Stage 2 assessment guide

Plumber

(General)

(ANZSCO: 334111)





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1 What is a Stage 2 assessment?

Your Stage 2 assessment is an important stage of the assessment process.

The Stage 2 assessment takes 7-8 hours and involves you completing:

- A Practical Assessment: a series of practical work-based tasks that demonstrate your skills as a Plumber
- A Technical Interview: an interview and/or written assessment designed to find out the depth of your trade knowledge and how you apply that knowledge.

Your assessment will be conducted in English and no interpreter is allowed.

The practical tasks and interview questions asked by the assessor are based on the units listed on the **Fact Sheet** for your trade. These units describe the skills and knowledge expected in your trade by industry in Australia.

Download the Plumber Fact Sheet here: https://www.vetassess.com.au/skills-assessment-for-migration/trade-occupations/guides-and-factsheets

2 Who will assess me?

You will be assessed by an assessor who is:

- A qualified Plumber: Your assessor has the qualification you are applying for, as well as many years of experience working in Australia as a Plumber.
- A qualified assessor: Your assessor also holds a qualification as an assessor. They have experience questioning and listening to candidates from all types of backgrounds.

3 Where will my assessment be held?

Your assessment will be held at a VETASSESS approved venue. Approved venues are located in certain countries around the world.

When you apply and pay for your Stage 2 assessment, we will schedule it to occur at the approved venue closest to your location. If you wish to change this location to a different approved venue, please send a request via email to: tradeassess@vetassess.com.au

When payment for your Stage 2 assessment is confirmed, we will email you your Admission Voucher. Your voucher will contain the venue address, date and time.



4 What do the assessment tasks involve?

An overview of the types of activities you may be asked to perform during your assessment is provided below. Please note that this is SAMPLE ONLY. This is not a complete list and may change from time to time. Your assessor will provide you with details of the assessment activities on the day of your assessment.

- Prepare and/or study plans and specifications to work out the layout of plumbing systems and materials needed
- Find and mark position for connections, measure pipes and mark cutting or bending lines
- Cut, thread and bend pipes, assemble and install piping, valves and fittings, join pipe sections and secure pipes
- Test lines as required by local plumbing regulations
- Fabricate, install plumbing fixtures such as a continuous flow hot water system, basin, and gas meter connection.
- Install, disconnect, reconnect and commission type A gas appliances.
- Install, commission and adjust water heating systems, controls and devices.
- Fabricate and install roof components.
- Give written and verbal answers to technical questions to demonstrate your knowledge.

The assessment will also include completion of an elective in either gas services or roofing.



5 What do I need to bring?

You **must** bring the following to your assessment:

- Your current passport
- Your Admission Voucher: Receiving the Admission Voucher can take up to 3 weeks from the time of your payment. If you are concerned you have not received your Admission Voucher email us at: www.tradeassess@vetassess.com.au
- Practical Experience Summary (PES): The PES document will be emailed to you at the same time as your Admission Voucher. This document must show your employment experience over the last 5 years and the variety of work that you have undertaken in that time. You can do this by providing additional supporting material that you have not submitted previously.
- Personal protective equipment (PPE): Please refer to Appendix D 'Safe working practice' for more information about the PPE you should bring
- Work Method Statement (WMS) and Safe Work Instructions (SWI) provided at Appendix D 'Safe working practice'

You are also encouraged to bring your own hand tools to the assessment. If you are unable to bring your own tools, VETASSESS will ensure tools are made available, but you may have to share these with other candidates. Please refer to **Appendix A 'Recommended hand tools'** for more information about the tools you should bring

All other equipment and materials necessary to complete the assessment tasks will be provided.

Please note:

- You must not bring any reference materials such as written notes, text books or manuals.
- You will not be allowed to use a mobile phone or other electronic devices during the assessment.



6 What will happen on the day of my assessment?

This is what will happen on the day of your assessment.

Arrival 10 mins

You will arrive at the time and location stated on your Admission Voucher. You will present your voucher and passport to the venue supervisor for checking.

Introduction 10 mins

Your assessor will explain the tasks you are required to complete and will provide you with the Assessment Workbook for your occupation.

Safety Task 30 mins

You will complete a Workplace Health and Safety (WHS) task.

The WHS task may require you to read paperwork and write answers, or listen and respond to questions relevant to your occupation.

It may include questions on areas such as

- job safety analysis
- working with equipment
- personal protective equipment (PPE).

