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

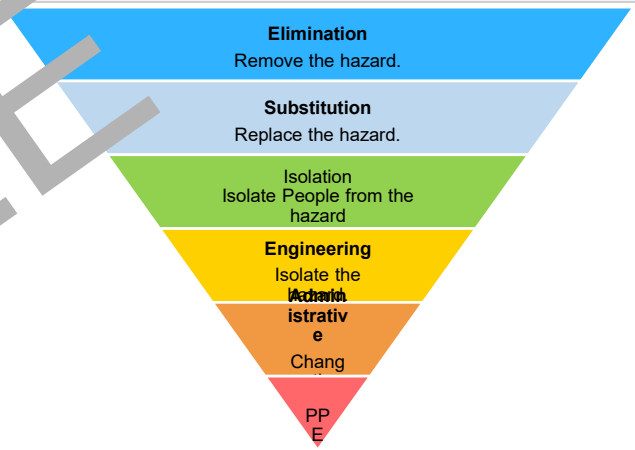
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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. WHS Governance, Legal Compliance and PCBU Duties	• Lack of formal WHS management system addressing high-risk plant including jackhammers and hydraulic breakers • Failure to identify jackhammer operations as high risk construction work under WHS Regulation 2011 (e.g. work involving powered mobile plant, demolition or structural alteration) • Inadequate consultation with workers and Health and Safety Representatives (HSRs) on jackhammer-related risks and controls • No clear allocation of WHS responsibilities for planning, supervising and reviewing jackhammer work (e.g. breaking pavements, slabs, existing flooring) • Insufficient processes to ensure compliance with WHS Act 2011 duties for PCBUs, officers, workers and contractors • Poor integration of jackhammer risk controls into broader construction project WHS plans and Safe Work Method Statements (SWMS) • Inadequate monitoring, review and continuous improvement of systems relevant to jackhammer and pavement breaking activities	High	• Establish and maintain a documented WHS management system that specifically addresses powered hand-held and hydraulic jackhammers, pavement breakers and similar plant, aligned with WHS Act 2011 and WHS Regulation 2011 requirements • Formally classify jackhammer and pavement breaking tasks as high risk construction work where applicable and require development, approval and implementation of SWMS before work commences • Define and document WHS roles, responsibilities and authorities for officers, managers, supervisors, and workers in relation to planning, authorising, supervising and reviewing jackhammer work • Implement structured consultation mechanisms (e.g. toolbox talks, pre-start meetings, HSR forums) for identifying jackhammer-related hazards and reviewing effectiveness of controls • Integrate jackhammer risk control requirements into project-level WHS plans, site rules, contractor management procedures and construction methodologies • Establish a documented compliance calendar and internal audit program to periodically verify adherence to WHS legislation, Codes of Practice (e.g. Managing the Risk of Plant in the Workplace) and relevant Australian standards for plant and noise • Require management review (e.g. quarterly) of jackhammer incident trends, near misses, exposure monitoring data (noise, vibration, silica) and corrective actions, with documented outcomes and assigned responsibilities • Ensure officers discharge due diligence obligations by receiving regular WHS performance reports on jackhammer operations and by verifying the provision of adequate resources for control implementation	Medium
2. Plant Procurement, Design and Selection	• Purchase or hire of jackhammers, hydraulic breakers and pavement breakers that are not fit for purpose or unsuitable for the specific substrate (e.g. thick reinforced concrete, brittle tiles, bitumen) • Selection of plant without vibration control features, noise reduction design or dust suppression compatibility, increasing long-term health risks • Failure to obtain or review manufacturer's instructions, safety data and compliance information (e.g.	High	• Develop and implement a plant procurement policy that sets minimum WHS performance specifications for jackhammers and hydraulic breakers, including vibration damping, noise reduction and integrated dust control compatibility • Require pre-purchase risk assessments for new or hired jackhammers that consider task type (breaking pavements, slabs, tile removal, flooring removal), material, work position and environmental constraints (indoors/outdoors, confined spaces) • Mandate that all jackhammers and associated plant comply with relevant Australian Standards and are supplied with manufacturer's instructions, safety data, and maintenance schedules • Establish preferred supplier arrangements for plant and attachments that have documented low vibration and noise ratings, and that are compatible with dust extraction or water suppression systems	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	guarding, pressure ratings for hydraulic equipment, compatible bits and chisels) • Acquisition of second-hand or hired equipment without evidence of inspection, maintenance, or original technical documentation • Use of incompatible power sources and accessories (e.g. incorrect hoses, couplings, chisels, bits) leading to plant failure or loss of control • Lack of standardisation across the fleet, creating confusion about controls, maintenance requirements and training content • Inadequate consideration of weight, ergonomics and handling requirements when selecting jackhammers for overhead work, wall chasing or floor removal		• Standardise key makes and models across the business to simplify training, maintenance, spare parts, and risk control documentation • Adopt a formal acceptance process for all new or hired plant (including second-hand), requiring verification of inspection records, test tags, pressure ratings and safe operating limits before being released to site • Include ergonomic and manual handling considerations in plant selection (weight, handle layout, anti-vibration grips, transport accessories such as trolleys or lifting points) particularly for repetitive pavement breaking and flooring removal • Ensure procurement documentation specifies requirements for noise and vibration emission data, dust management options and compatible personal protective equipment (PPE) recommendations from the supplier	
