

Engine Crane | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Engine Crane

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			 <p>Elimination Remove the hazard.</p> <p>Substitution Replace the hazard.</p> <p>Isolation Isolate People from the hazard</p> <p>Engineering Isolate the hazard.</p> <p>Administrative Change the work.</p> <p>PPE</p>	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED		
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before 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	Monitor and keep records		

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	Slips, trips and falls, Incorrect lifting procedures	2M	<ul style="list-style-type: none"> - Ensure proper training of all personnel involved in using the engine crane, focusing on appropriate lifting procedures and hazard identification. - Conduct regular inspections and maintenance of the engine crane to guarantee its safe and efficient operation. - Practice good housekeeping principles, keeping the work area clean and free from clutter that might cause slips or trips. - Keep the floor surface in good condition, identifying and repairing any uneven surfaces, cracks, or other potential hazards. - Wear appropriate personal protective equipment (PPE) such as sturdy footwear with slip-resistant soles to minimise slips and trips. - Use caution signs, barriers, or tape to indicate areas where slip, trip, and fall hazards exist. - Plan the lifting process before commencing the task. Consider weight distribution, obstructions, and proper attachment points. - Verify the capacity of the engine crane and ensure it is appropriate for the load being lifted. - Always inspect slings and attachments for defects or damage prior to use; replace if necessary. - Position the engine crane on a flat, stable surface to prevent tipping or overturning during the lift. - Implement a clear communication system between team members during the lifting process to coordinate movements and avoid confusion. - Avoid rushing or making sudden movements while operating the engine crane; practice slow, controlled actions. - Do not stand under the elevated load at any point during the lifting process. - Adhere to Australia Workplace Health and Safety regulations, reporting any incidents or near misses observed during the preparation and execution of the engine crane tasks. 	1L
2. Inspecting Lifting Devices	Faulty equipment, Inadequate inspection	3H	<ul style="list-style-type: none"> - Conduct a thorough pre-operation inspection of the engine crane and associated lifting devices, checking for any visible damage or wear on slings, hooks, chains, and other components. - Ensure that all employees are trained and competent in the proper use and inspection of engine cranes and lifting devices, only permitting authorised personnel to operate the equipment. - Develop and implement a regular maintenance schedule for the engine crane and lifting devices, in line with the manufacturer's guidelines, to minimise the risk of faults and malfunctions. - Verify that all equipment has been regularly inspected and tagged according to the relevant regulations and Australian standards, including sling tags and Safe Working Load (SWL) information. 	1L

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			<ul style="list-style-type: none"> - Utilise only certified and approved lifting devices strictly following the manufacturer's specifications for capacity, materials compatibility, and application, always considering the weight and size of the load being lifted. - Update and display clear signage near the engine crane stating inspection requirements, current SWL ratings, and procedure for reporting any suspected faulty devices, reminding operators to be diligent during every use. - Implement a system for reporting and removing faulty equipment from service immediately upon identification, ensuring that it is not used until repaired, tested and authorised for use by a competent professional. - Encourage open communication amongst coworkers regarding potential hazards and ensure that employees feel comfortable reporting concerns and discrepancies related to lifting devices and equipment. - Assess environmental conditions before each shift, accounting for factors such as ground stability, potential obstructions, and weather conditions that may impact the safe operation of an engine crane and its lifting devices. - Perform toolbox talks with all employees at the beginning of each shift, highlighting the importance of regular inspections, sharing key findings from past audits or incidents, and encouraging vigilance in reporting anomalies. - Continuously review and update workplace health and safety documentation, such as standard operating procedures and risk assessments, ensuring that they address the potential hazards and control measures associated with lifting devices. - Conduct periodic audits to assess the effectiveness of implemented control measures in minimising the risks associated with faulty equipment and inadequate inspections, adjusting procedures and training as necessary. 	
3. Positioning Crane	Struck by moving objects, Overloading	3H	<ul style="list-style-type: none"> - Conduct a pre-start inspection of the engine crane to ensure it is in proper working condition and assess its load capacity for the specific task. - Clearly mark out the designated work area with safety barriers or tape where the engine crane will be positioned to prevent unauthorised access and reduce the risk of being struck by moving objects. - Ensure appropriate signage is displayed around the work area to alert workers of the potential hazards related to positioning an engine crane. - Conduct safety briefing and toolbox talks for all team members involved in the operation, highlighting the hazards of positioning the crane and the control measures in place. - Utilise a designated spotter during positioning of the engine crane to prevent any collision with other stationary or moving objects within the workplace. - Verify the ground condition where the crane will be positioned to ensure it is level and stable, reducing the risk of tipping over or uneven loads. - Assess the weight of the load and make sure it is within engine crane's load capacity to prevent overloading and ensure safe operation. 	1L

- Determine proper weight distribution and avoid overloading.
- Monitor weather conditions during the positioning process, as high winds can increase the likelihood of accidents.
- Use Personal Protective Equipment (PPE) such as hard hats, high-visibility vests, and safety boots to minimise the risk of injury while positioning the engine crane.
- Implement ongoing monitoring and communication among team members, including hand signals or two-way radios, to ensure seamless coordination.
- Develop and implement emergency response procedures in case of issues during positioning, such as preventing collisions, to ensure swift action for worker safety.

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5. Lifting Load	Swinging or unbalanced load, Fall from height	3H		1L

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6. Moving Load	Collision with structures, Struck by falling object			1L
7. Lowering Load	Pinch points, Incorrect communication	2M		1L

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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>	
8. Detaching Load	Lifting equipment failure, Uncontrolled movement of load	3H	<div></div> <div></div> <div></div> <div></div>	1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
9. Maintenance & Storage	Poor housekeeping, Inadequate maintenance	2M	<div></div> <div></div> <div></div> <div></div>	1L

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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>	
10. Documentation & Training	Incomplete documentation, Lack of training	3H	<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
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
			[REDACTED]	
11. Emergency Procedures	Inadequate escape routes, Poor emergency response	2M	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
12. Post-operational Review	Inefficiencies in process, Unidentified hazard exposure	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	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.

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		
SIGNATURE		
DATE REVIEWED		
DATE COMPLETED		