Practical tasks Approx. 7 hrs (includes lunch break)

You will complete a number of practical tasks as directed by your assessor (refer to Section 4 for examples of tasks that you will be asked to complete).

Some tasks may need to be completed in a certain time period.

You will wear appropriate personal protective equipment (PPE) and follow all Workplace Health and Safety (WHS) requirements.

Note: If WHS requirements are not followed your assessor will stop your assessment.

Technical interview and theory questions Throughout day

Your assessor will ask you questions to gather evidence of your knowledge.

You will also answer a selection of written theory questions. For a sample of questions, please refer to Appendix C 'Sample knowledge questions'.

Finish 10 mins

You will clean up your work area and submit your Assessment Workbook.

Note: Your assessor will not be able to tell you your result.



7 What are the rules of the assessment?

To avoid cancellation of your assessment, you must follow these rules:

- Arrive on time your interview will be cancelled if you arrive more than 30 minutes late.
- Follow your assessor's instructions.
- Follow workplace health and safety precautions.
- Do not bring any reference materials including written notes, text books, manuals or devices with access to the internet.
- Do not bring any electronic communication or recording devices including mobile phones, laptops, tablets or MP3 players.
- Do not ask other candidates for assistance or interrupt them.

The venue supervisor or assessor may also cancel your assessment if you:

- cannot prove your identity
- cannot understand and/or answer questions in English
- become extremely distressed or disturbed
- appear ill or physically unwell
- become angry or violent
- arrive at the assessment venue in an abnormal state, such as being intoxicated or drugged.



8 How can I prepare for my assessment?

Use the following checklist to help you prepare for your assessment.

Action	Completed
Download and read the Fact Sheet for your occupation: http://www.vetassess.com.au/skills-assessment-for-migration/trade-occupations/guides-and-factsheets	
View each unit in your qualification using the following website: https://training.gov.au/Search/Training	
This will help you to understand the knowledge and skill requirements for each unit.	
Read the sample practical tasks stated in Section 4.	
Think about how you would complete these sample tasks by asking yourself:	
 what are the steps I would follow? what tools and equipment I would use? what safety precautions I would I observe? 	
Think about the required knowledge for each unit and if you could answer questions about this knowledge. Refer to the sample questions in Appendix C.	
Ask a friend or family member to ask you questions about your occupation.	
For example:	
"What are the main safety hazards at your work – how do you make sure you are safe?"	
"Tell me the tasks you do at work. Now tell me how you do each of them, what steps do you take, why do you do it that way?"	
"Where do you get information from to help you do tasks at work?"	
"Explain how a tool/piece of equipment you use works."	
"How do you know what work you must do each day?"	
"How do you work out what is wrong with a?"	
"How would you fix α?"	
"How do you make a?"	
"What is one of the most difficult tasks you have to do? Why is it difficult? Give me an example of how you have completed this difficult task."	
If you think there are areas/units where you are not very knowledgeable or skilled, take action to improve. This could include:	
 referring to the 'Suggested Reading' provided in Appendix B asking questions of experts completing a training course asking others to show you how to perform a task practising performing practical tasks. 	



9 What if I have a special need?

Candidates with special needs can request reasonable adjustments to the assessment process.

Reasonable adjustment refers to actions taken to provide a candidate with a special need or disability the same opportunities as every other candidate, while maintaining the integrity of the assessment outcome.

If you wish to request a reasonable adjustment, please contact and discuss your individual situation with VETASSESS.

Please note:

- All assessments must be conducted in English. No translator is allowed to attend an assessment.
- Reasonable adjustment does not mean that all candidates' requests are granted.

10 How will I get my results?

Your assessor **cannot** provide you with your result at the end of the Stage 2 assessment. This assessment only forms part of the assessment process.

Your assessment results will be available. Your results will also be sent to the address that you nominated on your application form.

You will receive the following depending on your result:

Successful candidates

If you successfully complete your assessment, you will receive:

- a migration outcome letter if the assessment is to support your visa application
- an Offshore Technical Skills Record (OTSR) that lists the units of competency in which you are assessed as having the required technical skills. This entitles you to gain provisional licensing in your trade in Australia. It is not a formal qualification and you will be required to undertake further training specific to the Australian context once you arrive in Australia.

Unsuccessful candidates

If you are unsuccessful, you will receive:

 an unsuccessful outcome letter detailing the areas where you were not able to demonstrate your competency.



11 What can I do if I receive an unsuccessful result?

If you receive an unsuccessful result you can choose to be re-assessed. If you choose this option, you will only be re-assessed on units listed as NYC (not yet competent).

