

## Exposure To Solar Radiation Risk Assessment

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

## THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON 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	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> 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.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	
<b>Risk Rating &amp; Required Action:</b>								<b>Notes on Hierarchy of Controls:</b>	
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.						Remember to apply controls in the preferred order shown by the coloured pyramid:	
3H		Review and approve additional controls before task starts. Senior supervisor sign-off needed.						1. <b>Eliminate</b>	
2M		Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.						2. Substitute	
1L		Proceed, following standard operating procedures. Monitor and keep records.						3. Isolate	
<b>Consequence Scale:</b>								4. Engineering	
Consequence		People (injury/illness)		Project / Assets		Compliance / Reputation		5. Administrative	
Catastrophic		Fatality or permanent total disability		project shutdown		Significant regulator intervention; criminal prosecution		6. PPE	
Major		Serious injury/illness (hospital > 5 days)		critical delay		Improvement notice; major media coverage		Always document <b>why</b> a lower-order control is accepted if elimination or substitution is not reasonably practicable.	
Moderate		Medical-treatment injury; lost-time > 1 day		moderate delay		Minor breach; adverse client comment		<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>	
Minor		First-aid only, no lost time		negligible delay		Isolated non-conformance			
Insignificant		No injury		no schedule impact		Deviation caught and corrected on site			

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. Preparation	Lack of awareness, Inadequate shade	3H	<ul style="list-style-type: none"> <li>- Conduct a site inspection to determine potential exposure areas.</li> <li>- Provide training on UV awareness and solar radiation risks.</li> <li>- Ensure appropriate shade structures are available at break areas.</li> <li>- Distribute information leaflets regarding UV protection.</li> <li>- Update knowledge on current UV indexes.</li> <li>- Implement daily UV risk reports for workers.</li> <li>- Check availability of personal protective equipment.</li> <li>- Schedule work for cooler parts of the day.</li> <li>- Encourage workers to report UV related issues.</li> <li>- Define responsibilities for UV protection monitoring.</li> </ul>	2M
2. Planning	Prolonged exposure, Lack of protective gear	4H	<ul style="list-style-type: none"> <li>- Develop a UV exposure minimisation plan.</li> <li>- Establish work-rest schedules to limit exposure.</li> <li>- Ensure access to UV protective clothing and gear.</li> <li>- Monitor worker schedules and rotate tasks to limit sun time.</li> <li>- Plan tasks considering the UV index forecasts.</li> <li>- Create an emergency plan for heat-related illnesses.</li> <li>- Develop a reporting mechanism for UV risk incidents.</li> <li>- Set UV risk management goals and targets.</li> <li>- Allocate shaded rest areas for breaks.</li> <li>- Include UV monitoring in site inspections.</li> </ul>	2M
3. Arrival at site	No control over sun positions, Insufficient UV training	3H	<ul style="list-style-type: none"> <li>- Conduct a UV risk briefing before work commences.</li> <li>- Provide all workers with sunblock of SPF 30+ or higher.</li> <li>- Verify all workers wear brimmed hats and UV protective eyewear.</li> <li>- Provide training on the use of personal and environmental controls.</li> <li>- Implement a buddy system for monitoring exposure symptoms.</li> <li>- Ensure all protective measures are visibly implemented.</li> <li>- Secure shade in sites with high UV exposure.</li> <li>- Ensure equipment and vehicles have UV blocking materials.</li> </ul>	1L

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			<ul style="list-style-type: none"> <li>- Allocate UV duration logs to monitor exposure.</li> <li>- Include UV hazard information in daily safety briefings.</li> </ul>	
4. Safety Checks	Equipment reflection, Inaccurate UV readings	2M	<ul style="list-style-type: none"> <li>- Conduct safety checks before starting work.</li> <li>- Verify equipment calibration and accuracy.</li> <li>- Use reflective safety gear.</li> <li>- Implement a safety protocol for equipment reflection.</li> <li>- Ensure accurate UV readings are recorded.</li> <li>- Use reflective safety gear.</li> <li>- Implement a safety protocol for equipment reflection.</li> <li>- Ensure accurate UV readings are recorded.</li> <li>- Use reflective safety gear.</li> <li>- Implement a safety protocol for equipment reflection.</li> <li>- Ensure accurate UV readings are recorded.</li> </ul>	1L
5. Task Commencement	Inadequate sun protection usage, Job pace and productivity	3H	<ul style="list-style-type: none"> <li>- Use appropriate sun protection (hats, sunscreen).</li> <li>- Monitor job pace and productivity.</li> <li>- Implement a safety protocol for sun protection.</li> <li>- Ensure adequate sun protection usage.</li> <li>- Monitor job pace and productivity.</li> <li>- Implement a safety protocol for sun protection.</li> <li>- Ensure adequate sun protection usage.</li> <li>- Monitor job pace and productivity.</li> <li>- Implement a safety protocol for sun protection.</li> <li>- Ensure adequate sun protection usage.</li> <li>- Monitor job pace and productivity.</li> </ul>	2M
6. Task Operation	Reflective surface proximity, Concentration on tasks	3H	<ul style="list-style-type: none"> <li>- Maintain safe distance from reflective surfaces.</li> <li>- Concentrate on tasks.</li> <li>- Implement a safety protocol for reflective surface proximity.</li> <li>- Ensure safe distance from reflective surfaces.</li> <li>- Concentrate on tasks.</li> <li>- Implement a safety protocol for reflective surface proximity.</li> <li>- Ensure safe distance from reflective surfaces.</li> <li>- Concentrate on tasks.</li> <li>- Implement a safety protocol for reflective surface proximity.</li> <li>- Ensure safe distance from reflective surfaces.</li> <li>- Concentrate on tasks.</li> </ul>	2M

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7. Morning Break	Overconfidence in short exposure periods, UV increased risk times	3H		1L
8. Post-Break Reassembly	Worker fatigue leading to lack of diligence, Inconsistent PPE protection usage	2M		1L
9. Afternoon Activity	Peak temperature and UV, Fatigue-induced inappropriate gear use	4A		2M

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10. Task Wrap-Up	Premature removal of protective gear, Time pressure to finish tasks	3H		1L
11. Debriefing	Dismissing potential symptoms, Underreporting of personal exposure experiences	3H		1L
12. Data Collection & Analysis	Misreporting, Overlooking trends	2M		1L

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13. Continuous Improvement	Complacency in procedures, Resistance to change	2M		1L
14. Reporting	Delayed reporting, Inaccurate risk assessments	3H		2M
15. Policy Review	Outdated procedures, Lack of engagement in policy updates	2M		1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
16. Documentation	Loss of records, Inaccessible information	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
17. UV Index Monitoring	Failing equipment, Incorrect readings	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
18. Emergency Preparedness	Inconsistent emergency plan, Delayed response	3H	<div></div> <div></div> <div></div>	1L



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19. Transport and Movement	Sun exposure during transport, Delays causing exposure	3H		2M
20. Site Departure	Final checks overlooked due to fatigue, Rush to leave site without PPE	3H		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 IF 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 2017

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) Regulations 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>

### 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

### 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.