| Working With Sulphuric | Acid SAFE WORK METH | OD STATEMENT (SWMS) | |
|--|---|--|------------------------------------|
| TASK OF | R ACTIVITY: Working With Sulph | uric Acid | |
| Business Name: | | ABN: | SWMS# |
| Business Address: | | | |
| Contact Person: | Phone: | E pil: | |
| THIS SAFE WORK METHOD | STATEMENT IS APPROX D BY | | |
| Under the Work Health and Safety Regulation (WHS Regulation), a person conduct the proposed work starts. | | required to en the that a safe work method s | tatement (SWMS) is prepared before |
| Full Name: | | | |
| Signature: | | Title: | Date: |
| Details of the person(s) responsible for ensuring implementation, monitoring | opliance the VMS a well as review | s and modifications of the SWMS. | |
| Full Name: | | Title: | Phone: |
| ALL PERSONNEL PARTICIPATING IN ANY ACTIVITY ON THIS MAN HAVE THE FOLLOWING COMMUNICATED | NALE OF ALL RELEVANT PERSONNE EVELOPMENT AND APPROVAL OF | EL WHO HAVE BEEN CONSULTED AND CO THIS SWMS | DMMUNICATED TO IN THE |
| Safety meetings or toolbox talks will be sched ad in account with egislative requirements to first identify any site hazards, such a company hicas those hazards and then to further take steps to either eliminate or contrast each hazard. | | | |
| If an incident or a near miss occurs, all work must stop an attactive 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 CONSTRUC | |
| ☐ involves a risk of a person falling more than 2 meters | I is carried out on or near pressurised gas mains or piping |
| □ is carried out on a telecommunication tower | 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 integ. Y of a sucture | \square is carried out in an area that may have a contaminated or flammable atmosphere |
| □ involves, or is likely to involve, disturbing asb | ☐ involves tilt-up or precast concrete |
| involves structural alteration or repair that quires terminary supart 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 | \Box 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 that 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 MACHINER | RY OR EQUIPMENT NEARBY |
| | |
| | |
| | |



| RISK MATRIX | | | | | | | | | | |
|--|---------------|---------------|---------------|------------|--------------|----------------|---|--|------------------------------------|--|
| LIKELIHOOD | INSIGNIFICANT | MINOR | MODERATE | MAJOR | CATASTROPHIC | SCORE | | | HEIRARCHY OF CONTROLS | |
| ALMOST CERTAIN | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4 ACUTE | SCORE | ACTION | | Elimination Remove the hazard. | |
| LIKELY | 2 MODERATE | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4A ACUTE | DO NOT PROCE | | Substitution | |
| POSSIBLE | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | 4 ACUTE | 3H HIGH | Review befor work starts. | | Replace the hazard. | |
| UNLIKELY | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | 2M MODERATE | Ensure control measures in place. | | Isolate People from the hazard | |
| RARE | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 3 HIGH | 1L LOW | nitor and k⊾ records | | Engineering Isolate the hazard. | |
| RARE LOW LOW MODERATE HIGH HIGH LOW Reserved Isolate the hazard. Iotes on Hierarchy of Controls: Elimination methods are the most effective and preferre usen consisting a hazard. Substitution as the second most effective method of controlling a hazard. Engineering by isolation is the increase the rive, while Administrative controls by changing the work is the fourth most effective method. PPE (Personal Protective Equipment), the least effective Administrative Change the work. PPE PPE PPE PPE PPE PPE | | | | | | | | | | |

| | | | | | | TIVE EQUIPM | | | | | |
|---------------------|---------------------------------|--------------------|---------------|-------------|----------------------------|--------------------|----------------------|------------------------|--------------------|-------------------|---------------------------|
| | | Select the ap | propriate PPL | abo, ruitab | i or the equi | oment used or | the job task | being perform | ned (if applica | able). | |
| FOOT PROTECTION | HAND PROTECTION | HEAD PROTECTION | | P ECTION | R⊾ ⇒PIRATORY PROTECTION | FACE PROTECTION | HIGH-VIS CLOTHING | PROTECTIVE CLOTHING | FALL PROTECTION | SUN PROTECTION | HAIR/JEWELLERY SECURED |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Other PPE Required: | | | | | | | | | | | |
| | Permit or Licenses Requirements | | | | | | Ма | andatory Qual | ifications and | Training | |
| | | | | | | | | | | | |

