Cut Off Wheel			
Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

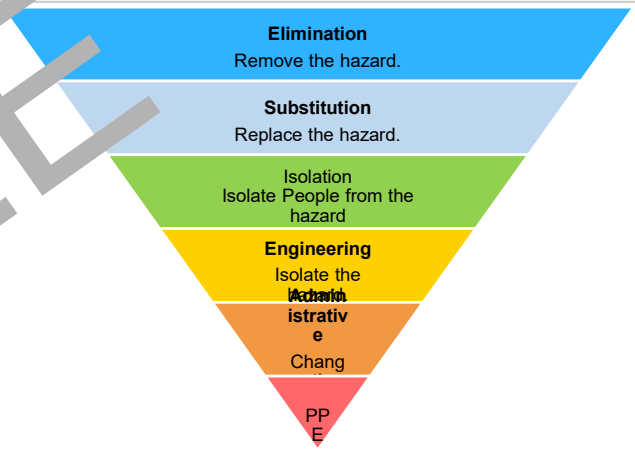
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS	
Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures Monitor and keep records.

Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work *(2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Governance, WHS Duties and Legal Compliance	• Lack of a documented WHS management framework for abrasive wheels and cut off saws leading to ad hoc risk control • Officers and PCBUs not fully understanding due diligence obligations under WHS Act 2011 in relation to plant and high-risk cutting activities • Failure to identify and apply relevant WHS Regulations, Codes of Practice and Australian Standards for abrasive wheels and metal cutting • Inadequate consultation with workers and Health and Safety Representatives (HSRs) about risks and controls for cut off wheel operations • Poor integration of cut off saw risks into the organisation's overall risk register and strategic planning • No clear allocation of WHS responsibilities for procurement, maintenance, training and supervision of cut off saw activities • Lack of monitoring or review of WHS performance indicators specific to abrasive wheel use (e.g. incidents, near misses, inspection findings)	High	• Establish and document a WHS management system that specifically addresses plant and equipment, including cut off saws and metal cutting discs, aligned with WHS Act 2011 and WHS Regulations • Define and communicate WHS roles, responsibilities and accountabilities for officers, managers, supervisors and workers in relation to cut off wheel use and supervision • Ensure officers exercise due diligence by regularly reviewing information on hazards associated with cut off wheels (Safe Work Australia guidance, manufacturer information, Australian Standards) and verifying implementation of controls • Develop and maintain a formal risk register entry for cut off saw operations covering system-level risks, with periodic review and sign-off by management • Implement a structured consultation process (toolbox talks, HSR meetings, safety committees) to seek worker input on hazards and improvements relating to abrasive wheel use • Ensure the organisation identifies and applies relevant standards and guidance (e.g. Safe Work Australia – Managing Risks of Plant in the Workplace, AS 1788 or equivalent for abrasive wheels, and manufacturer instructions) • Set leading and lagging WHS performance indicators for plant use (e.g. percentage of workers trained, number of inspections completed on time, incident and near miss trends) and review them at management meetings • Conduct scheduled internal WHS audits that include verification of cut off saw controls, training records, maintenance systems and procurement processes • Ensure incident reporting and investigation procedures specifically capture cut off wheel-related events and identify systemic contributing factors with corrective actions	Medium
2. Procurement, Design and Selection of Cut Off Saws and Discs	• Purchase of low-quality, non-compliant or counterfeit metal cutting discs without appropriate certification or traceability • Selection of cut off saws without appropriate guarding, safety features, braking systems or emergency stop devices • Procurement of discs that are not compatible with saw speed ratings, flanges or intended use (e.g. using masonry discs on metal) • Lack of technical evaluation of new equipment against WHS legislative requirements and relevant Australian Standards	High	• Establish a formal procurement procedure for plant and abrasive wheels that requires WHS review and approval prior to purchase • Specify that all cut off saws and metal cutting discs must comply with relevant Australian Standards and manufacturer requirements, and be sourced only from approved suppliers • Require documented verification that discs are speed-rated and compatible with the intended saw, flange system and material type before procurement is approved • Include safety design criteria in tender and purchasing documents (e.g. fixed and adjustable guarding, integrated clamping, low-vibration design, emergency stop, braking, dust control interfaces) • Mandate that suppliers provide technical data sheets, safety information, installation and operating manuals, and maintenance schedules for all cut off saws and discs • Implement a pre-purchase WHS risk assessment for new or significantly modified equipment, involving WHS, end-users, and maintenance personnel	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Price-driven purchasing decisions that ignore whole-of-life safety and maintenance requirements • Inadequate supplier vetting leading to inconsistent information, poor documentation and unreliable safety support • Failure to consider noise, vibration and dust exposure when selecting saws and associated controls (e.g. lack of dust extraction or water suppression capability)		• Evaluate total lifecycle cost including guards, consumables, maintenance, training, and noise/dust control when making procurement decisions • Maintain an approved product list for cut off saws and discs, with controlled change management for adding or removing items • Require suppliers to certify that metal cutting discs are genuine, batch-traceable, and suitable for industrial use, and to notify the organisation of product safety alerts or recalls	
