Working in Heat UV and Sun Safety

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:

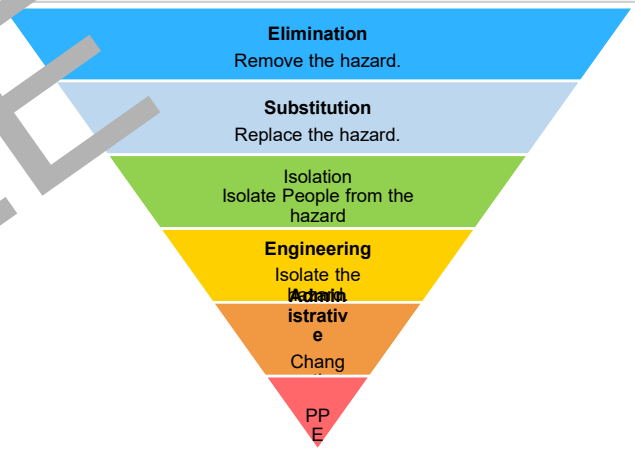
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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, Policy and Legal Compliance	• Absence of a formal heat, UV and sun safety policy aligned with WHS Act 2011 and relevant Codes of Practice • Failure to recognise extreme heat, UV and solar radiation as significant WHS hazards at governance level • Inadequate consultation with workers and HSRs on heat and sun exposure risks and controls • Lack of clear allocation of WHS responsibilities for managing heat and UV risks at officer, manager and supervisor levels • No documented process for reviewing legal changes, Safe Work Australia guidance or Bureau of Meteorology (BOM) heat health alerts • Insufficient integration of heat and UV risk management into the broader WHS management system and risk registers	4A	• Develop and endorse a formal Heat, UV and Sun Safety Policy approved by senior management, explicitly referencing obligations under the WHS Act 2011 and WHS Regulation • Include heat stress, dehydration, solar and UV exposure as specific hazards in the organisation-wide WHS risk register and annual WHS plans • Define and document clear roles and responsibilities for officers, managers, supervisors, PCBU representatives and workers in managing heat and sun safety risks • Establish a regular legislative and guidance review process (e.g. quarterly) to capture updates from Safe Work Australia, state/territory WHS regulators and BOM health advisories • Include heat and UV risk management requirements in WHS governance documents (WHS procedures, contractor management frameworks, procurement and HR policies) • Mandate formal worker consultation and toolbox forums to review the effectiveness of heat and UV controls prior to each summer season Set organisational expectations for proactive management of UV index, ambient temperature, humidity and radiant heat exposure across all outdoor and high-heat tasks	3H
2. Heat, UV and Sun Exposure Risk Management Framework	• Lack of a systematic process to identify and assess heat and UV exposures across different sites and job roles • Failure to consider combined risk factors such as high humidity, radiant heat from plant, PPE load and physical exertion • No structured process to assess individual susceptibility (e.g. medication, medical conditions, acclimatisation) while preserving privacy • Inconsistent or ad hoc risk assessments leading to poorly targeted control measures • Failure to recognise indirect heat impacts such as reduced concentration, fatigue and increased error rates • Inadequate inclusion of dehydration, manual labour under sun exposure and prolonged work in scorching summer heat in risk evaluations	4A	• Implement a standardised heat and UV risk assessment procedure and template to be used for all relevant tasks and projects • Require pre-season and pre-project risk assessments that consider temperature forecasts, UV index, humidity, wind, radiant heat sources, task duration and physical workload • Incorporate a formal assessment of personal risk factors (e.g. previous heat illness, certain medications, lack of acclimatisation) via confidential health declarations and occupational health input • Use recognised tools or indices (e.g. WBGT or equivalent) where practicable to quantify heat stress risk in extreme heat condition operations and high-heat plant areas • Require reassessment of risk whenever there is a change in work conditions, such as heatwave alerts, altered shift patterns, or new high-heat equipment or processes • Ensure risk assessments explicitly address manual labour under sun exposure, direct sunlight exposure, ultraviolet radiation exposure and dehydration risks from maintaining physical exertion • Integrate heat and UV risks into broader organisational risk management (e.g. operational risk registers, project risk workshops and change management processes)	3H

