Site SWMS & Risk Assessments

QR Code	934668
Principal Contractor	All Plumbing NQ
Date Provided to PC	30/09/2024
Revision Due	30/09/2025
Project	Stormwater Drain Cleans
Construction Site Location / Address	Glencore Copper 100 Hunter St, Stuart Qld 4811
Person Responsible for implementing SWMS onsite	Dayle Faint 0413 697 886
After Hours Contact	Barry Davies 0409 753 229

1 Purpose

The purpose of this document is to explicitly outline the Hazards and Risks associated with high-risk work activities and general construction site tasks. This Safe Work Method Statement (SWMS) must be maintained and accessible for inspection until the completion of the high-risk construction work it pertains to. In the event of a revision to the SWMS, all versions must be retained. Should a notifiable incident occur in relation to the high-risk construction work covered by this SWMS, it must be retained for a minimum of 2 years from the date of the incident.

2 Evaluation

Process effectiveness is evaluated through internal audits and site safety inspections. This document remains relevant until the specified review dates, unless it is found that controls may not be effective, new tasks or hazards/risks are introduced due to changes in the workplace, or in the event of a notifiable incident. In such cases, the SWMS will be reviewed and, if necessary, revised. Ultimately, everyone is responsible for upholding their duties regarding workplace safety.

The SWMS includes a provision at the end for adding or amending it. If these changes are implemented, workers must promptly notify Barry Davies to ensure they are properly incorporated. Once the SWMS is amended and controls are deemed adequate for the identified hazards, all workers must re-sign the SWMS to confirm their awareness of the changes.

3 Doc Control Details

PCBU Name:	**All Plumbing NQ**	**ABN:**	**11169623125**	
PCBU Address:	**35 Fleming Street, Aitkenvale QLD, Australia**		**Contact Number:**	**0409 753 229**
Document Name	**Glencore Copper Drain Cleans SWMS APN05 V1 Sep 24**			
Document Code	**APN05**			
Document Owner	**All Plumbing NQ**		**Maintained By**	**Erker Safety Pty Ltd**
Consulted By	**Barry Davies & Erker Safety Pty Ltd**		**Approved By**	**Barry Davies**
Created By	**Erker Safety Pty Ltd**		**Date Created**	**30/09/2024**
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V1	NW	Document Creation	30/09/2024	30/09/2025

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4 Definitions:

High Risk Work (As defined by WH&S Qld):

Work carried out at a workplace deemed as high risk by WH&S Regulation 2011 (s291):

1. involves a risk of a person falling more than 2m; or
2. is carried out on a telecommunication tower; or
3. involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure; or
4. involves, or is likely to involve, the disturbance of asbestos; or
5. involves structural alterations or repairs that require temporary support to prevent collapse; or
6. is carried out in or near a confined space; or
7. is carried out in or nearby—
   (i) a shaft or trench with an excavated depth greater than 1.5m; or
   (ii) a tunnel; or
8. involves the use of explosives; or
9. is carried out on or near pressurised gas distribution mains or piping; or
10. is carried out on or near chemical, fuel, or refrigerant lines; or
11. is carried out on or near energised electrical installations or services; or
12. is carried out in an area that may have a contaminated or flammable atmosphere; or
13. involves tilt-up or precast concrete; or
14. is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians; or
15. is carried out in an area at a workplace in which there is any movement of powered mobile plant; or
16. is carried out in an area in which there are artificial extremes of temperature; or
17. is carried out in or near water or other liquid that involves a risk of drowning; or
18. involves diving work.

5 Legislation that relates to this Safe Work Method Statement

Legislation

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- Electrical safety Act 2002
- Electrical Safety Regulation 2013

Current Codes of Practice – relevant to the task undertaken

https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice

- How to Manage Work Health and Safety Risks Code of Practice 2021
- Confined Spaces Code of Practice 2021
- Hazardous Manual Tasks Code of Practice 2021
- Managing Risks of Plant in the Workplace Code of Practice 2021
- Managing the Risk of Falls at Workplaces Code of Practice 2021
- Traffic Management for Construction or Maintenance Work Code of Practice 2008
- Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2021

6 PPE Requirements

PPE Requirements will be listed at the beginning of each activity with the recommended requirements using the below Pictograms:


Safety Glasses medium impact (clear indoor use and tinted outdoor use)


Safety Footwear with a steel cap toe or composite toe.


Safety Gloves suitable for the task


Ear Protection either plugs or muffs suitable to the task


Hard Hat for all work where there is work overhead


Hi Visibility Clothing, reflective tape is only recommended at nighttime


Respiratory Protection (RPE), specific to the task & as shown on fit test certificate


Protective Clothing, long sleeves and long pants


Clear High Impact Visor

Wide Brim Hat or ring worn over hard hats


Height Safety PPE specific to the task

7 Qualifications, Training Requirements

QBCC Licence – Plumbing and Drainage
HRWL - Forklift
Apprentice Training, if applicable
Industry White Card(s)
Supervision from Dayle Faint
Spotter for mobile plant, as required. Competently trained for the type of machinery with a full understanding of the tasks being conducted.