3. Plant and Equipment Management (Cut Off Saws and Abrasive Wheels)	• Inadequate system for inspecting, storing and rotating stock of metal cutting discs leading to use of damaged or expired wheels • Lack of formal pre-use inspection regime for cut off saws and associated guards, flanges and clamping devices • Use of modified, homemade or bypassed guards and flanges that invalidate manufacturer safety features • Poor maintenance sch... resulting in worn bearings, mi...gnment or vibration increasin...isc failure risk • Inadequate taggi... or id...cati... of defective equipment leading to continued unsafe use • No standard system for ...g accessories (e.g. incorrect flanges, worn spindles, incompatible clamps) that compromise disc integrity • Inappropriate storage conditions for metal cutting discs (excessive moisture, heat, impact) increasing risk of micro-cracks and burst • Failure to control use of portable and fixed cut off saws in unsuitable environments (confined spaces, explosive atmospheres, poor ventilation)	High	• Deve... a... imple...nt a documented plant management procedure covering selection, commissioning, inspecti..., m...tenanc... and decommissioning of cut off saws and associated discs • ...trodu... man...tory pre-use checklists for cut off saws, including guards, flanges, spindles, switches, pow...lea...s, clamping devices and disc condition, with records retained • Establis... a formal inspection schedule (e.g. weekly or monthly) for saws by competent maintenance p...sonnel, with defects recorded and tracked to close-out • Implement a lock-out, tag-out and isolation procedure for defective equipment, including clear criteria for when a saw or disc must be removed from service • Provide suitable storage systems for metal cutting discs (racks, shelves, protective packaging) in dry, temperature-controlled areas with clear labelling of disc type, batch and expiry date • Standardise and control flanges, spindles and clamps to manufacturer specifications; prohibit unauthorised modifications to plant and accessories • Ensure all cut off saws have appropriate guarding as per manufacturer and regulatory requirements, and prohibit operation if guards are missing or defective • Maintain asset registers for cut off saws with service history, inspection results and any modifications documented and reviewed • Establish criteria and procedures for use of cut off saws in special environments (e.g. hot work permits near flammables, ventilation requirements for enclosed areas, dust extraction connection points) • Regularly monitor vibration and noise levels where practicable and use the data to prioritise maintenance or replacement of high-risk equipment	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
4. Safe Systems of Work, Procedures and Permits	• Absence of a documented safe operating procedure (SOP) for cut off saw use and metal cutting discs leading to inconsistent practices • Safe systems of work not considering task variations such as cut orientation, material profiles, and workpiece securing methods • No formal process to assess risks of new or non-routine cutting tasks (e.g. unusual alloys, large sections, off-site work) • Inadequate integration of cut off saw activities into existing hot work, confined space or construction permit systems • Failure to consider simultaneous operations (e.g. welding, grinding and cutting in same area) that increase combined risk of fire, sparks and airborne contaminants • Informal job planning leading to rush work, poor workpiece setup and increased likelihood of kickback or whe binding • Lack of documen d controls for housekeeping aro d cutting including managem cuts, sw and flammable materials	High	[redacted]	Medium
5. Competency, Training and Supervision	• Workers operating cut off saws without verification of competency in abrasive wheel safety and metal cutting principles • Reliance on informal on-the-job instruction without structured training or assessment • Supervisors lacking specific knowledge of abrasive wheel hazards, limiting their ability to enforce safe systems of work • Inadequate refresher training leading to skill fade and normalisation of deviance from safe practices	High	[redacted]	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Training not covering recognition of disc damage, correct disc selection, and response to abnormal vibration or noise • No system to restrict use of cut off saws to authorised and competent persons only • Language, literacy or cultural barriers not addressed in training materials, resulting in misunderstanding of critical safety information		[redacted]	
6. Work Environment, Layout and Interaction with Others	• Inadequate segregation of cutting areas from general traffic routes leading to persons entering the line of fire or spark stream • Poor layout of workstations resulting in awkward body positioning, trip hazards and limited escape paths in the event of disc failure • Insufficient lighting in cutting areas causing misjudgement of cut lines, alignment and disc condition • Uncontrolled bystander exposure to sparks, noise, flying particles and metal fragments • Inadequate management of hoses and other services around fixed or portable saws leading to entanglement or trip hazards • Insufficient ventilation or dust extraction leading to accumulation of metal dust and fumes, particularly during prolonged cutting of coated or treated metals • Lack of clearly defined storage and staging areas for metal stock and finished items leading to congestion and manual handling risks around the saw	High	[redacted]	Medium
7. Personal Protective Equipment and Health Monitoring	• Reliance on PPE as the primary control rather than supporting higher order controls for abrasive wheel risks • Incorrect or inadequate PPE selection for cut off saw operations (e.g.	Medium	[redacted]	Low

