

SAFE WORK METHOD STATEMENT	SWMS Working in an area that may have a Contaminated or Flammable Atmosphere		
<b>Reference documents</b>	Work Health & Safety Act 2011 and Regulation's 2017, How to manage work WHS risks: Code of Practice 2011, Confined Spaces: Code of Practice 2011, P04 Document Control and Safety Records, P09 Safety Training, P20 Inspection, Testing, Monitoring and Health Surveillance, P16.F01 Confined Spaces – Permit to Work, P16.F02 Site Confined Space / Controlled Space Register, P25.F01 Hot Work – Risk Assessment Checklist, SWMS 1384 Confined Space Work, P28 Energy Isolation and Barricading		
<b>SWI:</b>	SWI86 – Self Contained breathing apparatus, SWI191 – Tag out, SWI – Gas Detector – use and maintenance		
<b>Training and Competencies</b>	General construction induction card (white card), Site specific induction, Confined Space Training, Traffic Management, risk management, first aid training, Issue permits to work.		
<b>Safety data Sheets</b>	As determined by SWMS		
<b>Personal Protective Equipment</b>	High visibility clothing, safety footwear, safety glasses, task appropriate gloves, hard hat, additional P.P.E to be determined by risk assessment.		
<b>Plant and Equipment</b>	Gas detector, harness, karabiner and as determined by task		
<b>Inspection and Testing</b>	<ul style="list-style-type: none"> <li>• Supervisor to check that pre-start checks are completed in log books or check sheets before work commences.</li> <li>• Exclusion zones and hazard warning signs (where required) be displayed before work commences.</li> <li>• Effective reliable communications available on site.</li> <li>• Check barricading is in place each day.</li> <li>• Gas detector testing and calibration</li> <li>• inspection as per manufacturers requirements,</li> </ul>		
<b>Hazardous Chemicals and Dangerous Goods</b>	As required		
<b>High Risk Work</b> <i>Indicate if any of the HIGH risk activities are performed by workers</i>	<input type="checkbox"/> Where there is a risk of a person falling more than two metres.	<input type="checkbox"/> On in or adjacent to roadways, railways, shipping lanes or other traffic corridor.	<input type="checkbox"/> In, over or adjacent to water or other liquids where there is a risk of drowning.
	<input type="checkbox"/> At workplaces where there is any movement of powered mobile plant.	<input type="checkbox"/> Involving the use of explosives.	<input type="checkbox"/> In an area where there are artificial extremes of temperature.
	<input type="checkbox"/> On or near energised electrical installations or services.	<input type="checkbox"/> Involving a trench or shaft if the excavated depth is more than 1.5 metres.	<input type="checkbox"/> On or near pressurised gas distribution mains or piping.
	<input type="checkbox"/> Involves structural alterations or repairs that require temporary support to prevent collapse.	<input type="checkbox"/> Involving a confined space.	<input type="checkbox"/> On or near chemical, fuel or refrigerant lines.
	<input type="checkbox"/> Involving tilt-up or precast concrete.	<input type="checkbox"/> On telecommunications towers.	<input type="checkbox"/> Involving diving.

	<input type="checkbox"/> Involving removal or likely disturbance of asbestos	<input checked="" type="checkbox"/> In an area that may have a contaminated or flammable atmosphere.	<input type="checkbox"/> Involves demolition of an element of a structure that is load-bearing or otherwise related to the structural integrity of the structure.
	<input type="checkbox"/> Involving a tunnel.		
<b>SWMS Prepared by:</b>	<b>Name and signature:</b>		<b>Date:</b>
<b>Authorised by:</b>	<b>Name and signature:</b>		<b>Date:</b>

**\*SWMS are to be reviewed as per the Document Control Procedure or when there has been a change to the Task / Process or Legislation.**

<b>Job Step</b>	<b>Hazard</b>	<b>Risk</b>	<b>Initial Risk Rating</b> E,H,M,L	<b>Control Measures</b> <i>Controls have been identified using the hierarchy of controls</i>	<b>Responsibility</b> <i>Who</i>	<b>Residual Risk Rating</b> E,H,M,L
<b>Pre-Start</b>	Lack of information to workers	Injury or illness	H	<ul style="list-style-type: none"> <li>Pre-start briefing to ensure all staff are fully aware of the scope of work before work commences.</li> <li>Ensure all persons have undertaken site specific induction.</li> </ul>	Supervisor	L
<b>General Safety</b>	Non-competent or untrained workers performing tasks	Injury or illness	H	<ul style="list-style-type: none"> <li>Ensure all workers are competent of performing the required work.</li> <li>Relevant training is to be provided.</li> <li>Ensure the P.P.E is rated or capable of the environment.</li> </ul>	Supervisor and Competent person	L
<b>Public Safety / Pedestrians</b>	Public may be at risk from an environment that have an artificial extreme	Serious Injury or illness	H	<ul style="list-style-type: none"> <li>Keep unauthorised person out of the site.</li> <li>Pedestrian signage is to be installed.</li> <li>Instigate traffic management plans if necessary.</li> <li>Reduce vehicle speed around the work sites.</li> <li>Where required, clearly signed alternative safe laneways</li> </ul>	Supervisor and workers	L

