

| SAFE WORK METHOD STATEMENT | | Confined Space Work | | |
|--|---|---|---|---------------------|
| Reference documents | Work Health & Safety Act and Regulation 2011, Codes of Practice; How to manage Work Health Safety Risks, Managing the risk of Chemicals in the Workplace, Hazardous Manual Tasks, First aid in the workplace, Confined spaces, Construction Work, Demolition Work, AS/NZS 2865:2009 Confined Spaces P16 Confined Spaces, P01 Responsibility and Supervision, P03 Safety Legislation, P09 Safety Training, P13 Working at Height, P18 Electrical Safety, P25 Hot Work, FM16/44 Permit to Work Confined Spaces , F01 Hot Work – Risk Assessment Checklist, P28 Energy Isolation & Barricading Procedure, P28.F01 Energy Isolation Plan | | | |
| SWI: | Safe Work Instruction - Air Blower for Entry into Confined Spaces, Safe Work Instruction - Gas Detector - Use & Maintenance Safe Work Instruction - Self Contained Breathing Apparatus, Safe Work Instruction - Welding - Oxy Gas, Safe Work Instruction - Welding Arc – Electric, Safe Work Instruction - Tag Out | | | |
| Training and Competencies | General construction induction card (white card), Enter and Work in Confined Spaces, Gas Test Atmospheres, Risk Management, First Aid Training, Issue Permits to Work | | | |
| Safety data Sheets | As required | | | |
| Personal Protective Equipment | As determined by risk assessment. Safety footwear, High visibility long sleeve shirt and trousers, Sun screen, Protective gloves, Hard hat. | | | |
| Plant and Equipment | Gas detector, harness, karabiner, rescue pole | | | |
| Inspection and Testing | Pre start checks on all plant and equipment, inspection as per manufacturers requirements | | | |
| Hazardous Chemicals and Dangerous Goods | As required | | | |
| High Risk Work <i>Indicate if any of the HIGH risk activities are performed by workers</i> | <input checked="" 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 checked="" 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 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. | | | |
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| | | | |
| SWMS Prepared by: | Name and signature: | Date: | |
| Authorised by: | Name and signature: | Date: | |

**SWMS are to be reviewed as per P04 Document Control and Safety Procedure or when there has been a change to the Task / Process or Legislation.*

| 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 |
|--|---------------------------------------|---|---------------------------------------|--|-------------------------------------|--|
| Step 1) Before commencing confined space work - Authorised Person to Complete Permit to Work - Request for confined space work received - Arrive at site - Conduct site specific risk assessment, induct workers into site | Hazards unknown | Serious incident due to unfamiliar site | E | <ul style="list-style-type: none"> • Authorisation is received for confined space work • Supervisor or Authorised person to conduct site induction | Supervisor or Authorised person | L |
| | Inadequate planning / risk assessment | Unsafe worksite | H | <ul style="list-style-type: none"> • Workers complete site specific risk assessment and SCC Permit to Work – Confined Spaces | Supervisor and Workers | L |
| | Uncontrolled services | Death or serious incident | H | <ul style="list-style-type: none"> • Competent person completes isolation of services • Refer to SWI – Tag Out. Do Not Operate tags are attached to all isolated services • Refer to P28 Energy Isolation & Barricading Procedure & P28.F01 Energy Isolation Plan | Competent Person | L |
| | Inclement weather | Incident due to extreme of weather, poor visibility, slippery work conditions | M | <ul style="list-style-type: none"> • Review weather forecasts prior to starting work • Wear appropriate PPE, have regular breaks, ensure workers stay hydrated in hot conditions • Stop work if required until conditions improve • Reassess site before re-commencing work | Supervisor and Workers | L |
| | Emergency Lack of communication | Delayed assistance | M | <ul style="list-style-type: none"> • Rescue Plan, as documented in Permit to Work – Confined Spaces • First Aid Kit • Establish appropriate communication e.g. two-way radio or mobile phone • Inform Supervisor of work duration • Supervisor may conduct welfare check / phone call | Supervisor and Workers | L |

