

Setting Up Battery Banks | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Setting Up Battery Banks

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

THIS SAFE WORK METHOD STATEMENT 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 safe work method statement (SWMS) is prepared before the proposed work starts.

Full Name:

Signature:	Title:	Date:
------------	--------	-------

Details of the person(s) responsible for ensuring implementation, monitoring compliance of the SWMS as well as reviews and modifications of the SWMS.

Full Name:	Title:	Phone:
------------	--------	--------

ALL PERSONNEL PARTICIPATING IN ANY ACTIVITY ON THIS SWMS MUST HAVE THE FOLLOWING COMMUNICATED | **NAME OF ALL RELEVANT PERSONNEL WHO HAVE BEEN CONSULTED AND COMMUNICATED TO IN THE DEVELOPMENT AND APPROVAL OF THIS SWMS**

Safety meetings or toolbox talks will be scheduled in accordance with legislative requirements to first identify any site hazards, then to communicate those hazards and then to further take steps to either eliminate or control each hazard.

If an incident or a near miss occurs, all work must stop immediately. Depending on the severity of the incident, a meeting will be called with all workers to amend the SWMS if required. The meeting may also be an educational opportunity.

Any changes made to the SWMS after an incident or a near miss must be approved by the Person Conducting Business or Undertaking and communicated to all relevant personnel.

The SWMS must be kept and be available for inspection at least until the work is completed. Where a SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to which the SWMS relates, then the SWMS must be kept for at least two years from the occurrence of the notifiable incident.

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date SWMS supplied to Project Manager:	

ANY HIGH-RISK CONSTRUCTION WORK BEING CARRIED OUT

<input type="checkbox"/> involves a risk of a person falling more than 2 meters	<input type="checkbox"/> is carried out on or near pressurised gas mains or piping
<input type="checkbox"/> is carried out on a telecommunication tower	<input type="checkbox"/> is carried out on or near chemical, fuel or refrigerant lines
<input type="checkbox"/> involves demolition of an element of a structure that is load-bearing	<input type="checkbox"/> is carried out on or near energised electrical installations or services
<input type="checkbox"/> involves demolition of an element related to the physical integrity of a structure	<input type="checkbox"/> is carried out in an area that may have a contaminated or flammable atmosphere
<input type="checkbox"/> involves, or is likely to involve, disturbing asbestos	<input type="checkbox"/> involves tilt-up or precast concrete
<input type="checkbox"/> involves structural alteration or repair that requires temporary support to prevent collapse	<input type="checkbox"/> is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor
<input type="checkbox"/> is carried out in or near a confined space	<input type="checkbox"/> is carried out in an area of a workplace where there is any movement of powered mobile plant
<input type="checkbox"/> is carried out in/near a shaft or trench deeper than 2m or tunnel involving use of explosives	<input type="checkbox"/> is carried out in areas with artificial extremes of temperature.
<input type="checkbox"/> is carried out in or near water or other liquid that involves a risk of drowning.	<input type="checkbox"/> involves diving work.

ANY HIGH-RISK MACHINERY OR EQUIPMENT NEARBY

--

RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HEIRARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	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 the work.	
								PPE	

Notes on Hierarchy of Controls: Elimination methods are the most effective and preferred when controlling a hazard. Substitution is the second most effective method of controlling a hazard. Engineering by isolation is the third most effective, while Administrative Controls by changing the work is the fourth most effective method. PPE (Personal Protective Equipment) is the least effective method.

PERSONAL PROTECTIVE EQUIPMENT (PPE)											
Select the appropriate PPE above suitable for the equipment used or the job task being performed (if applicable).											
FOOT PROTECTION	HAND PROTECTION	HEAD PROTECTION	HEARING PROTECTION	EYE PROTECTION	RESPIRATORY PROTECTION	FACE PROTECTION	HIGH-VIS CLOTHING	PROTECTIVE CLOTHING	FALL PROTECTION	SUN PROTECTION	HAIR/JEWELLERY SECURED
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other PPE Required:											
Permit or Licenses Requirements						Mandatory Qualifications and Training					

