

Bridge Instrumentation Maintenance | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Bridge Instrumentation Maintenance

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

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.

NAME OF ALL RELEVANT PERSONNEL WHO HAVE BEEN CONSULTED AND COMMUNICATED TO IN THE DEVELOPMENT AND APPROVAL OF THIS SWMS

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 1.5m 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			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.
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.								PPE

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	Unplanned traffic, Equipment malfunction	3H	<ul style="list-style-type: none"> - Conduct a comprehensive safety briefing with all team members to discuss potential hazards and control measures before commencing work. - Place clearly visible warning signage and traffic cones around the work area to alert and redirect pedestrian and vehicle traffic away from the site. - Coordinate with local authorities to obtain necessary permits and approvals for temporary road closures or traffic management plans, if required. - Assign a trained spotter or traffic controller to manage vehicular and pedestrian traffic flow and ensure communication between ground crew and workers on elevated platforms. - Ensure all equipment undergoes a pre-use inspection to confirm it is in proper working condition, identifying any signs of wear or damage before operations commence. - Implement a strict lockout/tagout procedure for any equipment found to be faulty or malfunctioning until repairs can be made by qualified personnel. - Provide team members with appropriate personal protective equipment (PPE), including high-visibility clothing, hard hats, gloves, and ear protection, and ensure correct usage at all times. - Develop an emergency response plan outlining steps to take in case of an accident, including contact information for emergency services and onsite first aid personnel. - Use barricades or temporary fencing around hazardous areas to prevent unauthorized access and enhance site security. - Schedule regular maintenance and function checks for all tools and machinery used in bridge instrumentation tasks to ensure continuous safe operation. - Designate safe zones where team members can gather in case of an emergency and establish clear communication channels for relaying urgent information. - Conduct regular review meetings to evaluate the effectiveness of implemented control measures and make adjustments as needed based on real-time feedback and incident reports. 	2M
2. Site Orientation	Lack of awareness, Rygolith dust inhalation	3H	<ul style="list-style-type: none"> - Conduct a detailed site induction for all personnel highlighting specific hazards and safety protocols. - Provide comprehensive training on the recognition and mitigation of site-specific hazards such as rygolith dust. - Ensure all workers are equipped with appropriate personal protective equipment, including P2 respirators to prevent dust inhalation. - Clearly display signage indicating areas where rygolith dust is present and enforce restricted access if necessary. - Implement a buddy system or assign experienced mentors for new workers to improve awareness and adherence to safety practices. 	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
			<ul style="list-style-type: none"> - Establish a clear communication system, such as two-way radios, to facilitate immediate reporting of hazards or incidents. - Regularly conduct toolbox talks focusing on hazard identification and control measures, encouraging worker feedback and engagement. - Use barriers and containment strategies when performing tasks that generate dust to minimise exposure to surrounding areas. - mandate regular health monitoring for workers exposed to rygoth dust to quickly address any adverse effects. - Schedule frequent site inspections by supervisors to ensure compliance with safety protocols and assess the need for additional controls. 	
3. Safety Briefing	Miscommunication, Ergonomic issues from prolonged standing	2M	<ul style="list-style-type: none"> - Conduct a pre-start meeting to clearly communicate tasks, roles, and safety expectations using plain language. - Use visual aids such as diagrams or checklists to ensure all team members understand the briefing content. - Assign a team leader to coordinate communication and ensure messaging is consistent across the team. - Provide two-way radios or communication devices to facilitate clear and immediate communication among team members. - Implement regular rest breaks to alleviate physical strain from prolonged standing, allowing team members to sit and stretch. - Provide anti-fatigue mats in areas where workers are required to stand for extended periods. - Arrange workstations ergonomically, ensuring that tools and materials are within easy reach to minimise awkward postures. - Encourage open feedback during the briefing, allowing team members to ask questions or voice concerns for clarification. - Use active listening techniques during discussions, such as paraphrasing and summarising, to ensure mutual understanding. - Ensure team members have access to appropriate personal protective equipment (PPE) and attire that support comfort while reducing injury risk from standing. 	1L
4. Equipment Setting Up	Fall from height, Crush injuries	3H	<div></div> <div></div> <div></div> <div></div>	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
			<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>	
5. Pre-Operation Inspection	Failure in inspection, Faulty devices	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>	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
6. Bridge Instrumentation Placement	Falling objects, Accidental falls from heights	4A		2M
7. Calibration	Incorrect calibration, Electrical shock	3H		2M

Sample

	Inadequate protective	Adequate protective
4A	[REDACTED]	[REDACTED]

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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
12. Equipment Dismantling	Falling objects, Sudden release of stored energy	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M
13. Waste Disposal	Improper disposal, Exposure to hazardous waste	3H		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
			<div>SAMPLE</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div>	
14. Debrief and Reporting	Misreporting, Time pressure leading to stress	2M	<div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div> <div>[REDACTED]</div>	1L

[illegible]

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
16. Data Analysis	Incorrect data, Technical glitches			2M
17. Documentation	Incorrect documentation, Data breach	3H		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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
18. Feedback and Improvement	Resistance to change, Misinterpretation of information	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L

According to damage, 3H

A large, light blue rectangular area with a grid pattern, overlaid with a large, diagonal, gray 'SAMPLE' watermark. The grid consists of thin, light gray lines forming a 4x4 pattern of squares. The watermark is a large, bold, gray 'SAMPLE' text oriented diagonally from the bottom-left to the top-right, spanning across the entire grid area.

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.

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 must 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 as 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