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|--|---|---|---------------------------------------|---|-------------------------------------|--|
| Step 1) Before commencing confined space work (cont.) - Request for confined space work received - Arrive at site - Conduct site specific risk assessment, induct workers into site | Unauthorised entry | Serious illness to others / or untrained worker | M | <ul style="list-style-type: none"> Ensure workers and others are aware of worksite Isolate work area, erect barrier / safety tape / temporary fencing and Confined Space Work signage | Supervisor and Workers | L |
| | Uneven or slippery ground | Slip, fall Muscular skeletal injury | M | <ul style="list-style-type: none"> Inspect work area for appropriate foot placement and vehicle access Walk where firm surface can be seen (e.g. not through long grass) Ensure surfaces are stable and not slippery or soft before driving or walking | Supervisor and Workers | L |
| | Biological hazard Sharps | Hepatitis A & B Sharps injury | M | <ul style="list-style-type: none"> Maintain a high level of personal hygiene, hand washing, hand sanitizer Current hepatitis A & B vaccination Wear appropriate PPE, may include disposable coveralls / face shield Sharps training, sharps disposal kit Wash down plant prior to use Eat in designated areas | Supervisor and Workers | L |
| | Moving Plant | Serious Incident Struck by moving plant / object | M | <ul style="list-style-type: none"> Maintain minimum clearance zone Ensure workers and others are aware of worksite Isolate area for 5m distance if possible Erect barrier / safety tape and Confined Space Work signage | Supervisor and Workers | L |
| | Unsuitable / faulty plant and equipment | Explosion Serious incident Equipment failure | H | <ul style="list-style-type: none"> Ensure bump gas detector is conducted, workers are trained in the testing process Ensure gas detector is within calibration date Required pre start plant checks are complete Ensure all safety equipment is within test date and has been inspected immediately prior to working Ensure safety equipment is suitable for the type of confined space entry Plant is intrinsically safe if required | Supervisor and Workers | L |
| Step 1) Before commencing confined space work (cont.) | | | | | | |

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|---|-----------------------|----------------------------------|---------------------------------------|---|-------------------------------------|--|
| <ul style="list-style-type: none"> - Request for confined space work received - Arrive at site - Conduct site specific risk assessment, induct workers into site | Workers fitness level | Fall from heights Injury | H | <ul style="list-style-type: none"> • Workers undergo confined space medical every 3 years • Worker maintains required fitness level | Supervisor and Workers | L |
| Step 2) Preparation for entry <ul style="list-style-type: none"> - Atmosphere checks from surface into confined space | Working from heights | Fall from height Slips, trips | H | <ul style="list-style-type: none"> • Ensure all safety equipment is within test date and has been inspected immediately prior to working • Ensure safety equipment is suitable for the type of confined space entry • Set up rescue equipment suitable for confined space • Clear tools equipment and material from the opening • Visually check opening for hazards (snakes, sharps, etc.) • Check the condition of ladders and steps • Use PPE e.g. harness, fall arrestor • Workers is connected to the winch cable by the safety harness at all times, with a second safety rescue rope available • Ensure winch remains in fall arrest mode | Supervisor and Workers | L |

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|---|-------------------------|---|---------------------------------------|--|-------------------------------------|--|
| Step 2) Preparation for entry (cont.) - Atmosphere checks from surface into confined space | Poor quality atmosphere | Fire or explosion Suffocation due to oxygen deficiency, poisoning (e.g. by carbon monoxide) Equipment failure | H | <ul style="list-style-type: none"> • Allow time for natural ventilation • Gas detection procedures must be conducted before any person enters the confined space, ensure tests are conducted at multiple levels • Gas detectors must undergo recalibration every 3 months through Shoaltec. • Follow SWI – Gas Detector • Mechanical ventilation may be required if natural ventilation doesn't provide a safe atmosphere • Place the gas detector back into the confined space for continuous monitoring, closest to the breathing zone | Supervisor and Workers | L |
| Step 3) Entering the confined space | Change in atmosphere | Fire or explosion Suffocation due to oxygen deficiency, poisoning (e.g. by carbon monoxide) | H | <ul style="list-style-type: none"> • Monitor the operation of the gas detectors at all times, if the alarms sounds worker is to leave the confined space immediately or implement rescue plan • Standby person to maintain visual or audio communication at all times • Standby person is not to perform any other work tasks • Rescue plan is known by Standby person and other workers • Workers are to immediately exit the confined space work area if headache, dizziness, nausea or a burning sensation in throat or eyes is experienced | Supervisor and Workers | L |