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	Improper handling of equipment, Lack of knowledge about process	3H	<ul style="list-style-type: none"> - Conduct a thorough risk assessment prior to commencing work to identify potential hazards. - Provide comprehensive training for all workers involved in setting up battery banks, ensuring they understand the specific equipment and processes. - Develop and distribute detailed work procedures and safety guidelines prior to starting the job. - Ensure all workers have completed appropriate training modules related to electrical safety and handling of batteries. - Use proper personal protective equipment (PPE), such as insulated gloves and safety goggles, at all times during the process. - Assign a competent supervisor to oversee the setup and monitor adherence to safety protocols. - Clearly label all equipment and tools used in the setup to avoid confusion and ensure correct usage. - Regularly inspect tools and equipment for wear and tear or damage before use, removing any that are defective from service. - Implement strict protocols for lifting and moving heavy equipment to prevent physical strain or injury. - Maintain an organised workspace, keeping aisles and pathways clear of obstructions to prevent slips, trips, and falls. - Establish a communication plan to ensure all team members can effectively convey and receive crucial information during the setup. - Position necessary signage around the work area to alert workers and others of potential electrical and chemical hazards. - Ensure an emergency response plan is in place, with clearly defined roles and responsibilities, in case of an incident. - Perform regular safety audits and inspections throughout the task to proactively identify and resolve any emerging risks. 	2M
2. Sourcing Components	Electrical Hazard, Manual handling	3H	<ul style="list-style-type: none"> - Conduct a risk assessment prior to sourcing components to identify and evaluate potential electrical and manual handling hazards. - Ensure all personnel involved in the sourcing process are trained and competent in handling electrical components and using appropriate manual handling techniques. - Select suppliers who adhere to Australian safety standards and provide quality electrical components with clear safety documentation. - Inspect all components for damage upon receipt and verify they match the specifications required for safe installation. - Store components in a dry, secure place away from potential sources of electrical hazards such as water or flammable materials. 	2M

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
			<ul style="list-style-type: none"> - Use appropriate personal protective equipment, such as insulated gloves and protective eyewear, when handling electrical components. - Utilise mechanical aids where possible to minimise manual handling risks, such as trolleys or hoists for heavy or awkward items. - Limit the weight of individual loads to be carried by workers and ensure teams are available for lifting heavier or bulkier items safely. - Implement clear labelling of components during storage and transportation to avoid mix-ups and reduce unnecessary handling. - Develop and maintain a log of sourced components ensuring traceability and accountability throughout the set-up process. - Establish a communication plan for reporting faults or issues with components to ensure timely resolution and prevent hazards escalation. 	
3. Assembling battery bank	Poor layout of workplace, Unskilled handling	3H	<ul style="list-style-type: none"> - Ensure the workplace is well-organised and free from unnecessary obstacles to facilitate easy movement and access. - Provide adequate lighting in the work area to enhance visibility and reduce the risk of accidents or mistakes during assembly. - Implement a clear layout plan for the battery bank setup, ensuring there is enough space around each component for safe installation and maintenance. - Use signage or floor markings to delineate areas where workers should walk, stand, or place tools and equipment. - Conduct a pre-task briefing to ensure all workers understand the task at hand and identify potential hazards associated with assembling the battery bank. - Ensure all workers involved in assembling the battery bank are trained and competent in handling batteries and related equipment safely. - Provide proper personal protective equipment, such as gloves, goggles, and acid-resistant clothing, to protect workers from chemical exposure or other injuries. - Use appropriate tools and equipment for the assembly process to avoid damage to battery components and ensure worker safety. - Implement a buddy system to have at least two workers present during critical steps of the assembly, providing assistance and oversight where needed. - Regularly inspect tools and equipment before use to check for damage or wear that could compromise safety during the assembly process. - Establish emergency procedures for immediate response in case of an incident, including spill kits and first aid supplies readily available in the workplace. - Ensure ventilation systems are functioning correctly to prevent accumulation of gases emitted by batteries during the assembly process. 	2M

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
			- Set up a waste disposal system specifically for hazardous materials, including used batteries and packaging, to minimize environmental impact and maintain a clean workspace.	
4. Installation of components	Electric shock, Falling from height	4A	[REDACTED]	2M
5. Testing Connections	Electric shock, Tripping over cables	3H	[REDACTED]	1L

SAMPLE

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
			[REDACTED]	
6. Securing Battery Bank	Moving heavy objects, Tripping fingers while moving	3H	[REDACTED]	1L

SAMPLE

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
			[REDACTED]	
9. Regular Maintenance	Exposure to harm by electricity, Physical pressure due to long maintenance hours	3H	[REDACTED]	2M

SAMPLE

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
			[REDACTED]	
10. Making Adjustments	High chance of electrical shocks, Accidents due to machinery speed	3H	[REDACTED]	2M
11. Cleaning and Tidying Up	Slips, trips, and falls, Chemical burns from cleaning products	3H	[REDACTED]	1L

SAMPLE

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
			[REDACTED]	
12. Personal Protective Equipment Use	Improper fit leading to exposure to hazards, Malfunction of PPE	2M	[REDACTED]	1L

SAMPLE

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
13. Following Safety Protocols	Negligence concerning safety measures, Lack of awareness and training about protocols	3H	[REDACTED]	2M
14. Waste Disposal	Cut and puncture wounds, Exposure to hazardous substances	2M	[REDACTED]	1L

SAMPLE

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
			[REDACTED]	
15. End of Work Review	Incorrect work reporting Miscommunication and misinterpretation	2M	[REDACTED]	1L

SAMPLE

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

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 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-of-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/work-places-and-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/work-places/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.