Before applying for re-assessment, you are advised to undertake training and/or gain more experience performing the skills required in the units listed as NYC.

For information on the re-assessment process please visit our website.

12 What can I do if I disagree with the result?

If you disagree with your assessment outcome you can request a Review. For information about Reviews, please visit our website.

13 What can I do if I have a complaint?

If you are dissatisfied with your assessment process, please contact VETASSESS to register your complaint. You can email your complaint to tradeassess@vetassess.com.au or ring +61 3 9655 4801.

14 How can I get more information?

If you require more information or would like to clarify information contained in this guide please contact us on:

Phone: +61 3 9655 4801

Fax: +61 3 9655 4899

Email: <u>tradeassess@vetassess.com.au</u>

Web: <u>www.vetassess.com.au</u>



Appendix A: Recommended hand tools

Provided below is a list of the hand tools you are encouraged to bring to the practical assessment. If you are unable to bring your own tools, VETASSESS will ensure tools are made available, but you may have to share these with other candidates.

- Copper tube cutter- 20mm
- Hacksaw and blades-24 tooth + 32 tooth
- Measuring tape and rule
- Pencils
- Square- 200mm
- Centre punch
- Tin snips- Left and Right hand
- Hammer- Ball or cross pen
- Footprints- 300mm
- Multigrips-250mm
- Shifting spanners- 250mm & 300mm
- 15mm copper bender
- 15mm & 20mm flaring tool (for assessments conducted in Australia only)
- Polymer tube cutter (16mm)
- Battery drill with Philips head (for assessments conducted in Australia only)
- Gas testing equipment Manometer (for candidates doing gas stream only)



Appendix B: Pre-assessment suggested reading

It is vital before you attend your assessment that you review your plumbing skills and knowledge. You will be assessed against an Australian qualification and the skills the Australian plumbing industry requires of all plumbers working in Australia.

If you do not have formal training and/or employment experience in the skill areas outlined in the Fact Sheet, you may need to do some research in preparation for the assessment.

A significant amount of Australian plumbing is concerned with new construction and installation work. All plumbing work is highly regulated across all states and territories.

Australian general plumbing consists of five plumbing streams – water, sanitary, drainage, gas and roofing. You will need a minimum of four plumbing streams – water, sanitary, drainage (mandatory) and gas OR roofing (elective).

You should base your decision about which elective to choose on the type of plumbing work you do in your country. For example, UK plumbers generally choose the gas stream. South African plumbers generally choose the roofing stream. However, as natural gas has been recently introduced into Johannesburg, some South African plumbers are electing gas. There are some plumbers who only have training and work experience in water, sanitary and drainage. If you have never worked in gas or roofing, it is a good idea to complete a short course or gain some employment experience in one of these areas before your assessment.

The following Australian general plumbing resources can be ordered online or viewed on YouTube. When undertaking your research, you will need to insert 'Australian' before your chosen topic (e.g. 'Australian Septic Tanks') to obtain the relevant information.

General Plumbing Skill Areas to revise

- Cut and join sheet metal (practical task only)
- Identify the components of welding mild steel using oxygen/acetylene
- Identify the components of welding mild steel using arc welding (electricity)
- Identify the components of cutting mild steel using oxygen/acetylene
- Identify the components of fusion welding plastic pipes using electricity

The following book may assist you:

Basic Plumbing Services Skills (Pearson Education Australia)
 Email: schools@pearson.com.au or help@pearson.com.au

There are also many general plumbing resources you can source from the web and YouTube.

Water Supply Skill Areas to revise



- Correct operation of an electric and piston water pump
- Purpose of an air gap in a storage tank supplying drinking water
- Function of a Back flow prevention device.
- How a washing machine/dishwasher works
- Connecting a mains pressure storage hot water system

The following book may assist you:

Basic Plumbing Services Skills — Water Supply (Pearson Education Australia)
 Email: schools@pearson.com.au or help@pearson.com.au

Sanitary Plumbing and Drainage Skill Areas to revise

- Sanitary fixtures classified as 'Trade Waste Discharges' in Australia—certain sanitary discharges require treatment before entering municipal sewerage systems.
- Design a system to connect three sink bowels (mounted in the same bench top) to a vertical stack, single lines only.
- Calculate the fall in a drainage pipe with a gradient of 1 in 60 or 1.65%
- Operation of an in-ground septic tank

The following book may assist you:

 Basic Plumbing Services Skills—Sanitary Plumbing and Drainage (Pearson Education Australia)

Email: schools@pearson.com.au or help@pearson.com.au

There are also many examples of sanitary and drainage plumbing resources you can source from the web and YouTube.