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3. Environmental and Weather Monitoring Systems	• No systematic monitoring of temperature, humidity or radiant heat in outdoor or hot work environments • Failure to track local UV index and solar radiation levels, leading to work occurring during peak UV exposure without controls • Reliance on subjective perceptions of heat rather than objective data, increasing the likelihood of underestimating risk • Inadequate early warning of heatwaves or extreme weather conditions that affect safe work planning • Lack of triggers for modifying or ceasing work during extreme heat or very high to extreme UV conditions	4A	• Implement a documented weather and UV monitoring procedure using reliable sources (e.g. BOM, UV index apps, local sensors) for all at-risk sites • Assign responsibility at each site for daily recording of forecast and actual temperature, humidity and UV index before shifts commence • Install fixed or portable heat and environmental monitors (e.g. WBGT meters or temperature/humidity loggers) in areas with persistent high-heat conditions • Define objective trigger levels for escalating controls or ceasing work (e.g. specific temperature or WBGT thresholds, UV index greater than agreed limits, official heatwave warnings) • Integrate automated alerts for extreme heat and UV events into site communication systems (e.g. SMS, email or app-based alerts to supervisors and workers) • Require supervisors to document decisions and actions taken in response to heat and UV triggers, including altered work schedules and additional breaks • Link environmental monitoring data into periodic WHS performance reports to enable trend analysis and continuous improvement	2M
4. Work Scheduling, Task Design and Workload Management	• High-intensity manual labour under sun exposure scheduled during peak heat and UV periods • Rigid work schedules that prevent task rotation, additional rest breaks or early knock-off in heatwaves • Failure to redesign tasks or plant layouts to reduce direct sun exposure and radiant heat load • Inadequate adjustment of work rates and productivity expectations during extreme heat or scorching summer conditions • Extended shifts and overtime leading to cumulative heat load and fatigue, impairing decision-making and increasing incident likelihood	4A	[redacted]	2M
5. Engineering Controls, Shade and Environmental Design	• Insufficient provision of permanent or temporary shade structures for outdoor work areas and rest breaks • Poorly designed work areas that trap heat or reflect sunlight, increasing radiant heat exposure	4A	[redacted]	2M

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	• Lack of cooling options in vehicles, plant cabins or control rooms used in hot environments • Inadequate ventilation in confined or partially enclosed spaces where heat and humidity accumulate • Failure to consider heat and solar exposure in design, procurement and modification of workplaces and equipment		[redacted]	
6. Hydration Management and Access to Cool Fluids	• Inadequate systems to ensure workers maintain hydration levels during physical exertion in hot conditions • Lack of reliable access to cool drinking water and electrolyte replacement in remote or temporary worksites • No monitoring or guidance on safe fl intake for high-heat and high-exertion tasks, increasing dehydrati risks • Work culture that d courages regular drink breaks due t production pressures or poor pervisi • Failure to identify and manage wor s at greater risk of dehydration due t medical or personal factor	4A	[redacted]	2M
7. PPE, Sun Protective Clothing and Equipment Management	• Insufficient provision or management of sun protective PPE such as wide-brim hats, neck flaps, UV-rated clothing and sunglasses • Mandatory PPE that increases heat load without consideration of alternative materials or designs • Inconsistent use of broad-spectrum SPF 30+ or higher sunscreen due to lack of supply, training or supervision	3H	[redacted]	2M