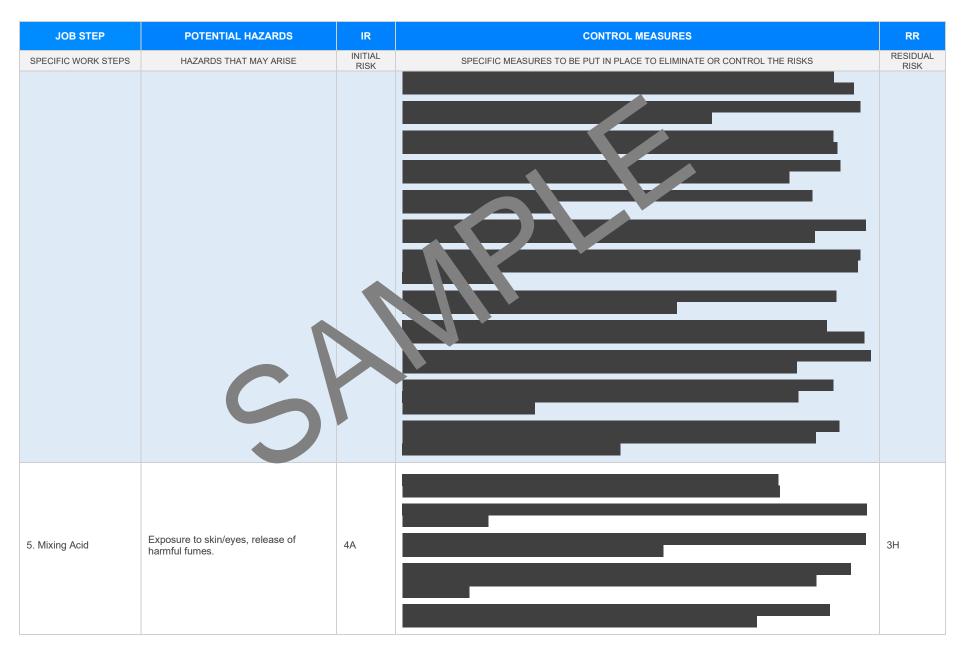


| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
|---------------------|---|-----------------|---|------------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
| 1. Preparation | Inhalation by mist, unintentional ingestion. | 3Н | Conduct a comprehensive risk assessment ordentify potential exposure levels and required controls. Implement engineering controls such as lot exhaust entillation to minimise mist generation. Ensure appropriate personal protective equiping of (PPE) is available, including chemical-resistant gloves, goggles, and respirates when necessary. Provide training for all workers on the proper hands on a risks associated with sulphuric acid to ensure they understand non-uncertained protocols. Set up empended eyewal station and safe ushowers in accessible locations in case of accidental exposure. Matter ventiles on externs regularly to ensure they are functioning effectively at reducing airborne mist. Clean lab estorage treas and containers with hazard warnings and ensure they are securely sealed to prevent bills bleaks. Inplement bills bleaks. Inplement and enforce strict hygiene practices, such as prohibiting eating and drinking in the workplace to avent buotentional ingestion. Implement safe work procedures that include step-by-step instructions for safely using and handling sulphuric acid. Establish an incident response plan that includes procedures for reporting and responding to exposures or spills. Schedule regular health surveillance of employees to promptly identify any adverse health effects related to sulphuric acid exposure. | 2M |
| 2. Training | Lack of qualified personnel, improper handling. | ЗН | Provide comprehensive training programs for all personnel on the safe handling and usage of sulphuric acid. Ensure workers are certified in chemical safety, specifically for handling hazardous substances like sulphuric acid. Implement a buddy system where less experienced workers are paired with seasoned staff for on-the-job training. Include emergency response procedures and spill management as part of the training curriculum. Conduct regular refresher courses to keep all employees updated on best practices and safety regulations. | 2M |