Roof Plumbing Skill Areas to revise (Only for roof stream candidates)

- Sheet metal roof gutters and rain heads and/or box heads
- Identify different types of sheet metal roof flashings
- Install pre-cut and pre-bent curved sheet metal roof coverings

The following books may assist you:

- Basic Plumbing Services Skills—Roof Plumbing (Pearson Education Australia)
 Email: schools@pearson.com.au or help@peason.com.au
- Plumbing Services, Volume 2 (McGraw-Hill Book Company Australia)



There are many roof plumbing resources you can source from the web and/or YouTube.

Gas Services Skill Areas to revise (Only for gas stream candidates)

- Steps involved in commissioning a natural gas stove
- Internal natural gas appliance flues
- Typical natural gas faults in appliances
- LPG electronic safety devices installed in marine craft (where the occupants sleep below deck)

The following book may assist you:

Basic Plumbing Services Skills—Gas Services (Pearson Education Australia)
 Email: schools@pearson.com.au or help@pearson.com.au

There are also many other examples of gas plumbing skills resources you can source from the web and/or YouTube.

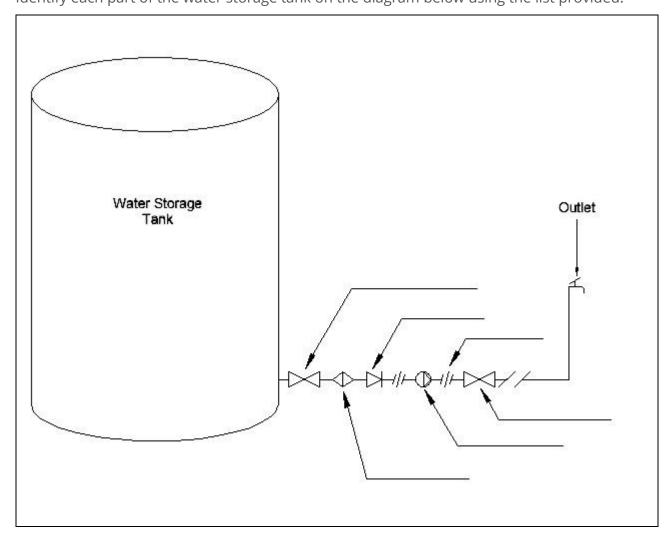


Appendix C: Sample knowledge questions

To help you prepare for assessment, the following example questions show the type of questions you will be asked during the assessment. Note these questions are examples only and are **NOT** the same questions used on the assessment day.

You are to answer **all** the theory questions correctly. You will be asked questions related to water, sanitary and drainage plumbing streams and either gas or roofing. If you do not answer any question correctly on the first attempt, you will be given a 'make up' question on the assessment day.

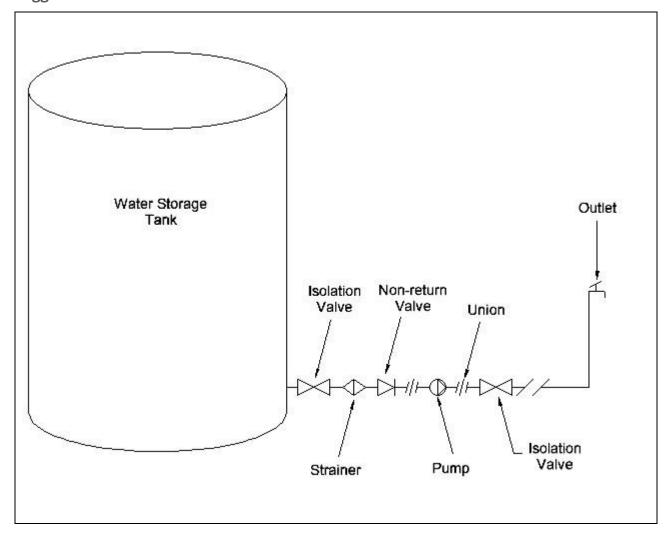
Example 1Identify each part of the water storage tank on the diagram below using the list provided.



- Isolation Valve
- Union
- Non-return valve
- Strainer
- Pump



Suggested Answer



Example 2

You are conducting a risk assessment for transferring plumbing materials by hand to a roof. Identify TWO (2) other safety hazards.