8 Hierarchy of Control Measures

Level 1	Level 2	Level 3
• Eliminate the Hazard	• Substitute the Hazard • Isolate the Hazard • Engineer the Hazard out	• Administration Controls • PPE

9 Parties responsible for implementation of Controls

Supervisor

Worker

Operator

Engineer

Management

Spotter

10 Risk Calculator

HOW TO USE THIS RISK TABLE
Step 1: Identify potential hazards.
Step 2: Decide what a possible **Consequence** could be.
Step 3: Decide **How Likely?** it is to happen
Step 4: Line up your choices in the table to get a number
Step 5: Use the Priority table to the right.

Appendix B - Risk Calculator

RISK RATING CALCULATOR			Likelihood		
Consequence What injury/damage could it cause?	**Rare - 3** Could only happen once in 25 years	**Unlikely - 2** Could happen, once in 5 years	**Possible - 1** Could happen each year	**Likely - 0** Could Happen more than once a year	**Almost Certain - 0** Could happen anytime
Catastrophic - 0 Multiple Fatalities	3	2	1	0	0
Major - 0 Death or serious disability	3	2	1	0	0
Moderate - 1 Long term illness or serious injury	4	3	2	1	1
Minor - 2 Medical attention & several days off work	5	4	3	2	2
Insignificant - 3 First aid needed	6	5	4	3	3

Risk Rating	Prioritisation
0, 1 or 2	Action to rectify must be done immediately before work may commence
3	Consider control measure as necessary and implement further controls to reduce risk
4, 5, 6	Continue to use correct controls selected and maintain communication

11 Workers Sign on and Consultation of SWMS

By signing the below I:

- **Acknowledge that I have had input into the development of the SWMS or have had opportunity to comment on the content**
- **Understand and agree to abide by all of the requirements stated within the SWMS**
- **Have appropriate certification, licences and/or training to competently undertake the task or, where permitted, will be directly supervised by persons with appropriate level of certification, licensing, training and competence**
- **Understand that where task changes or the controls stated are ineffective, that I will immediately notify my supervisor and cease work till the controls are modified and I re-sign an updated SWMS**

First & Last Name:	Signature:	Date:

First & Last Name:	Signature:	Date:

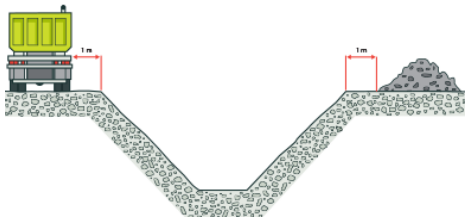
High Risk Work Activity: 6. Work in Confined Spaces				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
6A. Confined Spaces				
PPE Recommended			**Persons responsible for maintaining controls**	
Induction to site	Hazard: Unfamiliar environment **Risk: Personal injury**	**3**	• Workers to be site inducted • Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with this SWMS • All workers connected to confined space entry shall be recently trained and be deemed competent to work in on or around confined spaces and in rescue • Ensure any permits are issued prior to starting any activity	**5**
Assess work and work method	Hazard: Exposure to restricted Atmosphere, engulfment **Risk: Personal injury**	**3**	• Consider if the proposed work will result in additional new hazards or contribute to the risk of working in a confined space i.e. welding, high-pressure washing • Ignition sources should not be added to the confined space if there is risk of a flammable atmosphere • Minimise the release of harmful airborne contaminates • Eliminate the risk of engulfment	**5**
Setup confined space equipment for entry	Hazard: Equipment failure **Risk: Exposure to restricted atmosphere**	**3**	• Signage is to be erected to prevent unauthorised entry into the Confined Space Work area. Signs must warn against entry by other people other than those who are listed on the Confined Space Entry Permit and must be placed at each entrance to the Confined Space • Barriers and or traffic cones shall be implemented to prevent entry • Training in the use of and correct set up of equipment by supplier prior to use • Standby person to be assigned to monitor the wellbeing of those inside the space • Standby person/s to be adequately trained and competent in confined space entry, including rescue and first aid	**5**
Atmospheric testing and monitoring	Hazard: Contaminated atmosphere **Risk: Asphyxiation**	**3**	• A safe atmosphere is to be maintained as far as reasonably practicable during the work in the confined space • Air monitoring to be carried out by a competent person using a suitable, correctly calibrated gas detector • Tests for oxygen levels, airborne concentration of flammable contaminants and harmful contaminants may also be necessary • Use ventilation to maintain safe oxygen levels and any airborne contaminates in the space are minimised	**5**