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	• No system for assessing PPE suitability for combined heat, UV and manual labour demands • Failure to manage PPE replacement, laundering and UV rating degradation over time		[redacted]	
8. Training, Competency and Worker Awareness	• Lack of structured training on heat stress signs, dehydration, sun exposure risks and early symptom recognition • Supervisors and workers unable to recognise and respond to heat-related illnesses and UV overexposure • Insufficient competency in adjusting work practices during extreme heat or very high UV index conditions • Over-reliance on personal judgement rather than trained understanding of heat and UV controls • Failure to provide [redacted] heat conditions	4A	[redacted]	2M
9. Supervision, Monitoring of Workers and Health Surveillance	• Inadequate on-the-ground supervision of work under high-heat conditions and sun exposure • Lack of systematic monitoring for early signs of heat stress, dehydration and UV overexposure in workers • No clear criteria for removing workers from duty when symptoms of heat illness present • Failure to collect and review health and incident data to identify emerging trends in heat and UV-related harm	4A	[redacted]	2M

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	• Limited access to occupational health advice regarding fitness for work in extreme heat conditions		[redacted]	
10. Emergency Response and Incident Management for Heat and UV Events	• No specific emergency response procedures for heat stroke, heat exhaustion, dehydration or severe sunburn • Insufficient first aid resources and cold packs, fans or cooling equipment on site to treat heat-related illnesses • First aiders not trained or confident in recognising and responding to heat and UV-related medical emergencies • Lack of clear communication pathwa to escalate suspected heat-related events to medical services • Inadequate post-inci t re iew processes, leading repeated heat and UV-related incider	3H	[redacted]	1L
11. Contractor, Labour Hire and Visitor Management	• Contractors and labour hire wor s not aligned with the PCB , UV and sun safety systems • Inconsistent standards between principal contractor and subcontractors regarding hydration, sun protection and work-rest regimes • Visitors and short-term workers unaware of site-specific risks from operating under hot conditions and high-UV environments • Poor communication and coordination of controls on multi-PCBU worksites • Lack of verification that contractor management systems effectively	3H	[redacted]	2M

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	manage extreme heat condition operations		[redacted]	
12. Remote, Isolated and Field Work in Hot Conditions	• Workers operating under hot conditions in remote or isolated locations without adequate support or backup • Limited access to emergency medical assistance for heat-related illnesses during remote field work • Inadequate communication systems to monitor worker wellbeing and respond promptly to incidents • Insufficient contingency planning for vehicle breakdowns or becoming stranded in high-heat environments • Failure to plan hydration, shade and rest provisions for off-grid or mobile operations	4A	[redacted]	2M
13. Facilities, Amenities and Rest Break Infrastructure	• Insufficient shaded or air-conditioned rest areas for breaks during work in hig heat and direct sunlight • Amenities located o far from work fronts, discouragi regular us adequate breaks • Poorly maintained amenities that d not provide reliable cooling, hydra n or recovery environments • Lack of policies specifying minimum frequency and duration of rest breaks in extreme heat conditions • No consideration for vulnerable groups (e.g. pregnant workers, workers with certain medical conditions) in relation to rest and recovery facilities	3H	[redacted]	2M
14. Information, Signage and Behavioural Culture	• Lack of visible reminders about sun exposure risks, hydration and heat stress precautions at the workplace	3H	[redacted]	2M

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	• Workplace culture that normalises working through extreme heat without additional controls or breaks • Workers reluctant to report early symptoms of heat stress or sunburn for fear of stigma or loss of income • Inconsistent communication of heat and UV risks between shifts, crews and locations • Overemphasis on productivity at the expense of safe behaviours in high-heat and high-UV conditions		[redacted]	
15. Continuous Improvement, Auditing and Performance Review	• No formal process to evaluate the effectiveness of heat, UV and sun safety controls over time • Failure to analyse incident, near miss and health data to identify systemic weaknesses • Infrequent or superficial WHS inspections that overlook heat and sun exposure management [redacted] • Lack of performa[redacted] indicators related to heat and UV ris[redacted]management • Controls not updat[redacted]flect technological advances, new researc[redacted] or improved industry practices	3H	[redacted]	1L

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