SIGNATORIES OF THE SAFE WORK METHOD STATEMENT

The signed and dated personnel listed below have cooperated in the consultation and development of this Safe Work Method Statement which has been approved by the Person/s Conducting a Business or Undertaking (PCBU). In signing this Safe Work Method Statement each individual acknowledges and confirms that they have read this SWMS in full, having raised any questions for items on this Safe Work Method Statement that require clarification, and confirms that they are competent, skilled and knowledgeable for the task assigned to them. Every person acknowledges that they have received the relevant training and qualifications where required, before carrying out any work contained in this Safe Work Method Statement. By signing this Safe Work Method Statement each individual agrees to work safely, to follow any safe work instructions which are provided, and agrees to use all Personal Protective Equipment where appropriate.

Worker Name	Signature	Date

SAFE WORK METHOD STATEMENT MONITORING AND REVIEW

The SWMS must be reviewed regularly to make sure it remains effective and must be reviewed (and revised if necessary) if relevant control measures are revised. The review process should be carried out in consultation with workers (including contractors and sub-contractors) who may be affected by the operation of the SWMS and their health and safety representatives who represent that work group at the workplace.

When the SWMS has been revised the PCBU must ensure that all persons involved with the work are advised that a revision has been made and how they can access the revised SWMS, including all persons who will need to change a work procedure or system as a result of the review are advised of the changes in a way that will enable them to implement their duties consistently with the revised SWMS. All workers that will be involved in the work must be provided with the relevant information and instruction that will assist them to understand and implement the revised SWMS.

The SWMS must be monitored regularly for the effectiveness of ensuring hazard controls are effective in reducing the risk of incidents, keeping the workplace safe for all personnel. The person responsible for monitoring the effectiveness of the Safe Work Method Statement should employ a multi-faceted approach which includes but is not limited to:

1. Spot Checks.
2. Consultation with workers, contractors and sub-contractors.
3. Internal audits on a continual basis.

An approach of continuous improvement, promptly recording inconsistencies or deficiencies, followed up by immediate corrective action and consultation with all relevant personnel ensures that the PCBU is consistently developing ever-improving systems of safe work principles.

REVIEW NUMBER	1	2	3	4	5	6	7
NAME							
INITIALS							
DATE							

SAFE WORK METHOD STATEMENT REVIEW CHECKLIST

This Safe Work Method Statement Review Checklist is to be followed and used upon initial development of the SWMS to help ensure that all steps have been adequately taken before work commences. Think of this document as an internal audit review checklist before commencing work, and may form part of a Toolbox Talk (safety meeting) and may be used as an opportunity for education and training.

ITEMS WHICH MUST BE INCLUDED IN THE SWMS	COMPLETED	COMMENTS
The company details have been entered, including the project name and address.	<input checked="" type="checkbox"/>	
All relevant personnel consulted during the development of the SWMS.	<input checked="" type="checkbox"/>	
Name, signature, position and date signed of the person approving the SWMS.	<input type="checkbox"/>	
Specific personnel and qualifications, experience is noted in the SWMS.	<input checked="" type="checkbox"/>	
Provides a step-by-step process of tasks required to carry out the activity or task.	<input checked="" type="checkbox"/>	
Adequate risk assessment of any identified hazards has been completed.	<input checked="" type="checkbox"/>	
Foreseeable hazards are identified and documented for each step.	<input checked="" type="checkbox"/>	
Any hazards listed in any site risk assessments have been added to the SWMS.	<input checked="" type="checkbox"/>	
SWMS initial risk (IR) column as well as residual risk (RR) column completed.	<input checked="" type="checkbox"/>	
Check control measures added to the SWMS are the most effective selected.	<input checked="" type="checkbox"/>	
Responsible person is assigned and listed on the SWMS for the implementation of control measures.	<input checked="" type="checkbox"/>	
Permit or licenses requirements specified, such as Hot Work, Electrical Work, Work at Heights etc.	<input checked="" type="checkbox"/>	
SWMS identifies plant and equipment to be used.	<input checked="" type="checkbox"/>	
Details of inspection checks required for any equipment listed are noted on the SWMS.	<input checked="" type="checkbox"/>	
Describes any mandatory qualifications, experience, training or skills required to perform the work.	<input checked="" type="checkbox"/>	
Applicable personal protective equipment is selected on the SWMS.	<input checked="" type="checkbox"/>	
Reflects and documents any legislative references and/or Australian Standards.	<input checked="" type="checkbox"/>	
Identifies any hazardous substances used with specific control measures in line with any SDS.	<input checked="" type="checkbox"/>	
REVIEWED BY		DATE REVIEWED
SIGNATURE		DATE COMPLETED