•	Material	sliding	back	down	the	roof	once	placed	on it.
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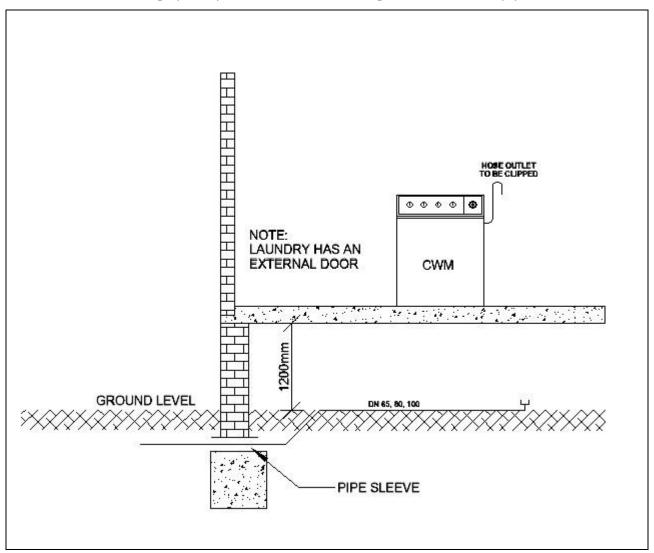
Suggested Answers

- Back strain due to awkward manual handling
- Cuts from edge of sheet
- Gusts of wind snatching sheet from your grasp



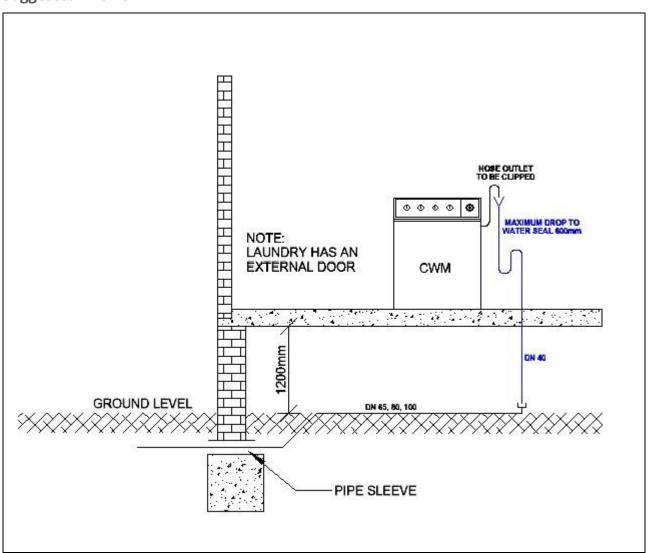
Example 3

Using a single line drawing, show the correct method for connecting a clothes washing machine to the drainage point provided on the drawing below. Show all pipe sizes.





Suggested Answer





Appendix D: Safe working practice

During the assessment, you must follow safe work practices to protect yourself, your assessor and other applicants. You must not wilfully place any person, including yourself, at risk during the assessment.

You must:

- wear PPE appropriate to the task being done.
- follow correct workplace health and safety procedures when completing all assessment tasks
- follow safety procedures for:
 - welding
 - scaffolding
 - trench shoring
 - use of power tools
- use electrical safety switches for power points.

Personal Protective Equipment

You must bring the following personal protective equipment (PPE) to the assessment.

- Welding goggles and glasses
- Clear safety glasses
- Leather gloves (welding)
- Leather safety boots (steel cap)
- Overalls (cotton only) or approved work wear
- Hearing protection
- Gloves for PVC work.

Any plumber has the potential to come into contact with potentially dangerous conditions and, therefore, must use appropriate PPE. The following are basic guidelines for the proper use of PPE.

- You are required to wear rated footwear, clothing and clear safety glasses at all times.
- PPE must be designed for the work being performed. For example, when soldering, brazing or welding, etc. suitable gloves and eye protection must be worn for the work to be undertaken safely.
- Always inspect your tools and PPE before each use to make sure they are in good condition and will work properly. It is your responsibility to maintain your tools and PPE at all times.



Work Method Statement (WMS) and Safe Work Instructions (SWI)

In preparation for the assessment, you must be familiar with the Australian safety standards.

Following are relevant Work Method Statement (WMS) and Safe Work Instructions (SWI) related to the practical assessments to be completed on the day of the assessment.

You **must**:

- Read the WMS and SWI documents before attending the assessment day
- Bring these documents with you on the assessment day.



To be completed progressively by candidates on the assessment day. Relevant parts of the WMS must be completed prior to undertaking assessment tasks.