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	unsuitable eye protection, inadequate respiratory protection) • Inconsistent use of PPE by workers and visitors due to poor enforcement or discomfort • Lack of consideration of cumulative noise exposure from cut off saws and other plant leading to hearing damage • No system to review health impacts such as hand-arm vibration, respiratory irritation or eye injuries linked to cutting activities • Insufficient management of prescription safety eyewear needs for workers requiring vision correction		[redacted]	
8. Contractor and Supplier Management	• Contractors operating cut off saws on site without alignment to the host PCBU's WHS standards and procedures • Inconsistent training, competency and supervision standards among labour hire and subcontractor personnel • Suppliers providing discs or equipment that do not meet specified safety requirements or failing to communicate product safety alerts • Poor coordination between multiple PCBUs leading to unclear responsibility for managing plant-related risks • Lack of verification of contractor risk assessments and safe work methods for abrasive wheel use	High	[redacted]	Medium
9. Emergency Preparedness, Incident Response and Recovery	• No specific planning for incidents involving disc shattering, severe lacerations, eye injuries or amputations from cut off saws	High	[redacted]	Medium

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Inadequate first aid resources or personnel trained to respond to high-severity injuries associated with metal cutting • Workers not knowing how to isolate and secure a cut off saw following an incident or near miss • Lack of procedures for managing fires started by sparks igniting combustible materials or flammable liquids • Poor incident investigation practices leading to repeat events due to unaddressed systemic causes • Insufficient communication of lessons learned from cut off saw incidents across the organisation		[redacted]	
10. Monitoring, Review and Continuous Improvement	• Failure to routinely monitor effectiveness of controls for cut off saw and disc risks leading to degradation over time • Lack of structured workplace inspections focusing on abrasive wheel use and plant condition • No systematic analysis of [illegible] near miss and maintenance data for trends involving cut off saws • Workers' safety concerns about cutting operations not captured or acted upon in a timely manner • Changes in processes, materials or workload not triggering review of existing risk controls • Complacency developing due to low incident frequency despite persistent high-potential risks	Medium	[redacted]	Low

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory
Work Health and Safety Act 2011
Work Health and Safety Regulations 2011
Legislation QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws
Codes of Practice QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice
Legislation ACT: https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations
Codes of Practice ACT: https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-practice

Northern Territory
Work Health and Safety (National Uniform Legislation) Act 2011
Work Health and Safety (National Uniform Legislation) Regulations 2011
Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws
Codes of Practice NT: https://worksafe.nt.gov.au/forms-and-resources/codes-of-practice

South Australia
Work Health and Safety Act 2012 (SA)
Work Health and Safety Regulations 2012 (SA)
Legislation for SA: https://www.safework.sa.gov.au/resources/legislation
Codes of Practice for SA: https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs

Tasmania
Work Health and Safety Act 2012
Work Health and Safety (Transitional and Consequential Provisions) Act 2012
Work Health and Safety Regulations 2012
Work Health and Safety (Transitional) Regulations 2012
Legislation for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations
Codes of Practice for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.

Victoria
Occupational Health and Safety Act 2004
Occupational Health and Safety Regulations 2017
Legislation VIC: https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations
Codes of Practice VIC: https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice

Western Australia
Work Health and Safety Act 2020
Work Health and Safety Regulations 2022
Legislation Western Australia: https://www.commerce.wa.gov.au/worksafe/legislation
Codes of Practice WA: https://www.commerce.wa.gov.au/worksafe/codes-practice

Safe Work Australia Links
Law and Regulation (All States): https://www.safeworkaustralia.gov.au/law-and-regulation
Model Codes of Practice: https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work