

Charging And Servicing Batteries Risk Assessment

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			Elimination Remove the hazard.
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution 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.	Engineering 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:

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.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. 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. Preparation	chemical exposure, trip hazards	3H	<ul style="list-style-type: none"> - Conduct a site inspection to identify and remove trip hazards. - Ensure all necessary PPE is available and used, such as gloves and goggles. - Review Safety Data Sheets (SDS) for all chemical substances involved. - Conduct a toolbox talk on the associated risks and safety procedures. - Ensure workers are trained in battery handling and charging safety. - Assign a trained supervisor to oversee the preparation activities. - Follow all manufacturer's procedures to avoid injury. - Prepare spill kits for immediate response to chemical spills. - Test air quality to ensure proper ventilation before proceeding. - Ensure mobile equipment is in good repair and appropriate for task. 	2M
2. Disconnecting Batteries	electric shock, fire risk	4H	<ul style="list-style-type: none"> - De-energise equipment and lock out all power sources before disconnection. - Use insulated tools specifically designed for electrical work. - Wear appropriate electrical PPE, including rubber gloves and face protection. - Follow manufacturer's instructions for battery disconnection protocols. - Employ the buddy system to ensure immediate assistance if required. - Implement proper grounding techniques to prevent static discharge. - Check battery condition for leaks or swelling before handling. - Ensure fire extinguishers and first aid kits are readily accessible. - Conduct regular inspections and maintenance of battery connectors. - Maintain a minimum clearance from flammable materials and substances. 	2M
3. Transporting Batteries	manual handling injuries, spills and leaks	3H	<ul style="list-style-type: none"> - Use mechanical aids like carts or forklifts for transporting heavy batteries. - Adhere to proper lifting techniques for manual handling safety. - Secure batteries correctly to prevent movement during transport. - Inspect batteries for damage before and after transport. - Avoid stacking batteries to minimise risk of toppling. - Use spill containment trays to protect against leaks. - Ensure trained personnel supervise the transportation process. - Label and handle batteries in accordance with Dangerous Goods regulations. 	2M

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			- Prohibit smoking and naked flames in the battery transport area. - Conduct regular training on safe battery transport procedures.	
4. Charging Batteries	overcharging, explosive gas buildup	4A	[REDACTED]	2M
5. Servicing Batteries	acid exposure, chemical burn	4A	[REDACTED]	2M
6. Disposal of Batteries	environmental contamination, illegal disposal	3H	[REDACTED]	2M

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7. Maintenance of Charging Equipment	electrical faults, mechanical wear	3H		2M
8. Emergency Planning and Response	lack of preparedness, poor response coordination	4A		2M
9. Worker Training and Competency	lack of knowledge, inadequate skills	3H		2M

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
10. Monitoring and Review	outdated risk controls, complacency	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
11. Ventilation Management	poor air quality, gas accumulation	4A	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M

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12. Signage and Communication	lack of awareness, miscommunication	3H	<div>SAMPLE</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	2M
13. Personal Protective Equipment (PPE) Management	inadequate protection, non-compliance		<div>SAMPLE</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	2M
14. Equipment Calibration and Testing	inaccurate readings, faulty equipment	3H	<div>SAMPLE</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	2M

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15. Incident Reporting and Investigation	incomplete reporting, recurrence of incidents	3H		2M
16. Security Management of Charging Areas	unauthorised access, vandalism	3H		2M
17. Contractor Management	communication breakdown, mismatched procedures	3H		2M

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18. Environmental Protection	spills, waste emissions	3H		2M
19. Continuous Improvement	stagnation, lack of innovation	3H		1L

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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 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.