High Risk Work Activity: 6. Work in Confined Spaces				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Entry to confined space	Hazard: Exposure to restricted atmosphere **Risk: Personal injury, asphyxiation**	**3**	• A Confined Space Entry Permit is required prior to entry - **DO NOT** enter confined space unless a permit has been obtained • Confined Space Entry Permit will highlight in greater detail the controls required and how to implement them • Prior to entering a confined space, check the oxygen levels are within the acceptable range and that atmospheric contaminants are below the relevant exposure standards • Ensure emergency evacuation procedures are in place before starting work • Consider heat stress: reduce the time spent in the space or the number of people	**5**

Entering and working in a confined space	Hazard: Dangerous atmosphere, engulfment, inadequate planning **Risk: Asphyxiation, death**	**3**	• No worker to enter a confined space without standby person in attendance
			• Entry and exit points must be large enough to avoid entrapment and for emergency access
			• Communications between personnel in confined space and stand-by person/s to be agreed upon prior to entry
			• Standby person/s to remain outside confined space and maintain contact with personnel in confined space
			• Standby person must not engage in any other work whilst observing confined space entry
			• All confined space equipment to be:
			  ○ Compliant with the relevant Australian Standards
			  ○ Visually inspected before use
			  ○ Pre-use tested before use
			• Confined space entry and rescue equipment shall be fit-for-purpose
			• All equipment to be used according to manufacturer's specifications
			• Emergency evacuation procedures in place before starting work and approved on permit prior to entry
			• Stand-by person shall not enter confined space to attempt rescue
			• Rescue equipment (for example, safety harness, lifting equipment, a lifeline) must be made available and be kept in close proximity
			• Stand-by person/s to check that all persons are accounted for before leaving site
			• Confined space permit to be closed out as soon as reasonably practical
				5

	Hazard: Slips, trips, falls **Risk: Personal injury**	**3**	• If entry to space is via a ladder, ladder is to be secured by the stiles not the rungs • 3 points of contact at all times • No work to be performed from ladder • Only 1 person on the ladder at any one time • Check footwear to ensure soles are free from mud, grease or other contaminants • Any tools that need to be used, should be lowered down	**5**

High Risk Work Activity: 6. Work in Confined Spaces				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Hazard: Use of hazardous substances **Risk:** **Asphyxiation, death**	**3**	• SDS to have been read and understood before use • Always keep lids on substances until required for use • Ensure area is monitored when using substance • Use a drop sheet if necessary to negate any spills	**5**

High Risk Work Activity: 7. Working in a Trench 1.5m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
7A. Working in or Near a Trench Deeper Than 1.5m				
PPE Recommended			**Persons responsible for maintaining controls**	
Pre-Start	Hazard: Inexperienced personnel, Plant/equipment used for tsk not suitable, contact with essential services **Risk: Injury, property damage, fire/explosion**	**1**	• Workers performing trenching and excavation work shall be adequately trained and competent in trenching and excavation work • Powered mobile plant operators must hold the relevant licence and verification of competency (VOC) • Plant and equipment to be used in accordance with manufacturers recommendations/specifications • Verify location of all underground services (dial before you dig and other relevant drawings). The relevant person must consider the information supplied, follow any reasonable restrictions and implement the necessary control measures. The information shall be always kept on site • All onsite workers must be advised of the location of the services, particularly the operator(s) of any plant working on the worksite • All exposed services should be marked with flags or devices that can be readily seen • Trenching and Excavation Permit to be completed • Exclusion zones to be barricaded, as required, prior to any excavation starting • Traffic control devices e.g., signage, protective barriers, traffic management plan etc. to be in place where applicable	**5**
Working in a trench deeper than 1.5 metres	Hazard: Installation of piping and foundations, uncontrolled collapse **Risk: Crush, death**	**1**	• To prevent collapse of the trench, the use of shoring, benching, or battering will be used and the most appropriate for the task will be selected. • **Battering:** To prevent collapse of the trench, no more than 45° (degrees) battering to all sides of the trench will be used. 	**4**

High Risk Work Activity: 7. Working in a Trench 1.5m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• **Shoring:** Will be used against all sides of the trench that protects by shielding. The shoring system will comply with applicable standards and manufacturers requirements. The shoring will be checked daily to ensure its continued effectiveness.  • **Benching:** To prevent collapse of the trench, apply benching to all sides of the trench. When I/we bench a trench, the vertical trench side, below the benched portion, will not exceed 1.5m in height. The benching will be checked at least daily to ensure its continued effectiveness.  • A geo-technical engineer will: o Approve in writing that all the sides of the trench are safe from collapse o State in writing how long the approval lasts if there is no stated natural occurrence that could affect the stability of the trench o State in writing the natural occurrence that could affect the stability of the trench • Compliance with the requirements of the geo-technical engineer will be adhered to	

