Working In Bus, Train Or Plane Hvac Systems | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Working In Bus, Train Or Plane Hvac Systems

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

THIS SAFE WORK METHOD STATEMENT IS APPROVED BY THE PCBU OF 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 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 and 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, assess risk 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	
☐ involves a risk of a person falling more than 2 meters	☐ is carried out on or near pressurised gas mains or piping
☐ is carried out on a telecommunication tower	☐ is carried out on or near chemical, fuel or refrigerant lines
☐ involves demolition of an element of a structure that is load-bearing	☐ is carried out on or near energised electrical installations or services
☐ involves demolition of an element related to the physical integrity of structures	☐ is carried out in an area that may have a contaminated or flammable atmosphere
☐ involves, or is likely to involve, disturbing asbestos	☐ involves tilt-up or precast concrete
☐ involves structural alteration or repair that requires temporary support to prevent collapse	☐ is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor
☐ is carried out in or near a confined space	☐ is carried out in an area of a workplace where there is any movement of powered mobile plant
☐ is carried out in/near a shaft or trench deeper than 1.5 m or tunnel involving use of explosives	☐ is carried out in areas with artificial extremes of temperature.
☐ is carried out in or near water or other liquid that involves a risk of drowning.	☐ involves diving work.

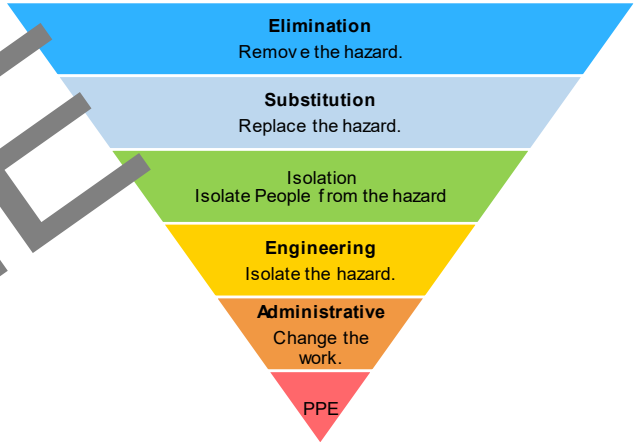
ANY HIGH-RISK MACHINERY OR EQUIPMENT NEARBY

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 PROCEE
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review befo work starts.
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	nitor and ke records

Notes on Hierarchy of Controls: Elimination methods are the most effective and preferr en co lling a hazard. Substitution is the second most effective method of controlling a hazard. Engineering by isolation is the most e tive, while Administrative Controls by changing the work is the fourth most effective method. PPE (Personal Prote ve quipm) is the least effective method.

HEIRARCHY OF CONTROLS



PERS NAL P TECTIVE EQUIPMENT (PPE)

Select the appropriate PPE abo suitable for the equipment used or the job task being performed (if applicable).

FOOT PROTECTION	HAND PROTECTION	HEAD PROTECTION	HEARING PROTECTION	EY PROTECTION	RESPIRATORY PROTECTION	FACE PROTECTION	HIGH-VIS CLOTHING	PROTECTIVE CLOTHING	FALL PROTECTION	SUN PROTECTION	HAIR/JEWELLERY SECURED
											
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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	Slips, trips and falls, Exposure to harmful dust or fumes	3H	- Conduct a pre-work site inspection to identify any slip, trip, or fall hazards and implement corrective actions as needed. - Ensure that all workers wear appropriate non-slip footwear to reduce the risk of slips and falls. - Provide adequate lighting in work areas to ensure visibility and minimise potential tripping hazards. - Use signage and barriers to alert personnel to any identified hazards, such as wet floors or uneven surfaces. - Ensure only trained and competent personnel handle hazardous materials or equipment involved in HVAC system - Equip workers with personal protective equipment (PPE) such as masks and respirators to protect against harmful dust and fumes. - Implement strict housekeeping practices to keep work areas clean and free of debris that could cause trips or slips. Regularly review Material Safety Data Sheets (MSDS) for any chemicals or substances involved to understand associated risks and control measures. Ventilate enclosed spaces adequately to disperse harmful dust or fumes before commencing work. - Educate and train workers on recognising symptoms of exposure and the importance of using PPE. - Schedule regular breaks and rotations to prevent fatigue among workers, reducing their risk of accidents. - Establish an emergency response plan and ensure all workers are familiar with it in case of exposure or injury.	2M
2. Inspecting the HVAC System	Physical strain, Electrical shock	3H	- Ensure all workers are trained in the safe handling and use of electrical equipment and components to reduce the risk of electrical shock. - Implement lockout/tagout procedures to ensure that all electrical systems are de-energised before beginning any inspection or maintenance work. - Use personal protective equipment (PPE) such as insulated gloves, safety boots, and eye protection to mitigate physical strain and protect against potential electrical hazards. - Conduct a pre-work stretch and warm-up session to prepare the body for physical exertion and reduce the risk of strain or injury while working in confined spaces. - Integrate the use of ergonomic tools and equipment designed to minimise physical stress during inspection tasks, such as lightweight tools with appropriate grips. - Utilise adjustable or positioned lighting to ensure clear visibility within HVAC systems, thereby reducing the need for awkward positions that might cause physical strain.	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
			- Establish clear communication protocols among team members, especially when navigating tight spaces, to prevent unexpected movements that could lead to physical strain. - Regularly inspect tools and equipment for wear and tear, ensuring they are in proper working order to avoid unnecessary strain during use and reduce the chance of accidents. - Educate workers on the importance of taking regular breaks to relieve stress and avoid fatigue, particularly during high-strain activities. - Develop and practise emergency response plans specific to electrical incidents, ensuring all team members understand their roles in these situations. - Monitor workplace conditions for potential hazards continuously, adjusting control measures as necessary to address any newly identified risks promptly.	
3. Removing Old Components	Exposure to harmful substances, Cutting or piercing injuries	3H	- Ensure all workers are trained in the safe handling and disposal of HVAC components that may contain harmful substances such as refrigerants, asbestos, or mold. - Wear appropriate personal protective equipment (PPE) including gloves, safety glasses, and respiratory protection as necessary to reduce exposure to harmful substances. - Implement proper ventilation procedures to mitigate the accumulation of potentially hazardous airborne particles during removal. - Conduct a pre-work assessment to identify any dangerous substances present, ensuring they are properly labelled and documented for safe disposal. - Use appropriate tools and minimise manual effort where possible to prevent cutting or piercing injuries during component removal. - Establish clear communication protocols to ensure all team members are informed about ongoing tasks and potential hazards in real-time. - Install guardrails or barriers around work areas to protect both workers and bystanders from dropping objects or accidental contact with sharp tools. - Utilise lockout/tagout procedures to ensure that power to HVAC systems is completely shut off while old components are being removed. - Follow detailed step-by-step removal procedures outlined in the specific HVAC system's manual, which often provides guidance on safely handling different components. - Schedule regular health and safety briefings to remind workers of safe practices and update them on any new procedures or tools being implemented. - Maintain an onsite first-aid kit and ensure all workers know who the designated first-aid officer is, in the event of any injury.	1L
4. Installing New Components	Falls from height, Struck by moving objects	3H	[redacted]	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
			[redacted]	
5. Testing the HVAC System	Electrical shock, Burns from hot components	2M	[redacted]	1L

