

**Lighting Installation and Maintenance**

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			<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.	Administrative Change	
								PPE	

  

Risk Rating & Required Action:	
<b>4A</b>	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.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

  

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	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, Duty of Care and Regulatory Compliance	<ul style="list-style-type: none"> <li>Lack of clear allocation of WHS duties for lighting installation and maintenance activities</li> <li>Failure to identify and comply with WHS Act 2011, WHS Regulations and relevant Australian Standards (e.g. AS/NZS 3000, AS/NZS 2293, AS/NZS 60079, AS/NZS 3012)</li> <li>Inadequate consultation with workers and Health and Safety Representatives about lighting risks and controls</li> <li>Absence of formal WHS objectives, KPIs and review mechanisms for high-risk lighting work (e.g. high ceilings, hazardous zones, elevated work platforms)</li> <li>Poor integration of contractor management obligations into the PCBU's WHS management system</li> <li>Failure to ensure due diligence by officers (directors, senior managers) in relation to lighting-related risks</li> </ul>	4A	<ul style="list-style-type: none"> <li>Establish and maintain a documented WHS management system that clearly references lighting installation and maintenance as a high-risk work activity</li> <li>Assign and document WHS responsibilities, accountabilities and authorities for officers, managers, supervisors and workers involved in lighting work</li> <li>Implement a documented legal register identifying WHS Act 2011, WHS Regulations, Electrical Safety legislation and all relevant Australian Standards applicable to lighting systems (including hazardous area lighting) and review it at least annually</li> <li>Develop a governance process for regular WHS performance reporting on lighting tasks, including incident data, audit findings and corrective actions</li> <li>Implement formal worker consultation arrangements (HSCs, HSRs, toolbox talks) specifically addressing lighting risks such as working at height and hazardous zones</li> <li>Embed WHS due diligence requirements into senior management position descriptions and performance reviews including oversight of lighting-related risks</li> <li>Establish a documented process for the pre-qualification, selection and monitoring of electrical and maintenance contractors undertaking lighting tasks</li> <li>Schedule periodic internal and external WHS audits covering governance, policies and field verification of lighting risk controls</li> </ul>	3H
2. Planning, Design and Engineering of Lighting Systems	<ul style="list-style-type: none"> <li>Poor initial design leading to difficult access for maintenance (e.g. very high ceilings without safe access provisions)</li> <li>Inadequate design of lighting in hazardous areas (e.g. incorrect Ex ratings, wrong zoning classification, incompatible fittings)</li> <li>Failure to consider emergency egress lighting requirements and redundancy in design</li> <li>Insufficient allowance for isolation points, lockable switches and clear labelling in designs</li> <li>Selection of fittings that require frequent replacement, increasing high-risk maintenance frequency</li> <li>Lack of coordination between designers, electrical engineers and</li> </ul>	4A	<ul style="list-style-type: none"> <li>Adopt a formal design risk management procedure requiring designers to identify, document and eliminate or minimise WHS risks associated with lighting systems at the source</li> <li>Specify lighting systems that minimise working at height, such as lowering-type fittings, accessible gantries, or lighting tracks positioned within safe reach via platform</li> <li>Require all designs in hazardous areas to be undertaken or verified by competent hazardous area electrical engineers in accordance with AS/NZS 60079 series and zoning requirements</li> <li>Ensure lighting designs incorporate clearly labelled isolation points, lockable switches and segregated circuits for maintenance purposes</li> <li>Standardise on robust, long-life, low-maintenance fittings and lamps to reduce frequency of high-risk bulb changes in high ceilings and elevated locations</li> <li>Integrate emergency and exit lighting requirements in accordance with AS/NZS 2293, including consideration of testing access and safe egress during power loss</li> <li>Mandate design reviews and constructability/maintainability workshops involving WHS, operations and maintenance personnel before final approval</li> <li>Maintain design documentation, as-installed drawings and specifications in a controlled document system accessible to maintenance planners and supervisors</li> </ul>	2M

