

Line Marking

Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS 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	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	Engineering Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	Administrative Change	
								PPE	

Risk Rating & Required Action:	
4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. 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. WHS Governance, PCBU Duties and Consultation	<ul style="list-style-type: none"> Lack of clear WHS governance structure for line marking operations across multiple sites and clients Failure to understand and implement duties under WHS Act 2011, WHS Regulation and relevant Codes of Practice Inadequate consultation with workers and Health and Safety Representatives (HSRs) regarding line marking risks (e.g. thermoplastic spraying, traffic control, night works) Insufficient integration of WHS requirements into contracts and service level agreements with principals and subcontractors No formal process to review incidents, near misses or regulatory changes affecting line marking activities Poor communication of WHS responsibilities to supervisors, team leaders and leading hands Inadequate allocation of resources (time, budget, competent people) to manage specific line marking projects such as hot works, powered traffic interfaces 	4A	<ul style="list-style-type: none"> Establish a documented WHS Management System aligned to WHS Act 2011, WHS Regulation and AS/NZS ISO 45001, with specific reference to line marking activities (roads, carparks, warehouses, sports fields) Define and document WHS roles, responsibilities and authorities for Directors, managers, supervisors and workers involved in line marking, including due diligence obligations for officers Implement a formal consultation and HSR engagement procedure addressing proposed changes to chemicals, line marking equipment, work methods, and scheduling (e.g. night works, weekend shutdowns) Embed WHS requirements into all tenders, contracts and subcontractor agreements for line marking projects including minimum competency, plant standards and incident reporting expectations Establish a WHS committee (or similar forum) that reviews line marking incident trends, near misses, audit findings and emerging risks (e.g. new thermoplastic products, reflective coatings, tactile paving requirements) Develop and communicate a WHS Policy endorsed by senior management that specifically references high risk elements in line marking (traffic interface, hot substances, chemicals, powered plant) Implement a formal WHS legal compliance register and annual review process, ensuring updates from Safe Work Australia, state regulators, and Australian Standards relevant to traffic control, road marking and hazardous chemicals Require periodic management reviews of the WHS Management System performance for line marking, with action plans, accountable owners and due dates 	3H
2. Strategic Planning, Scheduling and Fatigue Management	<ul style="list-style-type: none"> Poor planning of line marking works leading to extended shifts, night work and cumulative fatigue Inadequate journey management for mobile line marking crews travelling between dispersed sites Unrealistic project timeframes from clients causing compressing of breaks and 'rushing' behaviours No system for managing consecutive night shifts for warehouse, road or car park marking operations Insufficient planning for hot weather, high humidity or cold conditions affecting 	4A	<ul style="list-style-type: none"> Develop a formal planning and scheduling procedure for line marking projects that factors in drive time, set-up and pack-up, traffic management requirements, curing times and realistic work rates Implement a fatigue risk management policy consistent with regulator guidance, defining maximum shift lengths, minimum breaks, and limits on consecutive night shifts for mobile crews Use a journey management system for crews travelling between multiple sites, including pre-trip risk assessments, approved routes and escalation protocols for delays or adverse weather Require project planners to conduct a WHS review of each major line marking job (e.g. large car parks, road networks, sports precincts) before committing to client timeframes Integrate weather and environmental conditions into planning tools, including heat stress thresholds, wet weather limitations and requirements for rescheduling hot thermoplastic and coating works Establish cross-contractor coordination procedures (e.g. pre-start coordination meetings, site access plans) to avoid overlapping high-risk activities during line marking operations 	2M