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. Cleaning Work Area	Exposure to harm[redacted] subst[redacted], trips and falls	2M	[redacted]	1L

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]	
7. Repairing Damaged Parts	Cuts and abrasions, Struck by moving objects	2M	[redacted]	1L
8. Lubricating Moving Parts	Chemical burns from lubricants, Eye injuries	2M	[redacted]	1L

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. Securing the Work Area	Slips, trips and falls, Struck by falling object	3H	[redacted]	1L

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. Documenting Work Done	Eye strain from computer use, Repetiti strain injury	2M	[redacted]	1L
11. Disposing of Waste Materials	Injuries from manual handling, Exposure to harmful substances	2M	[redacted]	1L

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. Servicing Electrical Components	Electrical shock, Fire from faulty wiring	4A	[redacted]	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
			[redacted]	
13. Handling Tools and Equipment	Injuries from manual handling, Cuts and abrasions	[redacted]	[redacted]	1L
14. Reinstalling Protective Covers	Strain from heavy lifting, Injury from slipping tools	3H	[redacted]	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
			[redacted]	
15. Final Inspection and Handover	Overlooked faults leading to failure, Miscommunication	2M	[redacted]	1L

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]	
16. Emergency Procedures	Inadequate response to emergenc Panic-induced accidents	2M	[redacted]	1L

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]	
17. Regular Maintenance	Wear and tear leading to component failure, Overlooked maintenance tasks	3H	[redacted]	1L
18. Training of Workers	Incomplete understanding of procedures, Accidents due to lack of knowledge	3H	[redacted]	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
			[redacted]	
19. Wearing Appropriate Personal Protective Equipment (PPE)	Exposure to noisy environment, Exposure to harmful substanc	4A	[redacted]	1L

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
20. Post-Maintenance Testing and Verification	Faulty components causing damage or injury, Undetected faults leading to failure	4A	[redacted]	2M

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 REFERENCE IN 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-practi

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/legisla
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/ l-codes-of-pra ice

Northern Territory
Work Health and Safety (National Uniform Legislation) Act 201
Work Health and Safety (National Uniform Legislation) Regulati s 20
Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/ rkplac fety-la
Codes of Practice NT: https://worksafe.nt.gov.au/ nd-reso ces/ ctice

South Australia
Work Health and Safety Act 2012 (SA)
Work Health and Safety Regulations 2012 (S
Legislation for SA: https://www.safework.sa.gov.au/resources gislation
Codes of Practice for SA: https://www.safework.sa.gov.au/w places/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 A 004
Occupational Health a Safet egulations 2017
Legis ion VIC: https:// orksafe.vic.gov.au/occupational-health-and-safety-act-and-gulat s
Codes o actice 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

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 subcontractors who may be affected by the operation of the SWMS and their health and safety representatives who represented 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.	☒	
All relevant personnel consulted during the development of the SWMS.	☒	
Name, signature, position and date signed of the person approving the SWMS.	☐	
Specific personnel and qualifications, experience is noted in the SWMS.	☒	
Provides a step-by-step process of tasks required to carry out the activity or task.	☒	
Adequate risk assessment of any identified hazards has been completed.	☒	
Foreseeable hazards are identified and documented for each step.	☒	
Any hazards listed in any site risk assessments have been added to the SWMS.	☒	
SWMS initial risk (IR) column as well as residual risk (RR) column completed.	☒	
Check control measures added to the SWMS are the most effective solutions.	☒	
Responsible person is assigned and listed on the SWMS for the implementation of control measures.	☒	
Permit or licenses requirements specified, such as Hot Work, Electrical Work, Work at Heights etc.	☒	
SWMS identifies plant and equipment to be used	☒	
Details of inspection checks required for any equipment listed are noted on the SWMS.	☒	
Describes any mandatory qualifications, experience, training or skills required to perform the work.	☒	
Applicable personal protective equipment is selected on the SWMS.	☒	
Reflects and documents any legislative references and/or Australian Standards.	☒	
Identifies any hazardous substances used with specific control measures in line with any SDS.	☒	

REVIEWED BY		**DATE REVIEWED**	
SIGNATURE		**DATE COMPLETED**	