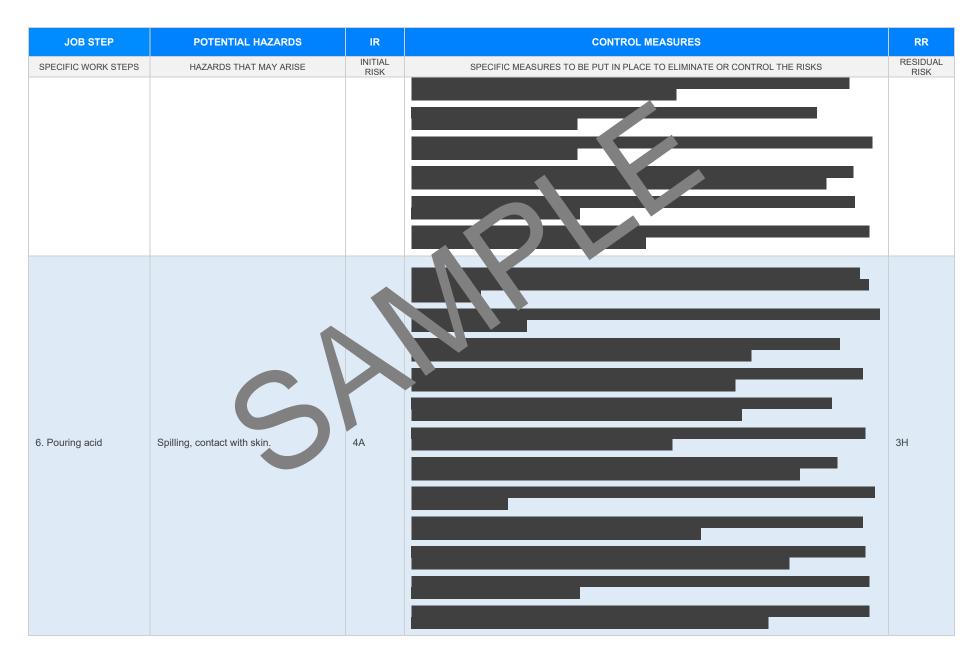


| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
|-------------------------------|---|-----------------|--|------------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
| | | | - Develop clear, written standard operating procedures (SOPs) available for reference at all times in the work area. | |
| | | | - Use role-playing techniques during training session to simulate real-world scenarios and improve preparedness. | |
| | | | - Incorporate a thorough examination mode in training to insure understanding and competence in sulphuric acid handling. | |
| | | | - Enforce strict adherence to personal protective uipment (PPF) usage as taught in the training. | |
| | | | - Assess workers' competency prough practical ever ation ost-training. | |
| | | | - Encourage question feed, k during training tradress any uncertainties or misconceptions. | |
| | | | - Maintain up to ate record of tracking completion and certifications for all personnel. | |
| | | | - Contra risk servicent to identify specific PPE requirements for handling sulphuric acid. | |
| | | | - Ensure worken are trained in the correct use and maintenance of required safety gear. | |
| | | | - Verify the a hilability indecessary PPE, such as corrosive-resistant gloves, goggles, face shields, and aprons, refore the methods any work with sulphuric acid. | |
| | | | lent t a system for regular inspection and replacement of damaged or worn-out safety equipment. | |
| | | | Provide inventory checklist to track stock levels of essential safety gear and replenish supplies as eded. | |
| | | | - Exablish designated storage areas for PPE to prevent contamination or damage. | |
| 3. Safety Gear Acquisition | Incorrect gear, unaversolity or safety equipment. | 4A | - Confirm compatibility of the selected PPE with sulphuric acid through product specifications or manufacturer consultation. | ЗН |
| | 5 | | - Ensure emergency eyewash stations and safety showers are accessible and functional within proximity to work areas. | |
| | | | - Involve workers in selecting comfortable and well-fitted safety gear to encourage compliance with protective measures. | |
| | | | - Display clear signage indicating required PPE in areas where sulphuric acid is handled. | |
| | | | - Allocate a responsible person to oversee PPE compliance, including conducting spot checks and addressing non-compliance. | |
| | | | - Provide alternative solutions or backup stock if primary safety gear becomes unavailable, ensuring no task proceeds without adequate protection. | |
| | | | | |
| | Incorrect use of gear, potential area | | | |
| 4. Application of gear | exposure to acid. | ЗH | | 2M |
| | | | | |
| | | | | |