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	facility managers about maintainability and WHS implications			
3. Procurement and Specification of Lighting Equipment and Tools	<ul style="list-style-type: none"> <li>• Purchase of non-compliant or sub-standard lighting fixtures, ballasts, drivers or control gear</li> <li>• Procurement of fittings not suitable for hazardous zones, outdoor exposure, corrosive or dusty environments</li> <li>• Inadequate specification of compatible lamps, drivers and control systems leading to premature failure or overheating</li> <li>• Lack of system for ensuring tools, test instruments and access equipment are fit for purpose and compliant</li> <li>• Inconsistent procurement leading to multiple lamp and fitting types, increasing complexity and error risk during replacement</li> </ul>	3H	<ul style="list-style-type: none"> <li>• Implement a centralised procurement procedure that requires all lighting equipment to meet relevant Australian Standards and manufacturer certifications</li> <li>• Develop and maintain an approved product list for lighting fittings, lamps, drivers, control gear, supports and hazardous area components</li> <li>• Specify IP, IK and temperature ratings suitable for the operating environment (e.g. wet areas, high dust, high temperature, explosive atmospheres)</li> <li>• Include WHS criteria in purchase documentation for access equipment (e.g. EWP, ladders, scaffolds) and electrical test equipment used for lighting maintenance</li> <li>• Standardise on a limited range of fitting and lamp types to simplify maintenance, reduce errors and improve stock control</li> <li>• Require supplier documentation including certificates of conformity, installation instructions, hazardous area certifications and maintenance requirements</li> <li>• Establish a system for verifying delivered lighting equipment against specifications prior to installation</li> <li>• Integrate procurement approvals with engineering, WHS and electrical supervisory sign-off for all high-risk hazardous area lighting equipment</li> </ul>	2M
4. Contractor and Worker Competency, Licensing and Training	<ul style="list-style-type: none"> <li>• Use of unlicensed or inadequately supervised persons for electrical work on lighting circuits</li> <li>• Insufficient training in working at heights, EWP operation, fall protection and rescue</li> <li>• Lack of competency in hazardous area lighting installation and maintenance</li> <li>• Inadequate understanding of isolation, lockout and test-before-touch procedures for lighting systems</li> <li>• Poor awareness of site-specific emergency procedures, including working near light fixtures in confined or restricted spaces</li> <li>• No verification of competency for maintenance on specialised lighting systems (e.g. emergency, control systems, smart lighting)</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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			[REDACTED]	
5. Planning and Scheduling of High-Risk Lighting Work	<ul style="list-style-type: none"> <li>• Ad-hoc scheduling of lighting maintenance without risk assessment or consideration of operating conditions</li> <li>• Undertaking high-level lighting work in peak operational periods leading to congestion and interface risks with other activities</li> <li>• Inadequate planning for power isolation and temporary lighting when circuits are de-energised</li> <li>• Failure to plan for access routes and exclusion zones when using EWPs or mobile scaffolds to replace lights in high places</li> <li>• No contingency planning for weather conditions, especially for outdoor lighting towers or exposed high-level fixtures</li> <li>• Insufficient time allocation, leading to rushed work and bypassing of safety systems</li> </ul>	4A	[REDACTED]	2M
6. Access and Work at Height Systems for Lighting Tasks	<ul style="list-style-type: none"> <li>• Inadequate systems for selection, inspection and maintenance of access equipment used to reach light fixtures in high ceilings</li> <li>• Use of inappropriate access methods (e.g. domestic ladders instead of industrial platforms or EWPs)</li> <li>• Lack of engineered solutions (e.g. fixed platforms, walkways, lowering mechanisms) for recurring high-level lighting maintenance</li> <li>• Failure to control third-party access under or around elevated work zones</li> <li>• Inadequate fall protection planning for work on lighting masts, roof structures or ceiling voids</li> </ul>	4A	[REDACTED]	2M