High Risk Work Activity: 7. Working in a Trench 1.5m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• Safe means of access/egress provided into all excavations	
Managing fill stockpile	Hazard: Uneven surfaces unstable stockpile, uncontrolled collapse **Risk:** **Crush, death**	**1**	• Plan to stockpile materials in allotted positions • Ensure all stockpiles / spoil is kept a safe distance away from the excavation • Maintain in such a way as to prevent creation of unnecessary uneven surfaces in areas of work.	**5**

Workers inside a trench working greater than 1.5m	Hazard:
	Worker collapse or injury preventing normal exiting via ladder
	Risk:
	Unable to obtain First Aid quickly, unable to exit excavation
		2	• Workers will never work alone in trenches where risk dictates the access to be hindered for one person to exit quickly
			• Steps will be constructed where practical in the earth
			• Where it is not practical constructing earth steps multiple workers will be required, with a minimum of 2 personal always in the area
			• Send someone immediately to telephone or radio for emergency services. Ensure that the person knows the location of, and how to use the communication equipment
			• Clear all unwanted workers away from the area
			• Appoint a worker to monitor the work area (i.e. an observer who is not involved in any rescue activities)
			• Do not remove the victim unless there is a danger from flooding or dangerous gases are present or there is an imminent danger of collapse
			• Do not remove the victim by tying a rope around him/her and pulling on the rope
			• Where possible (and safe), leave the victim in the trench until the ambulance or a qualified medical person arrives
			• If risk assessment indicates:
			  ○ A stretcher will be made available with a 4-man lift required to remove a person from the excavation
			  ○ Additional lifting straps may be required and attached to a lifting device rated for man use
			  ○ There are several configurations, however, the crane is a suitable source to lift casualty as long as a dedicated spotter is always appointed in direct eye contact with casualty being lifted and direct contact with crane operator.
			• Once the Worker has been removed normal First Aid treatment will apply.
				4

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15BA. Mobile Plant - Driving Work Vehicles Onsite				
PPE Recommended			**Persons responsible for maintaining controls**	
Driving work vehicles onto site	Hazard: Traffic **Risk:** **Uncontrolled contact between vehicles and people**	**1**	• Driver is responsible for conducting prestart vehicle checks • Only licensed drivers are permitted to drive vehicles • Always drive according to road and weather conditions • Driver to be aware of site instructions and any specific hazards/risks that may be relevant • Flashing lights are always used on mobile plant and vehicles • Adherence to site safety plan, exclusion zones, communication, consultation. • Follow the site safety plan relating to traffic control safety • Increase awareness of pedestrians if works are adjacent to the existing footpath • All pedestrians to be diverted around work area	**5**

Mobilising on site	Hazard:
	Obstruction
	Unauthorised access
	Risk:
	Crush death
	Inadequate PPE
	Crushing
		2	• Do not work within 3m of live traffic unless:
			  ○ A Traffic Management Plan is in place
			  ○ A Traffic Control system is in place – under the direction of ticketed traffic controllers
			  ○ There is a safety barrier in place (such as concrete new jersey curbs), water filled Triton barriers and or a shadow vehicle
			• Remove obstructions or reposition equipment
			• Ground condition and slope must be assessed prior to loading/unloading
			• Do not continue if you cannot confirm the stability of the machinery
			• Only those authorised may access site
			• Ensure work area is barricaded and signed to allow adequate exclusion zones. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater
			• High visibility clothing to be always worn
			• Transport driver shall be responsible for tie down of load and removing tie downs, straps etc
			• Maintain visual contact between plant operators and other personnel at all times. Spotters to be used where required for reversing operations, tight areas etc.
			• Avoid unloading/loading plant under power lines
				4