3. Contractor, Worker Competency and Training Systems	• Workers and contractors operating jackhammers without formal competency verification or task-specific training • Supervisors not competent to plan, allocate and oversee jackhammer tasks safely, particularly where structural elements, utilities or flooring are involved • Inadequate training on health risks associated with jackhammer use, including noise-induced hearing loss, hand–arm vibration syndrome, musculoskeletal disorders and respirable crystalline silica exposure • Lack of induction covering site-specific hazards (e.g. underground services, brittle substrates, confined spaces, overhead services) relevant to jackhammer activities • No system for refresher training or assessment following incidents, near misses, introduction of new plant, or significant changes in work practices	High	• Develop and implement a competency framework for jackhammer and hydraulic breaker operators covering theory (hazards, legislation, health risks) and practical skills (setup, control, shutdown, reporting) • Require documented verification of competency for all personnel who plan, supervise or perform jackhammer work, including assessment against defined criteria and retention of training records • Integrate jackhammer-specific content into corporate and site inductions, including noise, vibration, dust, flying debris, hit of buried services, and structural weakening hazards • Provide formal training modules on chronic exposure risks (hearing loss, vibration injury, musculoskeletal strain, silica-related disease) and control measures such as exposure limits, rotation, and correct PPE use • Ensure supervisors receive additional training in job planning, SWMS development, risk assessment techniques and monitoring of exposure durations for jackhammer operations • Mandate refresher training at defined intervals and after any significant incident, equipment upgrade or change in procedure involving jackhammer tasks • Implement a system to verify subcontractor competency and training equivalence prior to engagement, including review of licences, tickets and internal training standards • Establish and communicate clear procedures for fault detection, emergency shutdown, isolation, tagging out of defective plant and escalation to maintenance or management • Maintain a centralised training and competency register that is accessible to supervisors and project managers for workforce planning and site allocation	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Poor understanding of emergency shutdown, isolation and fault reporting procedures for electric, pneumatic and hydraulic jackhammers • Inconsistent competency standards between internal workers and subcontractors			
4. Planning, Design and Job Engineering for Jackhammer Tasks	• Inadequate pre-planning of jackhammer works such as pavement breaking, slab penetration or flooring removal leading to contact with services or structural instability • Failure to obtain and review structural drawings, service plans and engineering advice prior to breaking hard surfaces or existing flooring • Lack of formal risk assessments for complex or non-standard tasks (e.g. working on suspended slabs, near edges, on brittle or hollow tiles, in confined or occupied spaces) • No systematic consideration of alternative methods with lower risk (e.g. saw cutting, robotic de…, chemica… breakers) where ja…ammer risk is high • Poor coordinatio…ith othe… …and site activities, resul… …posure … bystanders to noise, dust, flying fragments and vibration • Insufficient planning for … management, including handling and removal of heavy broken materials and contaminated rubble • Inadequate consideration of environmental factors such as noise curfews, vibration impact on adjacent structures or sensitive receptors and indoor air quality when working inside buildings	Hi…	[redacted]	Medium
5. Maintenance, Inspection and Asset Management of Jackhammers	• Lack of scheduled inspection and maintenance leading to plant failure, uncontrolled movement or loss of control during breaking operations	High	[redacted]	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Use of damaged or worn components (e.g. chisels, bits, retaining mechanisms, hoses, power cords) increasing the likelihood of breakage, ejection or electric shock • Hydraulic and pneumatic system leaks causing high-pressure fluid injection, environmental contamination or slip hazards • Unmanaged modifications or non-approved repairs to jackhammers and hydraulic systems that bypass safety features or exceed design limitations • No central register of jackhammers and pavement breakers, resulting in inconsistent inspection regimes and undocumented defects • Failure to remove defective equipment from service promptly, allowing continued use of unsafe plant on site • Inadequate calibration or testing of Residual Current Devices (RCDs), pressure limiting devic[redacted]er protective systems [redacted]en used with jackhammers		[redacted]	