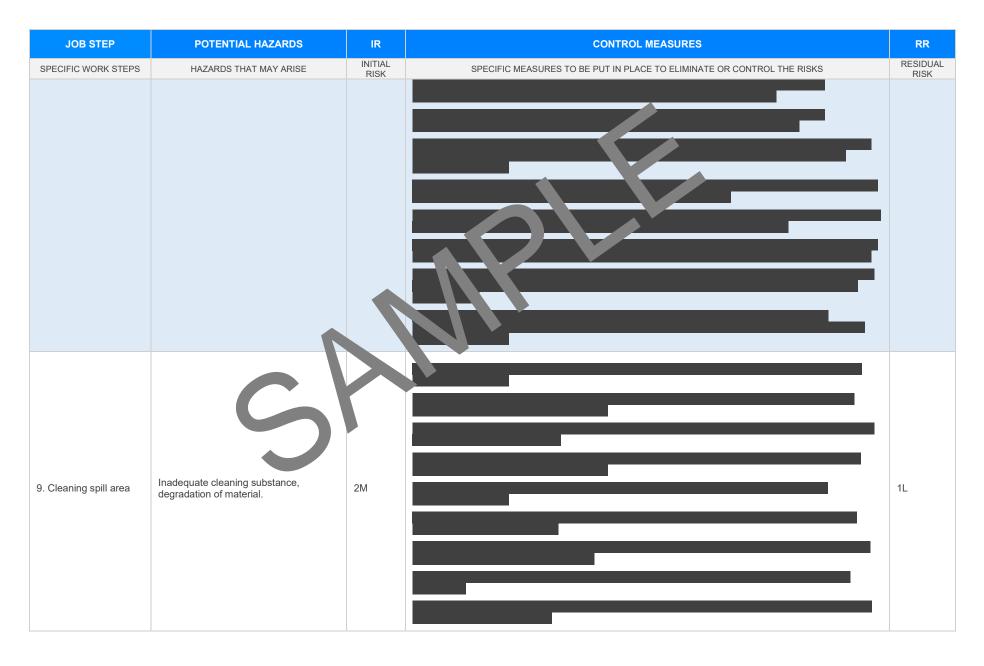






| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
|---------------------|--|-----------------|--|------------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
| 7. Storing acid | Leaks, improper sealing. | ЗН | | |
| 8. Disposal of acid | Improper disposal, environmental damage. | ЗН | | 2M |



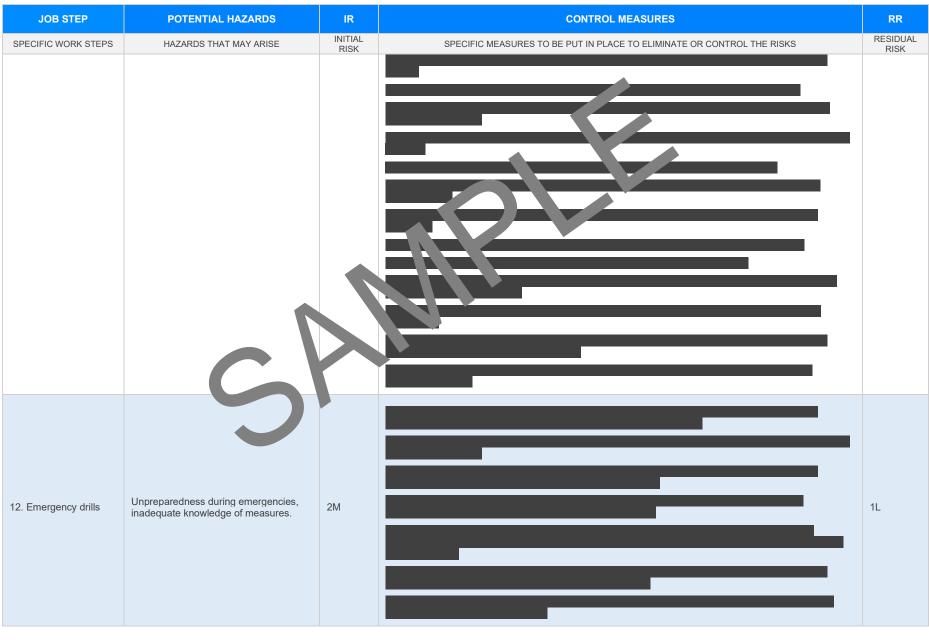




| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
|-----------------------------------|---|-----------------|--|------------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
| | | | | |
| 10. Acid container maintenance | Container comprovise, handling of compromised continer, | 2М | | 1L |
| 11. Equipment check | Missed signs of wear and tear, usage of faulty equipment. | ЗН | | 1L |