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Unloading of plant	Hazard: Plant and equipment falling off deck uneven ground **Risk:** **Damaged equipment, crush death**	**1**	• Qualified and competent operator to always unload vehicle • Warning signage and exclusion zones installed indicating hazard • Align machinery with ramps prior to unloading • Using a spotter when reversing • Adjust ramps to suit wheel width • Use winch cable and remote where possible • Remove excess personnel from the work area • Unloading to be done on level ground	**4**
Moving machinery around site	Hazard: Obstruction (Overhead, at ground level or underground), faulty equipment, plant tipping or rolling over **Risk:** **Crush death**	**1**	• Remove obstructions or reposition equipment • Do not continue if you cannot confirm the stability of the machinery • Check all electrical systems are operational • Check all warning systems and devices are operational • Only authorised personnel shall carry out maintenance checks • Only qualified person shall carry out repairs and maintenance • Check tyre tread and pressure are satisfactory (where applicable) • Provide tilt alarm system to advise operator of machine operating beyond safe working angles • Ensure the machine is an “outdoor rated” machine if operating where there is a risk of external wind • Operator is responsible to not exceed the safe working load and wind rating of the plant • Operator to be trained and competent in the safe operation of the plant	**5**
Stationary equipment	Hazard: Accidental movement of plant **Risk:** **Crush death**	**1**	• Ensure tools and equipment are stored appropriately • Ensure emergency stop switch is pushed in when equipment function completed and work to commence • Ensure shutdown procedures are followed as per the manufacture’s manual	**5**
Refueling with diesel or petrol	Hazard: Spills, exposure to hazardous substances **Risk:**	**1**	• Use a designated refuelling point where practical • Ensure machine is turned off before refuelling • Fire extinguisher to be available in mobile plant. Extinguisher to be maintained according to Australian Standard • and training in the correct use of extinguisher has been undertaken • Refuelling of portable containers must be done on the ground	**5**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Fire, skin irritation, ground contamination		• All hot work or sources of ignition will be kept away while refuelling takes place • Appropriate size spill kits are to be available to implement if required • All workers will wash their hands and arms with water when finished handling diesel/petrol • Any contaminated clothing will be removed • All workers will read the Safety Data Sheet prior to use	
15BB. Working Near Onsite Mobile Plant				
PPE Recommended			**Persons responsible for maintaining controls**	
Working near onsite mobile plant. (Under or beside)	Hazard: Road traffic **Risk:** **Contact between persons and vehicles**	**2**	• When establishing work areas consider mobile plant onsite has right of way • All personnel to have undergone site specific familiarisation • Erect any barriers & signage necessary to keep others safe and aware of the work being undertaken • Designated pedestrian routes to be established where required • Personnel not to enter the swing zone of equipment without positive communications with operator • Restrict access to work area. Ensure: ○ Exclusion zones surrounding work area using barricades and signage is in place ○ Any other workers within the exclusion zones are wearing PPE as required ○ Communicate with onsite mobile plant operators to get an understanding of their tasks and areas they need to access as well as times they operate. Work in with onsite operators and ensure tools, equipment and work doesn't unnecessarily block their work areas or travel paths • When new workers come to site ensure they understand the movements of onsite mobile plant as it may not be consistent and start up without notice • Mobile phones or personal entertainment devices (PEDS) are not to be used while working around mobile plant. If necessary to use such a device, move to a safe area. • **Never work under a load being lifted by any type of crane**	**5**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15F. Mobile Plant - Forklift				
PPE Recommended 			**Persons responsible for maintaining controls** 	

Setting up to use Forklift	Hazard: Untrained or incompetent operators used
	Risk:
	Expose workers to being struck by plant movements causing death or serious bodily injury.
		1	• Complete a site Induction/familiarisation of local conditions
			• All induction processes should include the principles of traffic and pedestrian flow plus a site map. Induction should especially reinforce the "traffic management rules"
			• Ensure flashing lights or beacons/reversing beepers are functioning
			• All operators must hold an in date high risk forklift licence in Queensland
			• Operators are trained and competent to operate the type of forklift and attachments they are using
			• Operators are suitably experienced in the work they are to perform
			• All persons on site should attend toolbox talk (safety briefing) to receive update on:
			  ○ Exclusion zones for pedestrians
			  ○ Any hazards present on that day
			  ○ Communication methods and emergency procedures
			• Ensure operators:
			  ○ Using public roads have the appropriate driver's licence
			  ○ Hold a valid high risk work licence for the type of industrial lift truck they are operating
			  ○ Are trained to operate the type of forklift and attachments they are using
			  ○ Are provided with information, training and instruction on the hazards, risks, and control measures relevant to the workplace
			• Ensure all relevant workers have undertaken training and/or received instruction in the use of control measures. Include:
			  ○ Reporting procedures for incidents
			  ○ Correct use of equipment including operation and maintenance
			  ○ Use of supervision where required (e.g., new starters or new equipment)
			  ○ Supervisors, foremen etc. are suitably experienced in the type of work
			  ○ Trained in this SWMS
			• Workers must be fit for work, e.g., no signs of fatigue, alcohol, or drugs
				4

Entering or	Hazard:		• Face the forklift whenever you mount and dismount the forklift	

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
exiting cab	Slips, trips, falls **Riks:** **Personal injury**		• Maintain a three-point contact with the steps and with handholds (three-point contact can be both feet and one hand or both hands and one foot) • Use provided steps/handholds when entering or exiting the cabin (see operations manual for instruction). • Never mount or dismount a moving forklift • Do not jump off the forklift • Do not carry tools or supplies when you try to mount / dismount • Do not use any controls as handholds when you enter / exit the operator compartment • Never leave operator seat with the engine running	
Assess onsite conditions	Hazard: Lack of a clear assessment **Risk:** **Personal injury, property damage**		• Operators must ensure: ○ There is suitable access/egress for all equipment required ○ The ground conditions for operation of equipment are stable and there are no uneven surfaces or drop offs ○ Suitable lighting, including night-works (include flood lighting and operator head lamps as applicable) ○ Work not near power lines ○ The area of operation is not in close proximity to power lines ○ Other trades and/or equipment does not impact the area of operation ○ Exclusion zones are set up around the area of operation where there is pedestrian activity	
Working with other workers	Hazard: Untrained or incompetent operators used **Risk:** **Expose workers to being struck by plant movements causing death or serious bodily injury**	**1**	• Establish an effective system of communication between forklift operator and ground workers before work commences • Relevant workers must be trained in the procedures involved prior to the work commencing • Ground workers are instructed not to approach forklift until the operator has agreed to their request to approach. • Ground workers are instructed on set distances to maintain from the forklift while in operation • Ground workers and forklift operators are aware of traffic management plan and exclusion zones • Ground workers are made familiar with the blind spots of the forklift • Forklift operator and ground workers are required to wear high-visibility clothing	**4**
Using attachments or implements	Hazard: Untrained or incompetent operators used	**1**	• Remove and attach as per manufacturer's instructions • Inspect quick-hitch device (if applicable) • Ensure attachment is on a flat, level surface • Ensure forklift designed for use of an attachment	**4**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