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			H	<ul style="list-style-type: none"> <li>shall be made available for pedestrians.</li> <li>Laneways crossing kerb and channelling shall have non-slip ramps suitable for wheelchairs, baby strollers, pedestrian scooters and aged or disabled persons.</li> <li>Plan and use safe vehicle access.</li> <li>Schedule working hours so as to limit exposure to the public.</li> </ul>		L
<b>Investigations, Inspections Viewing and Measuring</b>	Being struck by vehicles	Serious injury	H	<ul style="list-style-type: none"> <li>Spotter may be required for activity.</li> <li>Park vehicle clear of roadway.</li> <li>Vehicle to have warning device</li> <li>Workers wearing correct PPE</li> <li>Perform a risk assessment</li> </ul>	Supervisor and worker	L
<b>Contaminated Atmosphere</b>	Dangerous fumes Hazardous substances Harmful atmosphere Unsafe oxygen levels		E	<ul style="list-style-type: none"> <li>Ensure no unsafe levels of atmospheric contaminants</li> <li>maintain oxygen at safe levels</li> <li>Do not use cleaning solvents in poorly ventilated areas.</li> <li>the concentration of flammable contaminant in the atmosphere is below 5% of its LEL</li> <li>the atmospheric contaminants are reduced to below the relevant exposure standards</li> <li>where the oxygen level is below 21% or atmospheric contaminants cannot be</li> </ul>	Supervisor, Competent person and workers	M

Job Step	Hazard	Risk	Initial Risk Rating E,H,M,L	Control Measures <i>Controls have been identified using the hierarchy of controls</i>	Responsibility <i>Who</i>	Residual Risk Rating E,H,M,L
			E	<p>reduced below relevant exposure levels, entry may only occur with suitable PPE including supplied air</p> <ul style="list-style-type: none"> <li>entry shall not occur when flammable contaminants are greater than or equal to 5% LEL or where oxygen exceeds 23.5%</li> <li>where a concentration of flammable contaminant is found to be more than 5% and less than 10% of its LEL, all persons leave the confined space unless a continuous monitoring, suitably calibrated flammable contaminant detector is used in the confined space at all times while persons are present in it</li> <li>where a concentration of flammable contaminant in the atmosphere of a confined space is found to be 10% of its LEL or more, all persons leave the work area.</li> <li>identification of equipment to be worked on and any other equipment that may be affected</li> <li>energy isolation of the equipment, such as depressurisation and</li> </ul>	Supervisor, Competent person and workers	M
			E	<ul style="list-style-type: none"> <li>energy isolation of the equipment, such as depressurisation and</li> </ul>	Supervisor, Competent person and workers	M

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			E	<ul style="list-style-type: none"> <li>disconnection</li> <li>removal of hazardous substances in the immediate work area that may be impacted by the work</li> <li>preparation of piping such as sewers, drain that may have the presence of hazardous or flammable substances</li> <li>provision of appropriate rescue or fire-protection equipment</li> <li>where required, atmospheric testing of the work environment for the flammable or hazardous vapours and oxygen content.</li> <li>If work stops for a period of more than one hour a new gas test will be required.</li> </ul>	Supervisor, Competent person and workers	M
<b>Flammable Atmosphere</b>	Dangerous fumes Hazardous substances Harmful atmosphere Engulfment	Death Serious injury Burns	E	<ul style="list-style-type: none"> <li>Ensure no unsafe levels of atmospheric contaminants</li> <li>the concentration of flammable contaminant in the atmosphere is below 5% of its LEL</li> <li>the atmospheric contaminants are reduced to below the relevant exposure standards</li> <li>where the oxygen level is below 21% or atmospheric contaminants cannot be reduced below relevant</li> </ul>	Supervisor, Competent person and workers	M