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			[REDACTED]	
7. Electrical Isolation, Lockout and Testing Controls	<ul style="list-style-type: none"> <li>• Failure to isolate lighting circuits before maintenance or replacement activities</li> <li>• Inadequate labelling of lighting distribution boards, circuits and control devices</li> <li>• Bypassing or defeating interlocks and control systems during fault-finding or bulb changes</li> <li>• Use of untested or non-calibrated electrical test instruments when verifying isolation</li> <li>• Uncontrolled re-energisation of lighting circuits while workers are still in contact with fittings or conductors</li> </ul>	4A	[REDACTED]	2M
8. Hazardous Area and Specialist Lighting Management	<ul style="list-style-type: none"> <li>• Incorrect classification of hazardous zones where lighting is installed</li> <li>• Installation or replacement of non-certified fittings in hazardous areas leading to ignition risk</li> <li>• Inadequate maintenance and inspection regime for Ex-rated lighting fixtures</li> <li>• Lack of control over modifications to hazardous area lighting circuits and enclosures</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Insufficient documentation and change control for hazardous area lighting systems</li> </ul>		[REDACTED]	
9. Maintenance Systems, Inspection and Asset Management	<ul style="list-style-type: none"> <li>Reactive, breakdown-only approach to lighting maintenance leading to urgent high-risk interventions</li> <li>Absence of a structured inspection and maintenance schedule for lighting fixtures, supports and cabling</li> <li>Failure to detect deterioration of lamps, drivers, supports, diffusers or electrical terminations before failure</li> <li>Inadequate management of emergency and exit lighting testing obligations</li> <li>Poor record-keeping of lighting maintenance history, leading to repeated failures or unresolved defects</li> </ul>	3H	[REDACTED]	2M
10. Traffic, Public Interface and Site Access Control	<ul style="list-style-type: none"> <li>Uncontrolled interaction between lighting maintenance activities and vehicles, forklifts or mobile plant</li> <li>Members of the public or building occupants walking under work areas where bulbs are being changed or fittings are being serviced</li> <li>Inadequate control of access routes for EWP or scaffolds in retail, office or public spaces</li> <li>Insufficient signage and communication about temporary lighting outages and restricted areas</li> </ul>	3H	[REDACTED]	2M

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			[REDACTED]	
11. Hazardous Substances, Glass and Waste Management	<ul style="list-style-type: none"> <li>Exposure to hazardous substances from broken lamps (e.g. mercury in some fluorescent lamps)</li> <li>Cuts and lacerations from broken glass when changing or transporting bulbs and diffusers</li> <li>Inadequate systems for collection, storage and disposal of waste lamps, ballasts and fittings</li> <li>Uncontrolled release of dust or contaminants from ceiling voids or fittings during maintenance</li> <li>Incorrect handling or storage of chemicals used for cleaning lighting fixtures</li> </ul>	3H	[REDACTED]	2M
12. Fatigue, Workload and Scheduling Management	<ul style="list-style-type: none"> <li>Fatigue arising from over-hours lighting maintenance, especially in commercial or public venues</li> <li>Extended periods working at height or in awkward postures while servicing ceiling-mounted lighting</li> <li>Insufficient staffing leading to rushed work and poor adherence to safety procedures</li> <li>Lack of structured breaks during intensive lighting change-out programs or shutdowns</li> </ul>	3H	[REDACTED]	2M
13. Emergency Preparedness and	<ul style="list-style-type: none"> <li>Delayed rescue of a person suspended or injured while working at height near light fixtures</li> </ul>	3H	[REDACTED]	2M

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Incident Response for Lighting Work	<ul style="list-style-type: none"> <li>• Inadequate response to electrical shocks or burns from lighting systems</li> <li>• Poor management of loss of normal and emergency lighting during incidents or evacuations</li> <li>• Failure to report and investigate lighting-related near misses and incidents to prevent recurrence</li> </ul>		[REDACTED]	
14. Documentation, Communication and Change Management	<ul style="list-style-type: none"> <li>• Out-of-date procedures and drawing for lighting systems leading to unsafe assumptions</li> <li>• Poor communication of changes in lighting layouts, switching arrangements or control systems</li> <li>• Uncontrolled modifications by contractors or maintenance staff bypassing the formal change process</li> <li>• Lack of access to relevant documentation in the field when conducting lighting maintenance</li> </ul>	3H	[REDACTED]	1L

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.