	Risk:
	Expose workers to being struck by plant movements causing death or serious bodily injury.
			• Ensure plant maintained and in good working order
			• Ensure all locking pins are secured in place and marked with the following (manufacturer's name, make, model and serial number, quick hitch weight, maximum rated capacity.
			• If damage or faults detected, do not use. Follow tag-out/lock-out procedures and report to supervisor immediately
			• Operator to raise shaft slowly and test attachment is secured prior to use
			• Operator not to overload the capacity of attachment
			• Attachments kept in lowest working position possible
			• **Note**: If attachment is alternate brand – seek advice from manufacturer to ensure the different attachment does not affect the centre of balance.
			• When changing hydraulic attachments, wear gloves and eye protection:
			  ○ Turn plant off
			  ○ Release hydraulic pressure
			  ○ Cover quick connect with rag and disconnect
			  ○ Reconnect new attachment
			  ○ Check for proper hydraulic connection, hose routing and hose length
			  ○ Check for leaks
			• Only use compliant forklifts with a load capacity data plate that says a person lifting attachment may be used
			• Ensure forklift is fitted with a method to prevent free fall of the box/platform in the event of a hydraulic hose failure
			• Only to be used as specified by manufacturer	

15R. High Pressure - Water Jet				
PPE Recommended			**Persons responsible for maintaining controls**	
Setting up work area near electrical equipment	Hazard: Contact with electricity **Risk:** **Electrical shock, death**	**1**	• All Workers are competent or under direct supervision of a supervisor with experience in using the specific water blaster • Any electrical equipment in the immediate area of the operation that presents a potential hazard and is not required during the job, must be de-energised, shielded, removed, or otherwise made safe • All equipment should be checked daily by users for any damage or corrosion in accordance with the manufacturer's instructions	**5**

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

			• **Electric Powered Units:**
			  ○ All power water jet cleaner and leads are tested and tagged and are current.
			  ○ Safety switches (RCD's) are provided.
			  ○ Keep power leads up off the ground and out of the way.
			• Ensure equipment hoses and leads are not placed in areas where they may be run over, damaged or exposed to water.	

Use of water blaster	Hazard: Hit by water /objects under pressure **Risk: Lacerations, eye injuries**	**1**	• All equipment and machines near work area should be protected or shielded from water and/or being hit by flying debris • Remove all objects such as rocks, broken glass, nails, wire, debris, toys, or anything that may become a hazard during water jet cleaner operation • Don't point the jetting gun at anyone at any time • Don't leave the unit running unattended • Restrain the hose to restrict the movement in the event of a hose end failure • Nozzles checked and cleared of debris that could cause obstructions • Attachments fitted as per the manufacturer's recommendations • Don't change the jetting nozzle while the unit is running • Maintain control of the jetting gun • High pressure Water Jet Cleaners should not be directly aimed at electrical wiring, switches, relays, alternators, starter motors, bearing seals, window rubbers or vulnerable components that water might affect.	**4**
Movement of water blaster	Hazard: Hit by water / objects under pressure **Risk: Lacerations, eye injuries**	**1**	• Always push the water jet cleaner when moving it • Water jet cleaner to have triggers that can lock into place for use over longer periods (more than 30 seconds at a time) • Handles on water jet cleaner should be cylindrical and approx. 4cm in diameter • Operator's wrist to remain straight when operating water blaster • Operator to ensure grip on machine is comfortable • Ensure there are no sharp edges on machine • Grip length approx. 12cm • Avoid repetitive tasks. Ensure job rotation and sufficient breaks • Do not overreach or work in awkward or static postures for more than 30 minutes at a time or 2 hours over entire shift • Don't use on a ladder	**4**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Ladders – Under 2m				
PPE Recommended			**Persons responsible for maintaining controls** 	
Using Ladders	Hazard: Using Ladders **Risk: Falling**	3	• Tie offs, base support, gutter anchors, levelers to be considered • All ladders used on site will be rated 'Industrial' with 120kg (minimum) load rating • Persons using the ladder must have 3 points of contact always (i.e., 2 hands and 1 foot or 2 feet and 1 hand or be holding a stable object e.g., gutter, wall frame) • Ladders are to be maintained in a sound working condition and be appropriate for the task to be undertaken • Tools requiring two handed operations, or a high degree of leverage force should not be used while on ladders • A ladder is not a work platform.	5
Manual Handling				
PPE Recommended			**Persons responsible for maintaining controls** 	
Manual Handling	Hazard: Locations of the loads and distances to be moved **Risk: Musculoskeletal strain, Fatigue**	**3**	• Use mechanical handling equipment where possible • Correct lifting technics will be used whenever a lift is required • **Preparation**: The first step in any lifting operation is preparation. Plan how you will carry out the lift and clear away any obstacles. By visualising the lift, you will automatically make your stomach muscles contract. These muscles brace your back and will significantly contribute to injury prevention • **Size up to load**: By moving the load sideways and forwards you will be able to ascertain whether it is within your capacity. Always imagine that the object you are about to lift is much heavier than it is • **Proper foot position**: As a general rule the front foot should be beside the object. The back foot should be slightly behind and be hip width from the front foot. This achieves a stable base and allows for even distribution of weight • **Proper hold**: Ideally with the proper hold the hands should be diagonally opposite for security and comfort. Use the full length of the fingers and where possible the palms to avoid fatigue • **Bend at the knees**: Bend your knees to get down to the load and use the legs to lift it. This way thigh and leg muscles are used, and these are the strongest part of your body (your back muscles are only for bracing) • **Straight back**: Keep your back as near to straight as possible, raise your head, keeping your chin in. This will keep your spine straight and enable you to see where you are going	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