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|---|---|-----------------------------------|---------------------------------------|--|-------------------------------------|--|
| Step 3) Entering the confined space (cont.) | Working from heights | Fall from height Slips, trips | H | <ul style="list-style-type: none"> • Ensure all safety equipment is within test date and has been inspected immediately prior working • Ensure safety equipment is suitable for the type of confined space entry • Set up rescue equipment suitable for confined space • Clear tools equipment and material from the opening • Check the condition of ladders and steps • Use PPE e.g. harness, fall arrestor • Workers is connected to the winch cable by the safety harness at all times, with a second safety rescue rope available • Ensure winch remains in fall arrest mode | Supervisor and Workers | L |
| Step 4) Working in the confined space - Hot works - Monitoring the atmosphere Step 4) Working in the confined space (cont.) - Hot works | Hot work in confined spaces Explosive atmosphere | Explosion Serious Incident | H | <ul style="list-style-type: none"> • Complete Risk Assessment Checklist - Hot Works • Refer to P25 Hot Work Procedure • Ensure mechanical ventilation is in use • Ensure the correct respiratory PPE is used, minimum P2 • Follow SWI – Welding Arc – Electric • For electrical arc welding connection to electrodes (including a fully insulated electrode holder), earth lead and equipment should be fully insulated and must be thoroughly checked • Follow SWI – Welding – Oxy Gas • For oxy-acetylene work gas cylinders shall be kept outside of confined spaces Torches and pressure hosing connected to the supply shall not be left inside the working area when not in use | Supervisor and Workers | M |

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|-----------------------------|---|--|---------------------------------------|---|-------------------------------------|--|
| - Monitoring the atmosphere | Change in atmosphere | Fire or explosion Suffocation due to oxygen deficiency, poisoning (e.g. by carbon monoxide) | H | <ul style="list-style-type: none"> Monitor the operation of the gas detectors at all times, if the alarms sounds worker is to leave the confined space immediately or implement rescue plan Standby person to maintain visual or audio communication at all times Standby person is not to perform any other work tasks Rescue plan is known by Standby person and other workers Workers are to immediately exit the confined space work area if headache, dizziness, nausea or a burning sensation in throat or eyes is experienced | Supervisor and Workers | L |
| | Electrical Equipment Electricity | Electrocution | H | <ul style="list-style-type: none"> Only air driven or battery operated equipment should be used in confined spaces Avoid the use of electrical equipment in confined spaces. If portable equipment is the only option, the equipment is to be connected to an earth free low voltage supply located outside of the confined space or protected through an RCD (located outside the confined space) | Supervisor and Workers | L |
| | Combustion engines Fumes | Poisoning, suffocation | H | <ul style="list-style-type: none"> Do not position combustion engines equipment (generator, truck, car) where exhaust fumes can be drawn into the confined space Never take combustions engines into a confined space | Supervisor and Workers | L |
| | Raising and lowering of equipment Hazardous manual tasks | Muscular skeletal injury Impact injury | H | <ul style="list-style-type: none"> If the item can't be safely carried in a bucket, it is to be securely tied to a working line. Do not stand directly below objects being raised or lowered. Do not use rescue lines for this purpose | Supervisor and Workers | L |

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| Step 5) Completion of work - Exiting the confined space - Packing up work site | Energy services Stored energy | Incident / Services not reinstated | H | <ul style="list-style-type: none"> Competent person completes de-isolation of services Follow P28 Energy Isolation procedure | Supervisor and Workers | L |
| | Fall from heights | Fall from height | H | <ul style="list-style-type: none"> Worker safely exits the confined space All equipment is removed from the confined space Standby person maintains visual and communication Ensure gas monitoring continues throughout the exit process Close manhole lid or openings as soon as possible Worker remains connected until risk of fall from heights is eliminated | Supervisor and Workers | L |
| | Poor communication | Serious Incident Complaint | H | <ul style="list-style-type: none"> Secure and return confined space area to original or safe state Complete SCC Permit to Work – Confined Spaces, provide to Supervisor Advise stakeholder of work site status Appropriately dispose of any rubbish or unwanted materials | Supervisor and Workers | L |
| | Storage of safety equipment | Damage to safety equipment | H | <ul style="list-style-type: none"> Ensure safety equipment is stored in clean and protected bag or other secure location Any faulty equipment is tagged out of service and reported | Supervisor 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 |
| ALMOST CERTAIN Is expected to occur | E | E | H | H | M |
| LIKELY Will probably occur | E | H | H | M | M |
| POSSIBLE Might occur | H | H | H | M | L |
| UNLIKELY Could occur | H | M | M | L | L |
| RARE May occur only in exceptional circumstances | H | M | M | L | L |

| Risk Level | Required Action |
|-------------------|---|
| Extreme | Act immediately: 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. |
| High | Act today: 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 |
| Medium | Act this week: 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. |
| Low | Act this month: Managed by local documented routine procedures which must include application of the hierarchy of controls. |

