# Ignition Of Propane Cutting Torches | SAFE WORK METHOD STATEMENT (SWMS)

**TASK OR ACTIVITY: Ignition Of Propane Cutting Torches**

| | | | |
|---|---|---|---|
| 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, 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. |

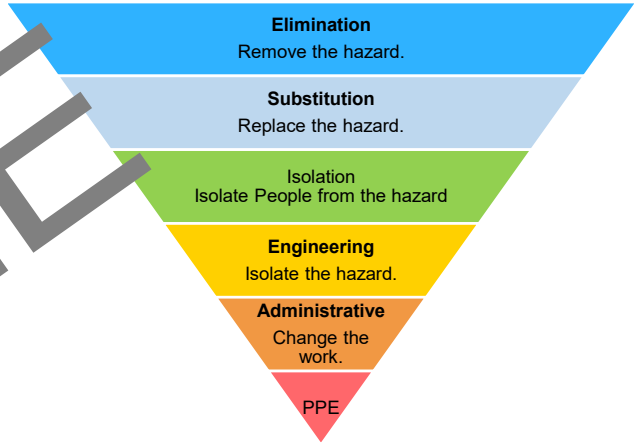
| ANY HIGH-RISK MACHINERY OR EQUIPMENT NEARBY |
|---|
| |

## 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 | Miscalculation of gas ratio, mishandling of combustible material | 2M | - Conduct a thorough risk assessment to identify potential hazards associated with propane cutting torches before beginning the task.<br>- Train all workers in correct gas ratio calculations and ensure they understand the importance of this step.<br>- Use gas detection equipment to regularly monitor air quality and ensure optimal ratio of oxygen to propane.<br>- Implement strict procedures for storing and handling cylinders to prevent mishandling of combustible materials.<br>- Ensure all equipment, including regulators and hoses, are regularly inspected for leaks or damage.<br>- Clearly label all gas lines and cylinders to avoid confusion and miscalculation of gas ratios.<br>- Maintain a clear workspace area free from unnecessary combustible materials to reduce the risk of ignition.<br>- Provide appropriate personal protective equipment (PPE) such as flame-resistant clothing, gloves, and eye protection for all workers.<br>- Establish an emergency response plan specifically for ignition incidents and ensure all workers are trained in its execution.<br>- Require that fire extinguishers or other fire suppression devices are readily accessible at the worksite.<br>- Establish clear communication procedures among team members to ensure safe and effective operations.<br>- Restrict access to the work area to only those individuals necessary for the performance of tasks involving propane cutting torches. | 1L |
| 2. Pre-inspection | Inadequate inspection causing gas leaks, lack of appropriate PPE usage | 3H | - Conduct thorough visual inspections of all hoses and connectors for signs of wear, damage, or cracking before each use.<br>- Ensure that propane cylinders are stored and transported in an upright position to prevent leaks.<br>- Implement routine maintenance schedules for equipment and make necessary repairs promptly.<br>- Use leak detection solution or soapy water to check connections for leaks prior to ignition.<br>- Train all personnel on proper inspection techniques and the importance of regular checks.<br>- Confirm that all safety valves and regulators are functioning correctly.<br>- Verify that all equipment is consistent with Australian standards and regulations.<br>- Position the torch and other flammable objects away from unintended ignition sources.<br>- Ensure all workers involved have completed safety induction specific to gas equipment usage. | 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 |
| | | | - Mandate the use of appropriate Personal Protective Equipment (PPE) such as flame-resistant gloves, face shields, and long-sleeved clothing.<br>- Provide easy access to fire extinguishers or other fi[illegible]ighting equipment near the work area.<br>- Limit the number of people in the immediate v[illegible]inity during the pre-inspection phase to reduce risk exposure.<br>- Clearly communicate any identified risks and c[illegible]ontrol measures at pre-start meetings. | |
| 3. Torque Set-Up | Incorrect assembly, high pressure release from cylinder | | - Ensure all workers involved a[illegible] trained and comp[illegible]ent in h[illegible]ndling and setting up propane cutting torches.<br>- Conduct a pre-o[illegible]peration i[illegible]spection to verify that all equipment, including hoses and connections, are in good condition and free from damage.<br>- Follow the ma[illegible]nufacturer's instructions and guidelines for proper assembly and torque set-up of propane cutting t[illegible]orches.<br>- Use a[illegible]ppropriate to[illegible]ls and equipment designed specifically for assembling and torquing gas cylinders and cutting t[illegible]orches.<br>- Check that all threads and connections are clean and free from debris or damage before assembly.<br>- Ve[illegible]rify that the cylinder valve is fully closed before attaching any equipment to prevent accidental high-pressure r[illegible]elease.<br>- Ensure that regulators and pressure gauges are correctly fitted and rated for the specific type of gas being used.<br>- Use leak detection spray or soapy water to check all connections for possible leaks after assembly.<br>- Position the cylinder upright and secure it to prevent tipping during torque set-up and operation.<br>- Maintain a safe distance between the torch and any flammable materials or ignition sources during assembly.<br>- Inspect and replace any worn or damaged O-rings or gaskets on connections to ensure they seal properly and prevent leaks.<br>- Implement lockout/tagout procedures as necessary while conducting maintenance or repairs on equipment.<br>- Make sure there is adequate ventilation in the work area to prevent accumulation of gas and potential explosions. | 3H |
| 4. Ignition | Sudden backfire, gas leakage leading to fire | 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] | |
| 5. Cutting Operation | Inconsistent cutting due to improper handling, eye injury from sparks | 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] | |
| 6. Gas Shut Down | Improper shutdown leading to gas leakage, inadequate equipment cooling prior to storage | [redacted] | [redacted] | 1L |
| 7. Post-inspection | Inadequate post-operation check, overlooking mechanical faults in the torch | 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] | |
| 8. Maintenance | Injury during maintenance, failure to detect wear and tear | 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] | |
| 9. Cylinder Exchange | Cylinder falls during [illegible]ange, ineffectual sealing of cylinder upon completion | 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 |
| 10. Ventilation Check | Inadequate ventilation causing gas build-up, ignition risk for other combustibles due to insufficient air flow | 2M | [redacted] | 1L |
| 11. Torch Test | Unnoticed gas leak during test, unexpected flame direction change | 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] | |
| 12. Equipment Cleaning | Accidental ignition duri[redacted]ing, injur[redacted] from handling hot to[redacted] or sharp edges [redacted] | [redacted] | [redacted] | 1L |
| 13. Verification process | Overlooking risks due to insufficient training, integrity verification failure | 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. Storage | Improperly stored equipment leading to accidental damage or activation | 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] | |
| 15. Debrief | Insufficient information transfer causing misunderstanding during welding operation, overlooking key safety issue | 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 |
|---|---|---|
| | | |
| | | |
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| | | |



## 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 are 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** | |