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	<ul style="list-style-type: none"> hot thermoplastic use, paint curing and worker heat/cold stress Failure to coordinate line marking with other contractors, traffic shutdowns and production schedules, creating time pressure and operational conflicts 		<ul style="list-style-type: none"> Monitor hours of work via timesheets or digital systems and trigger management review when defined fatigue thresholds are reached 	
3. Competency, Licensing and Training for Line Marking Activities	<ul style="list-style-type: none"> Workers operating road marking machines, hot thermoplastic sprayers and line marking equipment without verified competency Insufficient understanding of WHS obligations, risk controls and emergency procedures among line marking crews No formal training program for application of reflective coatings, tactile paving, bollards and speed bumps Gaps in training for traffic control, work near live traffic and night-time operations Inadequate supervision of new or inexperienced workers on complex marking tasks (e.g. sports field layouts, multi-storey car parks) Failure to train workers in safe use, storage and disposal of hazardous chemicals and paints Lack of manufacturer specific training for new equipment models (e.g. ride on road marking machines, paint spraying rigs, grinders for line removal) 	4A	<ul style="list-style-type: none"> Develop a line marking competency framework specifying required licences, tickets and internal competencies for roles such as road marker operator, thermoplastic applicator, traffic controller and leading hand Ensure all workers completing traffic marking on public roads hold the required traffic management and traffic control qualifications for the relevant state or territory Provide formal induction training covering WHS legislation duties, company procedures, hazard reporting, incident response and emergency management specific to line marking operations Develop and deliver task-specific training modules for reflective coatings, application of tactile paving, installation of bollards and speed bumps, and floor/warehouse markings Implement a verification of competency (VOC) program for critical plant (road marking machines, hot thermoplastic kettles, grinders for traffic line removal, spray equipment) and maintain training records Establish a supervision guideline requiring competent supervision of new starters and workers transitioning to higher-risk tasks such as hot thermoplastic spraying and traffic line removal Provide regular refresher training on hazardous chemicals, Safety Data Sheets (SDS), spill response and safe paint handling practices Include OEM (original equipment manufacturer) training or equivalent for new plant types prior to deployment in the field 	2M
4. Plant and Equipment Selection, Procurement and Engineering Controls	<ul style="list-style-type: none"> Use of outdated or non-compliant road marking machines and spray units lacking appropriate guarding and safety interlocks Inadequate engineering controls on hot thermoplastic kettles leading to burns, fires or pressure incidents Failure to specify low-emission, low-noise or ergonomically designed equipment when procuring new line marking machines No standard for fit-out of line marking vehicles (e.g. inadequate load restraint, 	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<p>poor access to equipment, no rollover protection where required)</p> <ul style="list-style-type: none"> • Lack of automatic shut-offs, guarding and emergency stops on grinders and scarifiers used for traffic line removal • Use of unsuitable equipment for confined or indoor car parks leading to excessive fumes or noise 		[REDACTED]	
5. Plant Inspection, Maintenance and Pre-Start Systems	<ul style="list-style-type: none"> • Lack of scheduled maintenance for road marking machines, compressors, grinders and hot thermoplastic units • Failure of braking, steering or line guidance systems on mobile marking equipment due to poor maintenance • Inadequate inspection of hoses, connections and heating components leading to leaks, burns or fires during hot thermoplastic spraying • Absence of a documented pre-start inspection for line marking machines and associated plant • Use of defective equipment where faults are not reported, logged or actioned • Uncontrolled modifications to line marking plant without risk assessment or engineering review 	4	[REDACTED]	2M
6. Hazardous Chemicals, Paints and Thermoplastic Management	<ul style="list-style-type: none"> • Exposure to volatile organic compounds (VOCs), solvents and isocyanates from paints, reflective coatings and line marking products • Burns and heat stress from handling hot thermoplastic materials and heated equipment • Inadequate storage and segregation of flammable liquids, gas cylinders and thermoplastic pellets 	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> Lack of up-to-date SDS access and understanding for products used in road marking, car park striping, sports pitch markings and tactile paving Poor management of spills and overspray leading to environmental contamination and slip hazards Improper disposal of paint residues, solvent waste and thermoplastic scrap 		[REDACTED]	
7. Traffic Management and Work Near Moving Vehicles	<ul style="list-style-type: none"> Workers struck by live traffic during road marking, car park striping or traffic line removal Poorly designed traffic management plans (TMPs) for moving line marking convoys and mobile works Inadequate separation of line marking plant from public vehicles, forklifts and mobile equipment in car parks and warehouses Insufficient use of signage, arrow boards, crash attenuators and shadow vehicles for road works Lack of coordination with road authorities regarding lane closures, speed reductions and detours Night work and poor visibility increasing risk of vehicle-pedestrian collisions 	4A	[REDACTED]	2M
8. Site Access, Layout and Interface with Other Contractors	<ul style="list-style-type: none"> Uncontrolled interaction between line marking crews and other contractors (e.g. civil works, concreters, electricians) on shared sites Poor site layout planning leading to congestion, reversing vehicles and blocked emergency access Failure to control public access into active line marking areas in shopping centres, sports facilities and warehouses 	3H	[REDACTED]	2M