Version 2.5

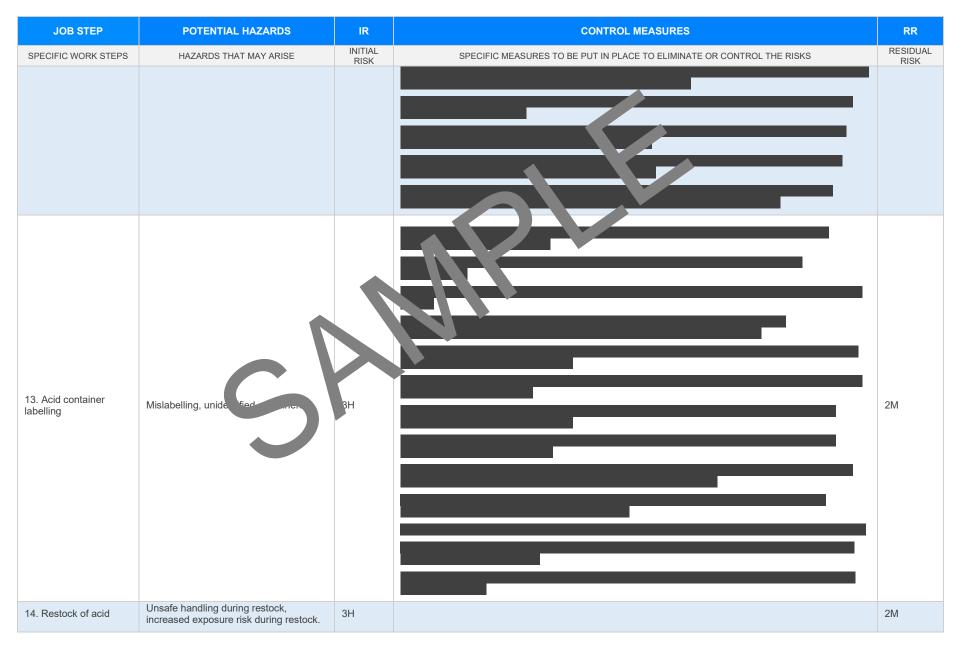




Version 2.5

Date of Issue:

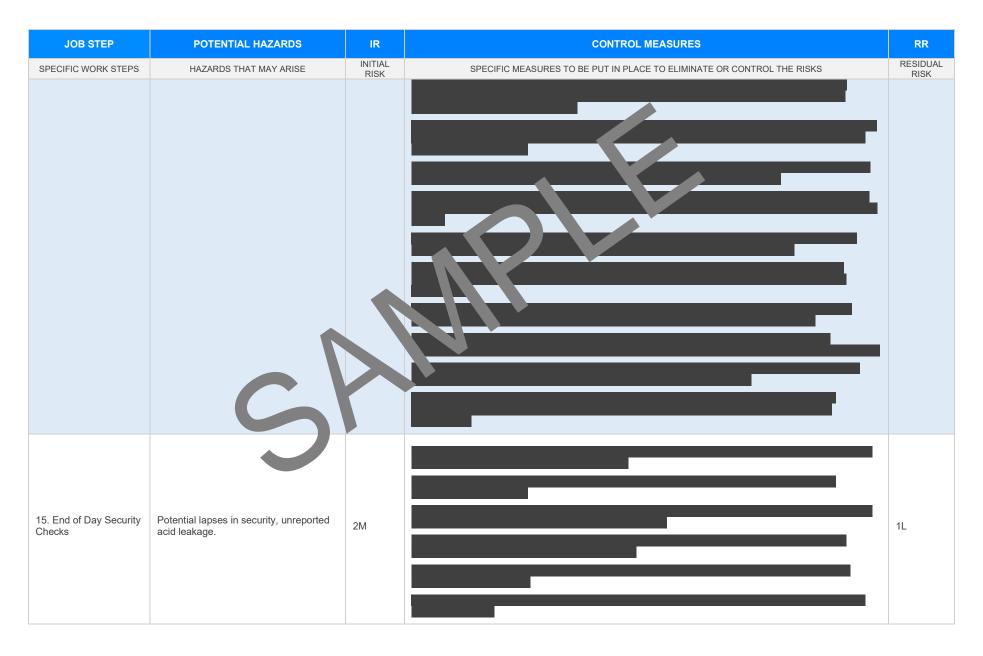




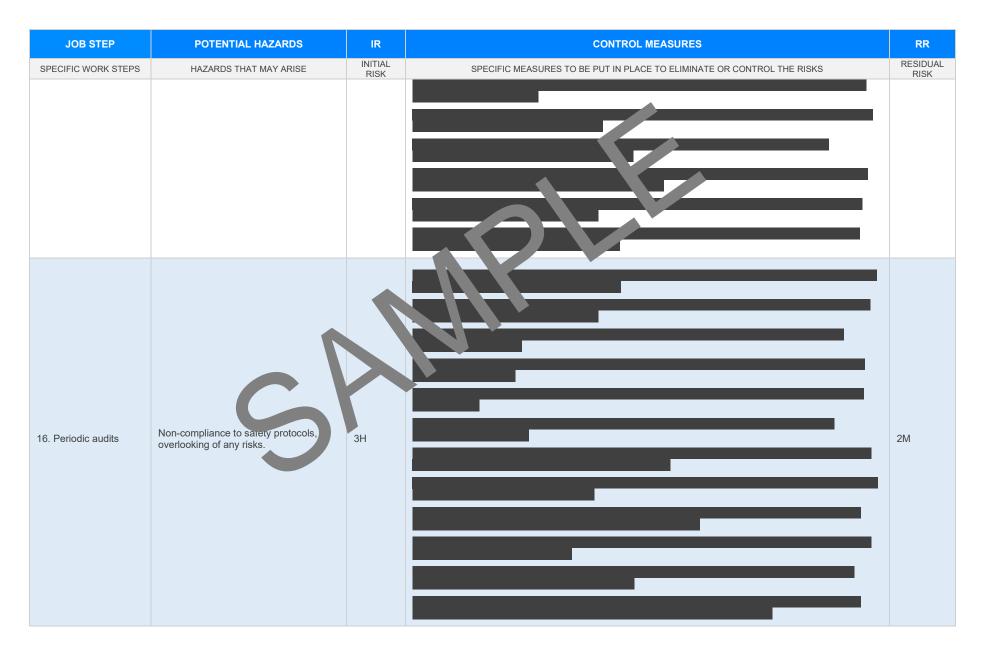
Version 2.5

Date of Issue:









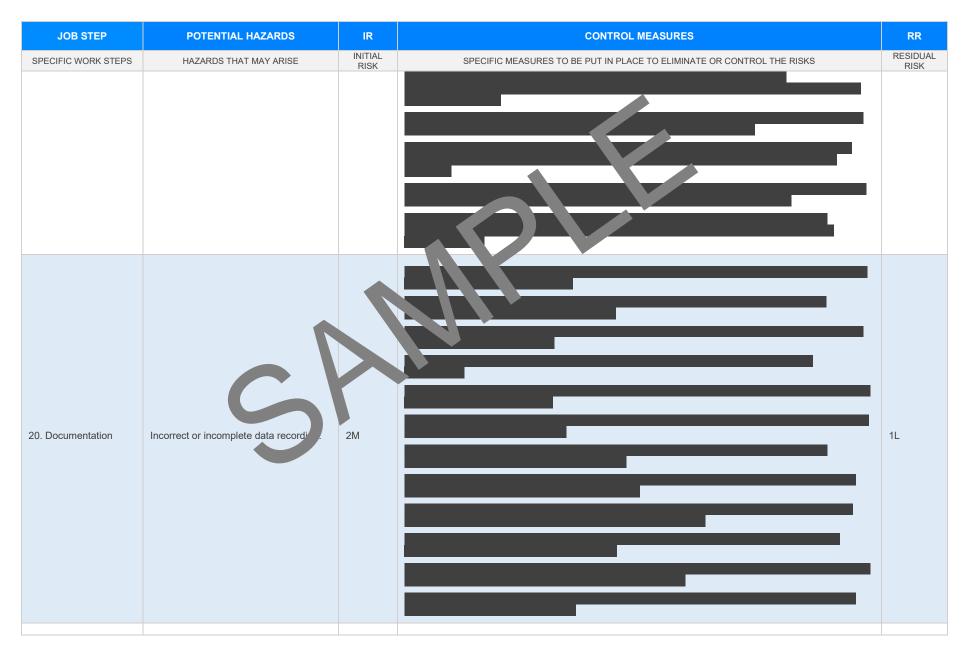


| JOB STEP | POTENTIAL HAZARDS | IR | CONTROL MEASURES | RR |
|-------------------------------|---|-----------------|--|------------------|
| SPECIFIC WORK STEPS | HAZARDS THAT MAY ARISE | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
| 17. Acid Disposal | Unlawful disposal, contamination of soil/water. | 44 | | 3Н |
| 18. Post work decontamination | Inadequate decontamination, neglect of exposed areas. | 2M | | 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 |
| | | | | |
| 19. Patient Care in case of exposure | Delayed first aid, inadequate medical knowledge. | ЗН | | 1L |





Date of Issue:



| 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 |
| | | | | |
| | | | | |
| | C | | | |



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 REF | ERENCES |
|---|---|
| RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISL | ATIVE REFERENCES DANY STATE DAT 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 au Safety Act 2004 Occupational Health and onfety or gulations 2017 Legis from VIC: <u>https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-ogulations</u> or thes on mactice VIC <u>actps://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice</u> |
| 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/legislative Codes of Practice NSW: https://www.safework.nsw.gov.au/legal-obligations/legislative | Western Australia Work Health and Safety Act 2020 Work Health and Safety Regulations 2022 Legislation Western Australia: <u>https://www.commerce.wa.gov.au/worksafe/legislation</u> Codes of Practice WA: <u>https://www.commerce.wa.gov.au/worksafe/codes-practice</u> |
| Northern Territory Work Health and Safety (National Uniform Legislation) Act 2011 Work Health and Safety (National Uniform Legislation) Regulations 2011 Legislation NT: <u>https://worksafe.nt.gov.au/laws-and-compliance/weiplace-serv-laws</u> Codes of Practice NT: <u>https://worksafe.nt.gov.au/ferriced-resources/compliance/weiplace-serv-laws</u> | Safe Work Australia Links Law and Regulation (All States): <u>https://www.safeworkaustralia.gov.au/law-and-regulation</u> Model Codes of Practice: <u>https://www.safeworkaustralia.gov.au/resources-publications/model-</u> <u>codes-of-practice</u> Model Codes of Practice |
| South Australia Work Health and Safety Act 2012 (SA) Work Health and Safety Regulations 2012 (SA) Legislation for SA: <u>https://www.safework.sa.gov.au/resources/legislation</u> Codes of Practice for SA: <u>https://www.safework.sa.gov.au/work_aces/codes-of-practice#COPs</u> | 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 |
| 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 | 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 |
| 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. | 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 gualifications 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 N THE ST ATEM ANT MONITORING AND REVIEW

d must reviewed (and

hav be sted by the operation

should be carried out in

The SWMS must be reviewed regularly to make sure it remains fective revised if necessary) if relevant control measures are revised. The viewn consultation with workers (including contractors htractors 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 persons involved with the work are advised that a revision has been made and how they can acces he revised SWMS, including all persons who will need to change a work procedure or system as a region of the review are advised of the changes in a way that will enable them to implement their duties antly 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. | \boxtimes | |
| Foreseeable hazards are identified and documented for each step. | \boxtimes | |
| Any hazards listed in any site risk assessments have been added to the SWMs | \boxtimes | |
| SWMS initial risk (IR) column as well as residual risk (RR) column mpleted. | \boxtimes | |
| Check control measures added to the SWMS are the most effective selection | \boxtimes | |
| Responsible person is assigned and listed on the property of the importation control measures. | \boxtimes | |
| Permit or licenses requirements specified, su as Hot Work, Electric Work, Work at Heights etc. | \boxtimes | |
| SWMS identifies plant and equipment to be use | \boxtimes | |
| Details of inspection checks required for any equipment listed protection on the SWMS. | \boxtimes | |
| Describes any mandatory qualifications, experience, and g or skills required to perform the work. | \boxtimes | |
| Applicable personal protective equipment is selected on the SWMS. | \boxtimes | |
| Reflects and documents any legislative references and/or Australian Standards. | \boxtimes | |
| Identifies any hazardous substances used with specific control measures in line with any SDS. | \boxtimes | |
| | | |
| REVIEWED BY | DATE REVIEWED | |
| SIGNATURE | DATE COMPLETED | |