Ensure Proper Maintenance Of Frac Tanks | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Ensure Proper Maintenance Of Frac Tanks

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 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, 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	
☐ 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 a structure	☐ 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 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.

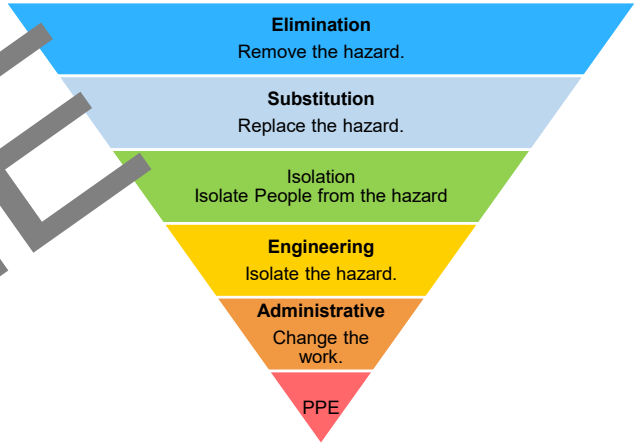
ANY HIGH-RISK MACHINERY OR EQUIPMENT NEARBY

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 k records

Notes on Hierarchy of Controls: Elimination methods are the most effective and preferre en co lli a hazard. Substitution is the second most effective method of controlling a hazard. Engineering by isolation is the ost e ve, while Administrative Controls by changing the work is the fourth most effective method. PPE (Personal Protective Eq ment) he least effective method.

HEIRARCHY OF CONTROLS



PERS NAL P TECTIVE EQUIPMENT (PPE)

Select the appropriate PPE bov uitable or the equipment used or the job task being performed (if applicable).

FOOT PROTECTION	HAND PROTECTION	HEAD PROTECTION	HEARING C ECTION	EY CTION	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	Lack of PPE, Incorrect handling of materials	3H	- Conduct a pre-start meeting to inform all personnel about the task and specific PPE requirements. - Ensure all workers have appropriate PPE, including gloves, safety glasses, steel-toed boots, and high-visibility clothing before starting the task. - Check that all PPE is in good condition and fit for purpose; replace damaged or worn-out gear as necessary. - Provide training on correct handling and lifting techniques for materials and equipment to prevent injury. - Use mechanical aids such as forklifts or pulleys for handling heavy items to minimise manual handling risks. - Keep an updated inventory of necessary tools and equipment to ensure they are ready and functional for the task. - Clearly label and organise materials and equipment to avoid confusion and mishandling. - Establish clear communication protocols among team members to coordinate tasks and manage unexpected issues effectively. - Implement a buddy system to monitor compliance with PPE use and safe handling practices. - Conduct a site assessment to identify potential hazards related to the handling process and take corrective actions. - Set up appropriate signage to indicate areas requiring specific PPE and caution while handling materials. - Limit access to the worksite to only those individuals who are trained and authorised, reducing the chance of accidents. - Document all procedures and communicate any changes to ensure everyone is aware and knowledgeable about the current best practices.	2M
2. Transporting Frac Tanks	Collisions or rollovers, Spillages during transport	3H	- Conduct pre-transport checks to ensure that all tanks are securely fastened and in good condition. - Ensure that drivers are adequately trained and hold the appropriate licenses for transporting large tanks. - Use escort vehicles if moving through congested or high-risk areas to manage traffic flow and enhance visibility. - Implement a journey management plan to determine the safest routes, avoiding high-traffic times and hazardous conditions. - Conduct regular maintenance checks on vehicles used in transporting frac tanks to prevent mechanical failures. - Apply signage and warning flags to the transport vehicle to increase visibility on the road.	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
			- Ensure spill kits are available and accessible in transport vehicles to quickly address any leakages. - Use locking mechanisms and secure covers on valves to prevent accidental discharge during transit. - Communicate with local authorities and relevant stakeholders about large-scale transport jobs that may affect local communities. - Conduct a risk assessment before each transport task to identify and mitigate potential hazards specific to the route and weather conditions. - Keep detailed records of all transport activities including times, routes, and personnel involved for accountability and ongoing safety improvements.	
3. Setting up Frac Tanks	Incorrect assembly, lack of safety signage	3H	- Develop a detailed assembly checklist to ensure all components of the frac tank are correctly assembled. - Provide comprehensive training for workers on proper assembly procedures and safety protocols relevant to frac tank setup. - Use clear, marked visual guides or diagrams to aid in the correct assembly of frac tanks. - Assign experienced personnel to oversee the assembly process to promptly address any errors or uncertainties. - Conduct regular inspections of tools and equipment to ensure they are suitable and safe for use during assembly. - Implement a buddy system where workers verify each other's steps during assembly to catch potential mistakes early. - Install clear and durable safety signage on and around frac tanks to warn of potential hazards and provide essential safety information. - Ensure all safety signage complies with Australian standards for visibility, language, and symbols used. - Conduct a pre-operational safety briefing specific to the frac tank setup, highlighting potential risks and control measures. - Establish a system for reporting and documenting near misses or incidents related to incorrect assembly and lack of signage. - Utilize physical barriers or tape to clearly define restricted areas where only authorized personnel are allowed during assembly. - Equip assembly teams with personal protective equipment such as gloves, helmets, and boots to reduce risk of injury. - Schedule routine maintenance checks post-assembly to confirm that tanks remain correctly assembled over time. - Encourage a safety-first culture by empowering workers to halt operations if an unsafe condition related to assembly or signage is observed.	2M
4. Inspecting Tanks	Encountering harmful substances, Poor visibility	3H		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. Connecting Pipes and Hoses	Poor connection, Leaks leading to spills	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]	
6. Testing System	System failure, Uncontrolled release of liquids/gases	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]	
7. Continuous Monitoring	Exposure to harmful substances, Equipment failure	3H	[redacted]	2M
8. Tank Cleaning	Exposure to harmful chemicals, Slippery surfaces	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]	
9. Maintenance Checks	Inadequate training, Tool malfunction	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. Tank Emptying	Overfilling, Unprotect[redacted]working edges	[redacted]	[redacted]	2M
11. Decommissioning	Incorrect process followed, Exposure to residual chemicals	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]	
12. Waste Disposal	Incorrect disposal methods, Contamination risks	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]	
13. Incident Reporting	Non-compliance, Incomplete information provided	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]	
14. Reviewing Procedures	Outdated procedures, Ignorance of revisions	2M	[redacted]	1L
15. Staff Training	Non-compliance, Inadequate knowledge/skills	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]	
16. Regular Auditing	Missed inspections, Non-compliance issues	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. Emergency Response Preparation	Delay in response, Inadequate training	3H	[redacted]	2M
18. Repair Work	Ineffective repair work, Exposure to harmful substances	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. System Upgrades	System failures, Accidental syste[illegible]mp	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
20. Feedback and Improvement	Delayed implementation, Non-compliance	2M	[redacted]	1L

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

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

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/forms-and-resources/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/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.

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

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 sub-contractors) 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 selection.	☒	
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 and 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**	