

Pump Down Refrigeration Circuits | SAFE WORK METHOD STATEMENT (SWMS)

TASK OR ACTIVITY: Pump Down Refrigeration Circuits

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

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:

Project Name:

Project Address:

Project Manager:

Contact Phone:

Date SWMS supplied to Project Manager:

SCOPE OF WORKS

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 2m 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	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, Exposure to harmful refrigerants	2M	<ul style="list-style-type: none"> - Conduct a pre-start meeting to discuss the work plan, potential hazards, and control measures with all team members. - Ensure all personnel are wearing appropriate personal protective equipment (PPE), including gloves, safety goggles, and non-slip footwear. - Inspect the work area for any uneven surfaces or obstacles that could lead to trips and falls, and clear these hazards where possible. - Place warning signs and barriers around areas where slip, trip, and fall risks are present to alert workers and others in the vicinity. - Use drip trays and absorbent materials to manage spills of refrigerants or other substances that may create slippery conditions. - Equip workers with proper tools and equipment for accessing elevated work areas safely, such as ladders or scaffolding with secure footing. - Ensure ventilation systems are operational to mitigate exposure to harmful refrigerants by dissipating vapour in enclosed spaces. - Equip each worker involved in the pump-down process with a portable refrigerant detector to identify potential leaks quickly. - Conduct regular checks on hoses, valves, and connections in the system to ensure they are in good working order and do not pose a leakage risk. - Implement a buddy system where workers monitor each other for signs of exposure to harmful refrigerants, ensuring quick response in case of emergencies. - Develop and rehearse emergency procedures in case of spills or refrigerant exposure, so all workers know their roles and actions required. - Store refrigerant containers securely and away from high-traffic areas to prevent accidental tipping and to minimise exposure risk. 	1L
2. Gathering Tools and Equipment	Inappropriate tools, Handling heavy equipment	3H	<ul style="list-style-type: none"> - Select tools specifically designed for refrigeration systems to ensure precision and prevent damage. - Conduct regular inspections of tools to identify and replace any items that are damaged or worn out. - Use appropriate manual handling techniques to lift and move heavy equipment, such as bending the knees and keeping the load close to the body. - Employ mechanical aids like trolleys and hoists to transport heavy equipment safely and minimise physical strain on workers. - Ensure all personnel involved are trained in the correct use of refrigeration tools and equipment. - Clearly label and organise tools in a designated storage area to prevent confusion and misuse. 	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"> - Conduct a pre-work briefing to confirm everyone understands the proper procedures and equipment needed. - Wear suitable personal protective equipment (PPE), such as gloves and steel-toed boots, to safeguard against injuries while handling tools and equipment. - Limit access to the work area to authorised personnel only to reduce the risk of accidents or interference. - Establish a clean and organised workspace to avoid clutter and tripping hazards that could lead to injury or tool damage. 	
3. Switching off power supply	Electrical shock, Faulty equipment	4A	<ul style="list-style-type: none"> - Ensure all personnel involved are trained and competent in electrical safety procedures. - Verify the power supply is de-energised by using appropriate testing equipment. - Use insulated tools and wear personal protective equipment, such as rubber gloves and safety footwear. - Implement lockout/tagout procedures to prevent accidental re-energisation of the circuit. - Conduct a visual inspection of equipment for signs of damage or wear before commencing work. - Use voltage-rated gloves when handling electrical components. - Ensure that a certified electrician performs or supervises the work involving switching off the power supply. - Post clear signage to warn others that electrical maintenance is being performed. - Confirm that emergency shutoff switches are easily accessible and functioning properly. - Establish a communication plan for team members, including emergency contact procedures. 	2M
4. Test pressure of the system	Pressure injury, Faulty equipment	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	2M

mf gases, Pressure 4A

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>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>	
7. Ensure all refrigerant is removed	Exposure to harmful gases, Incomplete removal	4A	<div>REDACTED</div> <div>REDACTED</div> <div>REDACTED</div> <div>REDACTED</div> <div>REDACTED</div> <div>REDACTED</div> <div>REDACTED</div> <div>REDACTED</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
8. Seal system	Unsecured seals, Leaks leading to exposure	3H		1L
9. Inspect for any remaining refrigerant	Exposure to harmful gases, Insufficient inspection	3H		2M

SAMPLE

leftover hazardous 2M

as Failure Source 2M

Category	Value	Percentage
Planning, Miscommunication	2M	100%
Execution	1.5M	75%
Monitoring	1.2M	60%
Reporting	1.0M	50%
Analysis	0.8M	40%
Documentation	0.6M	30%
Review	0.4M	20%
Feedback	0.2M	10%
Other	0.1M	5%

[illegible]

[illegible]

es, I am following-up on...

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-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/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 2012

Legislation NT: <https://www.worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>

Codes of Practice NT: <https://www.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://www.worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>

Codes of Practice for TAS: <https://www.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 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.	<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 solutions.	<input checked="" type="checkbox"/>	
Responsible person is assigned and listed on the SWMS for the implementation of control measures.	<input checked="" type="checkbox"/>	
Permit or licenses requirements specified, such as Hot Work, Electrical Work, Work at Heights etc.	<input checked="" type="checkbox"/>	
SWMS identifies plant and equipment to be used.	<input checked="" type="checkbox"/>	
Details of inspection checks required for any equipment listed are noted on the SWMS.	<input checked="" type="checkbox"/>	
Describes any mandatory qualifications, experience, training or skills required to perform the work.	<input checked="" type="checkbox"/>	
Applicable personal protective equipment is selected on the SWMS.	<input checked="" type="checkbox"/>	
Reflects and documents any legislative references and/or Australian Standards.	<input checked="" type="checkbox"/>	
Identifies any hazardous substances used with specific control measures in line with any SDS.	<input checked="" type="checkbox"/>	
REVIEWED BY		
SIGNATURE		
DATE REVIEWED		
DATE COMPLETED		