			• **Keep the load close to you**: During the lift, keep the arms as straight as possible, and the elbows into the side. Don't change your grip while carrying and directly face the spot on which the load will rest. Never combine lifting with the twisting of your body. If you must turn, do it by moving your feet. Twisting causes the worst type of back injuries
			• **When a team lift is required, good communication will be used to co-ordinate the lift**: Whenever team lifting is used, it is essential to co-ordinate and carefully plan the lift. When organising a lift, ensure:
			  ○ An adequate number of employees are chosen to help in the lift.
			  ○ Team members are of similar height.
			  ○ One person is appointed "leader" of the team to perform the lift.
			  ○ There is enough area for the team members to maneuver as a group.
			  ○ Team members know their roles and responsibilities.
			  ○ Training in team lifting has been provided and the lift is rehearsed.	

Use of Hand and Power Tools				
PPE Recommended			**Persons responsible for maintaining controls** 	
Prestart check at site	Hazard: Site hazards may impair works **Risk:** **Personal injury**	**3**	• Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with the SWMS. • Discuss site specific works with the Site Supervisor reviewing site signage, Safety Management Plan, for site specific hazards • Ensure all employees are made aware of any site specific hazards to works and these SWMS • Construction Inducted employees are only allowed to undertake construction works • Ensure all leads tagging & testing are up to date, if applicable	**5**
Use of drills, saws, planner, sander, hand tools	Hazard: Untrained workers **Risk:** **Personal injury**	**3**	• Workers are to use the right type and right size of tool for the job • Workers to follow the correct procedure for using every tool • Worker to check the condition of tool prior to use • Always carry pointed tools by your side with the points and heavy ends down • Never carry tools in your pockets • Keep cutting tools sharp and in good condition • Cut away from yourself when using chisels and other edged tools • Handle sharp-edged and pointed tools with care • Handles must have no sharp edges or areas that dig into the fingers or palm of the hand • Do not use tools which are loose or cracked	**5**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			• When power tools are used follow the manufacturer's instructions for the correct PPE to be worn and the safe use instructions • Workers to be competent in the use of the PPE and risk assessments must be undertaken prior to using PPE to show that the hierarchy of control was used in determining if to use PPE • If an item of plant or equipment creates excessive noise, that is where you need to raise your voice to talk, wear appropriate hearing protection • If there is a risk of injury to the head by falling objects then wear hard hats	
	Hazard: Contaminated atmosphere **Risk: Respiratory illness**	**3**	• If you don't know or you suspect area being worked on may contain crystalline silica, STOP work and talk to supervisor for further directives • Assess whether to wet down areas to reduce dust emission from works conducted • Where the risk of dust production, worker will wear appropriate PPE	**5**
	Hazard: Flying debris **Risk: Personal injury**	**3**	• Guards on tools and equipment will be maintained and working effectively before being used on site • Guarding on tools will not be removed to perform any work activity • All tools and equipment will be inspected prior to work activity for any faults or defects • If a fault or defect is found the item will be removed from services and reported to the supervisor as soon as practicable • All persons performing work where there is a risk of a foreign object striking the eye, eye protection must be worn	**5**
	Hazard: Poorly maintained electrical tools **Risk: Electrocution**	**3**	• All corded tools will be tested and tagged in accordance with current legislation and conducted every **three months** on construction sites • All corded tools will be connected directly to an RCD switch box which is also inspected and tagged in accordance with current legislation	**5**
