Concrete Placement

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:

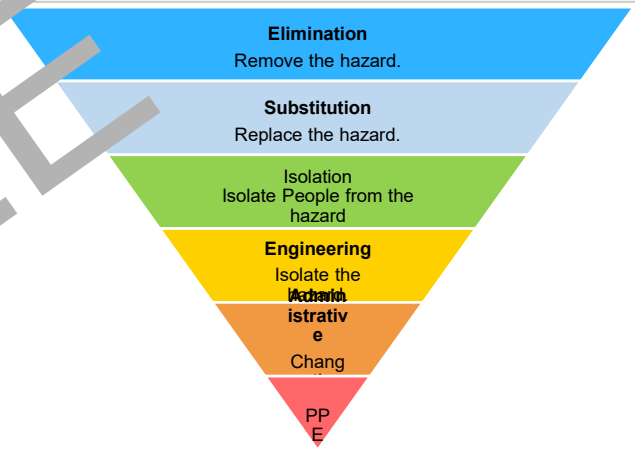
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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 Consultation	• Lack of clearly defined WHS responsibilities for concrete placement activities, including duties of PCBU, principal contractor, supervisors and subcontractors • Inadequate consultation mechanisms with concrete finishers, pump operators, labourers and other affected workers about concrete placement risks • Absence of an overarching WHS management plan specific to concrete works, leading to inconsistent risk management across projects • Failure to ensure officer due diligence in monitoring WHS performance of concrete placement contractors and suppliers • Inadequate worker participation in development and review of policies for concrete vibrators, formwork access, plant interfaces and exposure to cementitious products	High	• Develop and implement a concrete works WHS governance procedure that allocates and documents WHS roles, responsibilities and accountabilities in accordance with the WHS Act 2011, including officer due diligence obligations • Integrate concrete placement and finishing risks into the project WHS Management Plan, including interfaces with formwork, reinforcing steel, mobile plant and specific management systems • Establish formal consultation arrangements (e.g. WHS committee, health and safety representatives, toolbox meetings) that specifically address concrete placement hazards and control effectiveness • Require all concrete subcontractors, including concrete finishers and specialist vibrator operators, to provide WHS management documentation and demonstrate alignment with the principal contractor's WHS systems • Implement a structured process for workers to raise WHS concerns related to concrete placement (noise, vibration exposure, cement burns, fatigue, line pressure hazards), with documented follow-up and feedback • Schedule periodic WHS governance reviews by officers and senior managers, including audits of concrete placement activities, incident trends and corrective action close-out	Medium
2. Planning, Design and Engineering of Concrete Works	• Concrete placement risks not adequately considered during design, leading to unsafe reliance on manual handling, improvised access and overreaching with concrete vibrators • Insufficient early coordination between designers, engineers and constructors regarding pour sequence, pour size, slump, and finishing requirements • Lack of engineering verification for formwork capacity, pour rates and vibration regimes, creating risk of collapse or blowouts • Design not accounting for safe work zones for finishers, vibrator operators and pump hoses in congested reinforcement or tight slab edges • Inadequate planning for environmental conditions (heat, cold, wind, rain) that	High	• Apply safe design principles by involving designers, engineers, supervisors and experienced concrete finishers in constructability reviews focused on safe concrete placement and finishing • Document a concrete placement plan that addresses pour sequence, pump locations, access, egress, slab fall protection, lighting, curing systems and vibrator usage patterns • Ensure formwork and falsework designs are certified by a competent engineer, including explicit limits for pour height, pour rate, concrete pressure and vibration parameters • Incorporate dedicated working platforms, edge protection and penetrations protection into the design to allow safe movement of finishers and vibrator operators • Plan and document contingencies for changed weather or site conditions (e.g. start time changes, additional labour, admixtures, shade, hydration strategies) and incorporate into scheduling systems • Verify that design documentation includes clear specifications for concrete mix, slump tolerance, surface finish requirements and vibration requirements to avoid ad hoc on-site decisions	Medium