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	<ul style="list-style-type: none"> Inadequate briefing on site-specific hazards such as underground services, uneven surfaces, ramps and loading docks Unclear responsibilities between principal contractor, facility operator and line marking contractor for site safety coordination 		[REDACTED]	
9. Work at Height, Falls, Slips and Surface Conditions	<ul style="list-style-type: none"> Slips on wet paints, reflective coatings or thermoplastic residues during application or curing Falls on uneven, sloped or degraded road and car park surfaces while operating line marking machines Inadequate control of pedestrian access through freshly painted or coated areas Working near edges, pits, drains or loading docks while focused on line alignment No formal inspection of sports pitches, stadium concourses or warehouse floors for trip hazards before marking commence 	3H	[REDACTED]	1L
10. Manual Handling, Ergonomics and Musculoskeletal Risk	<ul style="list-style-type: none"> Repetitive pushing and manoeuvring of line marking machines over long distances Manual handling of heavy paint drums, thermoplastic bags, bollards, speed bumps and tactile tiles Poor ergonomic design of controls on road marking machines, leading to sustained awkward postures Inadequate systems for mechanical lifting or transport of materials on multi-storey car parks and stadiums Lack of rotation between tasks causing localised overuse injuries (shoulders, wrists, lower back) 	3H	[REDACTED]	2M

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11. Noise, Vibration and Environmental Conditions	<ul style="list-style-type: none"> High noise levels from compressors, grinders and traffic line removal machines Whole-body and hand-arm vibration from prolonged use of powered line marking and removal equipment Heat stress during summer road and car park marking, especially when working with hot thermoplastic Cold and wet weather increasing risk of hypothermia, reduced dexterity and poor product adhesion Glare from reflective surfaces, particularly when applying reflective coatings, white line painting and thermoplastic markings on bright days or under floodlights 	3H	[REDACTED]	2M
12. Electrical Safety and Powered Tools	<ul style="list-style-type: none"> Use of portable electrical equipment and extension leads in wet or outdoor conditions during line marking Damaged leads, plugs or tools leading to electric shock or fire Inadequate testing and tagging regime for powered line marking equipment used in warehouses, car parks and depots Unsafe connection of equipment to generators or temporary power supplies on road works Lack of documented procedures for electrical isolation and defect management 	3H	[REDACTED]	1L
13. Emergency Preparedness, Incident Response and First Aid	<ul style="list-style-type: none"> Delayed or ineffective response to burns from hot thermoplastic or contact with heated equipment Inadequate planning for vehicle incidents or struck-by events during road marking activities Poor management of chemical exposures, inhalation incidents or eye splashes from paints and solvents 	3H	[REDACTED]	2M

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	<ul style="list-style-type: none"> Lack of clear communication and rescue arrangements for remote or after-hours line marking work Under-reporting of incidents and near misses, resulting in repeated systemic failures 		[REDACTED]	
14. Remote and After-Hours Operations, Communications and Security	<ul style="list-style-type: none"> Crews working in isolated or low-traffic areas without reliable communication or supervision Increased security risks during night works in public car parks, sports grounds and industrial estates Delays in emergency response due to unclear location details or access constraints for emergency services Psychosocial stress associated with irregular hours, remote work and limited support Failure to consider community impact such as noise, lighting and access disruptions during night marking works 	3H	[REDACTED]	2M
15. Contractor, Labour-Hire and Subcontractor WHS Management	<ul style="list-style-type: none"> Use of subcontractors for specialist tasks (e.g. thermoplastic spraying, traffic line removal) without adequate WHS vetting Inconsistent safety standards between principal contractor and subcontractors on shared line marking projects Labour-hire workers not inducted into company-specific procedures for line marking plant and chemicals Poor communication of changes in scope, methods or site conditions to subcontractors and labour-hire personnel 	3H	[REDACTED]	2M

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16. Quality Assurance, Product Performance and Long-Term Safety Outcomes	<ul style="list-style-type: none"> • Poorly planned line layouts in car parks, sports pitches or warehouses leading to traffic conflicts and long-term collision risk • Inadequate consideration of skid resistance and luminance of reflective coatings and road markings under wet or night conditions • Incorrect installation of tactile paving, bollards or speed bumps resulting in accessibility or trip hazards • Premature failure or fading of markings due to inadequate surface preparation or unsuitable products, leading to confusing or absent guidance for drivers and pedestrians 	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

SAMPLE

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>

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>

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-codes-of-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>

Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011
 Work Health and Safety (National Uniform Legislation) Regulation 2011
 Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>
 Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-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>

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>

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

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.