Powered tools with discs: grinders	Hazard: Incorrect disc or fragmented disc resulting in flying parts striking people **Risk:**	**3**	• If worker doesn't know or suspects area being worked on may contain silica then follow the steps listed in the crystalline silica component of this SWMS for specific controls of respirable crystalline silica • Grinders will always be inspected before use • If a cutting or grinding disk has been left on, carefully inspect disc prior to use • If damage to disc is noted, swap out for a new one • Never change any type of disk on a grinder without unplugging or removing battery • Checking for dead is also essential to prevent accidental operation during disk change	**4**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Personal injury		• Never over tighten disk as this may also damage them • Guards are always manditory on a grinder. If the guard is in the way, the grinder is the wrong tool for the job • Do not remove guards for any reason while grinder is in use	
Working in Hot/ Humid Environments (Excess 30°or +60% Humidity)				
PPE Recommended			**Persons responsible for maintaining controls**	
Working in excessively hot environments or during a heat wave (i.e., working on open fields, concrete structures, etc.	Hazard: Heat and high humidity on the body, Radiant heat, High humidity, Hot objects, or Strenuous physical activity **Risk:** **Heat stress,** **Dehydration,** **Headaches,** **Nausea**	**2**	• Extended working hours, excessive heat and more strenuous activities will be carefully monitored • Have in place emergency procedures for heat stress • Supervisors to consider: ○ Length of shifts - depends on physical and mental load of the work ○ Previous hours and days worked ○ Type of work being performed ○ Level of physical and/or mental effort required to complete tasks ○ Time of the day when the work is being performed. ○ Rotating workers • Supervisors to implement, as far as is reasonably practicable: ○ Increased supervision/monitoring of workers and regular communication with them ○ Work to be carried out under shade/portable shade structure ○ Increased work to rest ratio i.e., 1 hour work to 15 minutes, minimum, rest period ○ Buddy system where workers keep an eye on each other for signs of heat effects ○ Where possible schedule work for early morning, late afternoon or at night ○ Utilize 5 min hydration breaks away from sun and work ▪ Hydration Stop: Is a controlled break facilitated by the supervisor or safety rep to bring the work crew together and re-hydrate, (water, sqwincher or hydrolytes.) will be used. This is not a normal break as the sole purpose of this is to re-hydrate • Shaded or cool area(s) for rest breaks with good ventilation - use fans if needed	**4**

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk

Hot/ Humid environments - Emergency Response Procedures	Hazard: Unidentified heat stress or exhausted worker **Risk: Dehydration, Collapse, Permanent disability, Death**	**1**	• Workers will:
			  ○ Look after each other and ensure that there is drinking water, co-workers are taking breaks and not showing signs of heat stress
			  ○ Ensure they have plenty of cool water to drink - not icy water
			  ○ Use electrolyte icy blocks if not contra indicated
			  ○ Take regular rest breaks in shade
			• If a worker shows symptoms:
			  ○ Remove the worker from the heat or work area
			  ○ Loosen their clothing, remove PPE including shirts and masks
			  ○ Have them rest in a cool, well-ventilated area
			  ○ Encourage them to drink cool (not cold) fluids
			  ○ If symptoms do not reduce quickly, seek medical help immediately
			• As far as is reasonably practicable, sites to have available ice towels (i.e., esky, ice, water, and towels) as part of a first aid response. Ice towels have been shown to be an effective cooling method for heat related illness
			• To relieve acute symptoms, such as painful muscular cramps, hydrolytes may be used in the single serve
			• **DRSABCD** – Implement basic first aid
			• **See site First Aiders**
			• Each day ensure workers know who the onsite first aiders are
				4

End of Shift				
PPE Recommended			**Persons responsible for maintaining controls**	
Clean up and re-packing.	Hazard: Loading vehicle **Risk: Muscular strains**	**3**	• When cleaning up and repacking good manual handling techniques will be used, e.g., such as bending the knees and not the back, team lifts where possible and avoid carrying very heavy items	**5**
Leaving Site	Hazard: Environmental **Risk: Environmental damage**	**4**	• When leaving site, make sure to take away any of the left-over materials • When cleaning ensure that all environmentally sensitive products are disposed of correctly • Any leftover hazardous substances will be taken off site and disposed at the correct facility	**5**

Site Risk Assessments – Additional Tasks or Activities to be Added				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Additional Tasks to Add to Job				
Task 1:	Hazard: **Risk:**	**0-6**	What did you do to make it safe?	**4-6**
Task 2:	Hazard: **Risk:**	**0-6**	What did you do to make it safe?	**4-6**
Task 3:	Hazard: **Risk:**	**0-6**	What did you do to make it safe?	**4-6**