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	affect pour timing, finishing quality and worker health			
3. Contractor and Supplier Management	• Selection of concrete subcontractors and suppliers based primarily on cost without adequate assessment of WHS capability • Incomplete or inconsistent prequalification processes for concrete finishing crews, pump contractors and ready-mix suppliers • Poor coordination between principal contractor, concrete supplier, pump operator and finishing crew leading to uncontrolled changes to pour volume, slump or timing • Inadequate contractual requirements for WHS performance, incident reporting and competency verification for concrete finishers and vibrator users • Limited monitoring of subcontractor compliance with project WHS requirements and safe systems of work	High	• Implement a formal prequalification proces[illegible]or concrete contractors and suppliers that includes review of WHS management systems, previous inc[illegible]nt histor[illegible]nd evidence of competency management for concrete finishers and vibrator operators • Embed WHS performance requirements, includ[illegible] adheren[illegible] to the WHS Act 2011 and relevant Codes of Practice, within all contracts[illegible]r concrete supply, [illegible]mpin[illegible]and finishing services • Require documente[illegible]fe work[illegible]cedures from co[illegible]ete contractors covering concrete vibrator use, exposure to silica[illegible]d cem[illegible]t, ma[illegible]l handling of screeds and finishing equipment, and management of line blockage • Establish pre[illegible]ur coord[illegible]ation meeti[illegible](pre-start conferences) involving the principal contractor, concr[illegible]supplie[illegible]un[illegible]operator and finishing supervisor to confirm volume, rates, mix, access, interface risks a[illegible]mmuni[illegible]on protocols • Includ[illegible]su[illegible]ntract[illegible]WHS performance indicators in regular contractor performance reviews, with the ability to[illegible]susp[illegible]d or re[illegible]ve contractors who repeatedly breach agreed safety standards • [illegible]plem[illegible]t a sy[illegible]m of scheduled and unscheduled site inspections targeting concrete placement activi[illegible]ith findings communicated to subcontractor management and tracked through corrective [illegible]ction sy[illegible]ms	Medium
4. Systems for Plant, Equipment and Concrete Vibrators	• Lack of a systematic a[illegible]h to selection, inspection[illegible]d maintenance o[illegible] concrete vibrators,[illegible]ower packs and finishing equipmen[illegible]e.g. trow[illegible] screeds) • Use of non-compliant or poorly maintained electrical or pneumati[illegible] vibrators increasing risk o[illegible]tric shock, vibration-related injury or mechanical failure • Inadequate controls around guarding, isolation and tagging of defective vibrators and related tools • No standard process for verifying compatibility of vibro-equipment with formwork design, concrete mix and reinforcement density • Insufficient management of noise and hand–arm vibration exposure arising from extended vibrator use by concrete finishers	High	[redacted]	Medium

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5. Training, Competency and Supervision	• Insufficient verification of competency for concrete finishers and workers operating concrete vibrators, power trowels and screeds • Reliance on informal on-the-job instruction with no structured training on hazards like line pressure, blowouts, exposure to cement, and vibration injuries • Supervisors lacking specific knowledge of concrete placement WHS requirements and unable to identify unsafe practices during pours • No evidence of refresher training or re-assessment for workers undertaking high-risk or infrequent concrete works • Inadequate communication of site-specific procedures to non-English-speaking or inexperienced workers	High	[redacted]	Medium
6. Safe Work Procedures and Work Method Planning	• Absence of standardised safe work procedures for concrete placement an finishing, resulting in ad hoc methods c each project • Procedures not ref ing actual site practices, leading t poor uptake and non-compliance • Failure to integrate safe work meth statements (SWMS) for high-risk construction work with broader pr ct WHS systems • Inadequate consideration of the interaction between finishing activities, vibrator use, pumping, reinforcing installation and formwork dismantling in work sequencing • No systematic approach for planning labour numbers, pour duration and rest breaks, increasing fatigue risk especially for finishers working extended hours	High	[redacted]	Medium
7. Health Risks, Hazardous Substances and Occupational Hygiene	• Inadequate management of exposure to wet concrete and cementitious products leading to skin irritation,	High	[redacted]	Medium

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	chemical burns and dermatitis for concrete finishers and labourers • Poor control of airborne contaminants such as respirable crystalline silica from cutting, grinding or chasing set concrete associated with finishing works • Lack of systematic health monitoring or exposure assessment for noise and vibration arising from extended use of concrete vibrators and finishing machinery • Insufficient provision and enforcement of appropriate PPE, including gloves, eye protection, respiratory protection and suitable footwear • No formal processes for managing heat stress, dehydration and fatigue during prolonged or high-temperature pours		[redacted]	
8. Site Access, Traffic and Interface Management	• Poorly planned access for concrete trucks, pumps and workers leading to congestion, reversing risks and potenti collision with pedestrians and concrete finishers working on sl • Inadequate sepa ion between concrete delivery hicles, pu s and work areas wh ers and vibrator operators are moving • Uncontrolled interaction betwee mobile plant, cranes, for crews and finishing crews during pours and trowelling • Insufficient planning for emergency vehicle access during major pours when site layouts are constrained • Lack of clear responsibility for traffic management during concrete deliveries and finishing operations	High	[redacted]	Medium
9. Emergency Preparedness and Incident Management	• Emergency procedures not tailored to risks associated with concrete works, including formwork failures, line bursts, entrapment, chemical burns and slips on wet surfaces	Medium	[redacted]	Low

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	• Workers unaware of how to respond to incidents involving concrete vibrators, electrical faults or high-pressure lines • Inadequate provision of first aid facilities and trained first aiders during critical pour periods and extended finishing shifts • No structured process to investigate and learn from concrete-related incidents, near misses or quality failures that present WHS risks • Poor coordination with external emergency services regarding access and response during large or continuous pours		[redacted]	
10. Monitoring, Audit and Continuous Improvement	• Lack of systematic monitoring of WHS performance in relation to concrete placement and finishing activities • Failure to identify recurring issues su as near misses involving concrete vibrators, formwork stability or manual handling by finishers • Audit tools not ad quately addressing concrete-specific r ks resultin superficial inspecti • No defined performance indicators measure the effectiveness of management controls fo e works • Limited feedback loops from workers, supervisors and subcontractors to senior management on practical challenges with existing control measures	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 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