to bypass, ignore or forcibly remove such devices for any reason.

CONTROLLING THE ZERO ENERGY STATE

- You must ensure that you guard against energy left in the equipment and inspect to make sure all parts have stopped moving.
- Make sure to release the tension on springs or block their movement.
- Block parts which could fall due to gravity (potential energy) and do the same for parts in pneumatic and hydraulic systems which could move from a loss of pressure.
- Physical props are provided where deemed necessary by risk assessment. These must be used to prevent the release of stored energy.

PERFORMING THE WORK

- Complete the planned work as per the risk assessment and avoid doing anything different which could accidentally re-activate the equipment.
- Never bypass the lockout when putting in new piping or wiring.
- If, at any point, it is suspected that an energy source now exists stop the work immediately, report the incident and investigate when authorised to do so.

INSPECT AND RESTORE

- Visually inspect the area and check that any removed guarding is back in place securely.
- Make sure the responsible person removes the final lock and notify all employees that the equipment is ready to use.
- Confirm that all operatives have been removed from the area and that guarding is in place before starting the plant machinery.
- Only the responsible person may remove the Lock-out padlocks, or energy isolation device.

1. All devices should be restored to their operating position and verify it is operating correctly.

Safe use of Props

- Always assess the task when you need to support/ prop something.
- Take care when selecting props/ supports and ensure it is suitable for the task.
- If you are unsure, discuss with your supervisor/ manager.
- Measures should be taken to reduce the risk of load drift (eg spinning, swinging, etc); and of the load falling freely or being released unintentionally.
- Additional methods must be developed to prevent falling loads, including the use of multiple ropes or chains.
- Care must be taken while setting down the load using a lifting equipment, loads must be lowered at a safe speed.
- While propping a load, the process must take place as low from the ground as possible.
- Before any change in the process or repositioning the load, the task is to be re-assessed to ensure the integrity and stability of the load.
- If using a prop, always use a secondary or even third method of securing the item.
- Guiding of the lifting object must be undertaken from a safe distance using guide ropes or hand tools.

Signature sheet

Please add your signature to the table below to say that you have read the attached RAMS on **Plant maintenance at the DBR site**, and that you will abide by all control measure put in place.

Name	Signature	Date