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			E	<p>exposure levels, entry may only occur with suitable PPE including supplied air</p> <ul style="list-style-type: none"> <li>entry shall not occur when flammable contaminants are greater than or equal to 5% LEL or where oxygen exceeds 23.5%</li> <li>where a concentration of flammable contaminant is found to be more than 5% and less than 10% of its LEL, all persons leave the confined space unless a continuous monitoring, suitably calibrated flammable contaminant detector is used in the confined space at all times while persons are present in it</li> <li>where a concentration of flammable contaminant in the atmosphere of a confined space is found to be 10% of its LEL or more, all persons leave the work area.</li> </ul>	Supervisor, Competent person and workers	M
			E	<ul style="list-style-type: none"> <li>identification of equipment to be worked on and any other equipment that may be affected</li> <li>energy isolation of the equipment, such as depressurisation and disconnection</li> </ul>	Supervisor, Competent person and workers	M

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			E	<ul style="list-style-type: none"> <li>removal of hazardous substances in the immediate work area that may be impacted by the work</li> <li>preparation of piping such as sewers, drain that may have the presence of hazardous or flammable substances</li> <li>provision of appropriate rescue or fire-protection equipment</li> <li>where required, atmospheric testing of the work environment for the flammable or hazardous vapours and oxygen content.</li> <li>If work stops for a period of more than one hour a new gas test will be required.</li> </ul>	Supervisor, Competent person and workers	M

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<b>Trench Work</b>	Trench collapsing	Risk of personnel being buried or crushed causing death or injury. Risk of engulfment by gas or liquids.	E	<ul style="list-style-type: none"> <li>Dial before you dig</li> <li>If work is to be performed the SWMS1414 Excavating work deeper than 1.5m is required.</li> <li>SCC Permits to work are in place.</li> </ul>	Supervisor, Competent person and workers	M
<b>Completion of work</b>	Energy services/ stored energy Confined space Traffic Management Plant and equipment Storage of safety equipment Lack of communication	Injury or serious injury	H	<ul style="list-style-type: none"> <li>Competent person completes de-isolation of services</li> <li>Worker safely exits the confined space</li> <li>All equipment is removed from the confined space</li> <li>Standby person maintains visual and communication</li> <li>Ensure gas monitoring continues throughout the exit process</li> <li>Close manhole lid or openings as soon as possible</li> <li>Spotters and traffic control to be used for plant and equipment to exit the site</li> <li>Complete SCC Permit to work and return to Supervisor (if applicable)</li> <li>Open trenches have been covered and/or barricaded</li> </ul>	Supervisor, Competent person and workers  Supervisor,	L



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			H	<ul style="list-style-type: none"> <li>• Advise stake holders of work site status</li> <li>• Appropriately dispose of any rubbish or unwanted materials</li> <li>• Ensure safety equipment is stored in clean and protected bag or other secure location</li> <li>• Any faulty equipment is tagged out of service and reported</li> <li>• Any hazardous materials are contained and disposed of correctly</li> </ul>	Competent person and workers	L

LIKELIHOOD How likely is it to happen? ↓	E=EXTREME H=HIGH M=MEDIUM L=LOW				
	← CONSEQUENCES – How severely could it affect health and safety? →				
	CATASTROPHIC Kill or cause Permanent Disability	MAJOR Serious Illness or Injury	MODERATE Medical Attention, Time off Work	MINOR First Aid Required	INSIGNIFICANT No Injuries
<b>ALMOST CERTAIN</b> Is expected to occur	E	E	H	H	M
<b>LIKELY</b> Will probably occur	E	H	H	M	M
<b>POSSIBLE</b> Might occur	H	H	H	M	L
<b>UNLIKELY</b> Could occur	H	M	M	L	L
<b>RARE</b> May occur only in exceptional circumstances	H	M	M	L	L

Risk Level	Required Action
<b>Extreme</b>	<b>Act immediately:</b> The proposed task or process activity must not proceed. Steps must be taken to lower the risk level to as low as reasonably practicable using the hierarchy of controls.
<b>High</b>	<b>Act today:</b> The proposed activity can only proceed, provided that: The risk level has been reduced to as low as reasonably practicable using the hierarchy of controls. The risk controls must include those identified in legislation, Australian Standards, Codes of Practice etc. and The document has been reviewed and approved by the supervisor and A Safe Working Procedure or Safe Work Method has been prepared and The supervisor must review and document the effectiveness of the implemented risk controls
<b>Medium</b>	<b>Act this week:</b> The proposed task or process can proceed, provided that (i) The risk level has been reduced to as low as reasonably practicable using the hierarchy of controls and The document has been reviewed and approved by the supervisor and A Safe Working Procedure or Safe Work Method has been prepared.
<b>Low</b>	<b>Act this month:</b> Managed by local documented routine procedures which must include application of the hierarchy of controls.

**Acknowledgement register**

All workers are to sign this register to indicate they have read and understood this document prior to commencing work.

Name	Signature	Date	Name	Signature	Date