6. Exposure to Noise, Vibration and Ergonomic Strain	• Chronic exposure [redacted]oise lev from jackhammer and pavement bre[redacted]er use causing noise-induced hearing[redacted]ss • Prolonged hand–arm vi[redacted]leading to vascular and neurological disorders such as hand–arm vibration syndrome • Whole-body vibration exposure when operating jackhammers for extended periods on uneven or unstable surfaces • Ergonomic strain and musculoskeletal injuries from poor body positioning, repetitive breaking, overhead work and manual handling of heavy jackhammers • Inadequate systems for monitoring and limiting individual exposure time to noise and vibration during intensive flooring removal or pavement breaking works	High	[redacted]	Medium

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	• Selection of plant and accessories without considering user height, grip span or task ergonomics • Insufficient organisational controls such as job rotation or micro-break scheduling to manage cumulative fatigue and strain		[redacted]	
7. Airborne Contaminants, Dust and Silica Management	• Generation of respirable crystalline silica dust during breaking of concrete, mortar, screeds, tiles, masonry and other silica-containing flooring or pavements • Excessive general dust from jackhammer work affecting indoor air quality and neighbouring work areas • Lack of engineered dust control systems such as water suppression or on-tool extraction on jackhammers and pavement breakers • Inadequate respiratory protection programs leading to poor selected, fitted or maintained respirators • Insufficient segregation, enclosure or ventilation of work areas using jackhammers indoors or in partially enclosed spaces • Lack of monitoring or assessment of dust levels, particularly in high-intensity flooring removal or slab demolition activities • Poor management of contaminated rubble and fine dust during cleanup, transport and disposal	High	[redacted]	Medium
8. Environmental, Site Layout and Public Interface Controls	• Exposure of members of the public or building occupants to noise, dust, vibration or flying fragments from jackhammer operations performed near public areas or occupied premises • Insufficient delineation of jackhammer work zones leading to unauthorised	Medium	[redacted]	Low

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SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
	access and struck-by or slip/trip hazards from rubble, hoses and power leads • Poor management of noise impacts on neighbours, sensitive facilities or time-restricted zones during pavement breaking or external demolition work • Uncontrolled spread of debris, water slurry or hydraulic oil to stormwater systems or environmentally sensitive areas • Inadequate planning for traffic management where jackhammer works occur on or near roadways, footpaths, car parks or loading docks • Congested site layout with conflicting movements of plant, materials handling and jackhammering activities in the same zones		[redacted]	
9. Emergency Preparedness, Incident Management and Health Monitoring	• Lack of specific emergency response planning for jackhammer-related incidents such as eye injuries, crush injuries, electric shock, hydraulic injection or structural failure • Inadequate first aid resources or trained first aiders on sites where jackhammer and hydraulic breaker work is routinely performed • Failure to report and investigate near misses, minor injuries or equipment failures associated with jackhammer use, leading to repeated incidents • No structured process for health monitoring in relation to noise, vibration and silica where risk assessments indicate a need • Poor communication of emergency procedures to contractors and short-term workers engaged in pavement breaking or flooring removal tasks	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
	• Inconsistent capture and trending of incident data related to jackhammer tasks across multiple projects or sites		[redacted]	
10. Documentation, Communication and Continuous Improvement	• Outdated or inconsistent procedures, SWMS and risk assessments for jackhammer and pavement breaking activities across different projects • Critical information about hazards, controls and limitations of jackhammer use not effectively communicated to workers, supervisors or contractors • Lack of a controlled document system resulting in multiple conflicting versions of jackhammer guidance on site • Limited worker participation in reviewing and improving jackhammer-related WHS procedures and tools • No structured process for capturing lessons learned from incidents, audits new technology in jackhammer plant and incorporating them i[redacted]stems • Inadequate verifi[redacted]on that management cont[redacted]s for jackh[redacted]mer risks are actually i[redacted]m[redacted]n th field	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