Work Method Statement (WMS)			
Personal qualifications and experience:	Personnel, duties and		Training required to complete work:
Candidate name:	Work under supervision	on of work skills officials	WorkCover General Induction for construction work in Australia
Engineering Details/Certificates/WorkCover Approvals:		Legislation and Australian Standard Occupational Health & Safe	
 Plant/Equipment: General plumbing hand tools Manual Handling Oxy acetylene equipment Non-ferrous pipe benders Pipe / Tube Cutters Hazardous Substances Flaring Tool Hacksaw. 		 Occupational Health & Safe Australian Standard AS/NZ Australian Standard AS/NZ Hazardous manual tasks 	ety Regulations 2007 S 3500 National Plumbing and Draining S 5601 Gas Installations Managing Work Environment and Facilities
I have read and understand the safety requirements for the assessment. Candidate signature:	is VETASSESS	Maintenance checks: In accordance with Manufacturer's	requirements.



TASK OPERATION: PERSONAL PROTECTIVE EQUIPMENT (P.P.E.)

SPECIAL COMMENTS: This procedure is to be used with any operating manuals or training relevant to the tasks.

Ensure all Personal Protective Equipment conforms to Australian Standards.

No:SWI001

Date issued on site:

ACTIVITY	HAZARDS	HOW TO DO IT	
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Require	ements
		HARD HATS	SAFETY FOOTWEAR
		EYE PROTECTION	EAR PROTECTION FACE PROTECTION
Providing P.P.E con		RESPIRATION EQUIPMENT	SAFETY HARNESS
	Identify process to be carried out to ensure correct Personal Protective Equipment is worn.	HAND PROTECTION	SUN GLASSES
		ILLUMINATING SAFETY VEST	SUN SCREEN
		HATS	BARRIER CREAM
		OVERALLS (or equivalent)	WET WEATHER GEAR
		When selecting safety harness or intertia reel system, ensure compliance to CODE OF PRACTICES and AUSTRALIAN STANDARDS	Highlight P.P.E. issued to site personnel



Risk Management Checklist Summary (RMC)

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Assess Ris	sks	0	Host I	Environme	nt	(6							
		0	Wet E	nvironmer	nt	(6					Ir	mplement co	ntrols
Implemer	nt controls	0	Night	Environme	ent		6							
		0	Fire a	nd Explosio	on	•	6						Consult	
Consult		0	Foul A	\ir		(6							
Biological		0	Hazar	dous Equip	oment	(6							
Dangerou	s Goods	0	Hot N	1etal		(6							
Dust		0	Hot W				0							
Cold Envir	onment	0	Hydra	iulic Pressu	ıre		0							
Dark Envir	ronment	0	Movir	ng Machine	ery		6							
Excavation	n	0	Noise	and Vibrat	tion		6							
	and Overflow	0		nead Hazar	ds		6							
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Hazardous	s Substances	0		te Location			6							
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Class 2	,			1	2	,	3							
Class 2	Serious Injury /			1			<u> </u>							
Class 3	Minor Injury Res	sulting	in no	2	3	3	4							
	Lost Time													
	ot proceed			3. Pro	oceed wi	th caut	ion							
2. Proce	ed with extreme of	cautio	n	4. Pro	oceed									
		If risk	is asses	ssed at:										
Level 1	or 2 do not proce	eed wi	thout c	onsultatio	n with yo	ur ASS	ESSOR.							
Level 3 a	and 4 proceed wit	h Cau	tion un	der superv	ision or v	with AS	SESSOR							
4. F	RISK MANAGEN	/ENT	OVER	VIEW - J	ob Safe	ety Ar	nalysis	_						
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Risk Mana	agement Checklist	Summ	ary											



Hazards Identified requiring additional Control Measures to be implemented

ssible effect	Hazard
	Possible effect
	Possible effect
ssible effect	Possible effect
	Actions Required
	-
Safe Work Method Statement Required	Safe Work Method Statement Required
	tions Required Safe Work Method Statement



Further Action
Actions to be taken prior to the commencement of work



TASK OPERATION: Safe Use of Hand Tools

SPECIAL COMMENTS: All hand tools should be inspected to ensure they are in good working order.

No:37

			140.57
ACTIVITY	HAZARDS	HOW TO DO IT	PPE required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	Cuts and abrasionsFingers jammed	Inspect hand tools for any visual defects	
Operation	 Cuts and abrasions Fingers jammed Impact injury 	 Ensure correct hand tool is used for the task being performed Ensure appropriate space is available to complete task Ensure operation of hand tools is not likely to cause injury to others 	Wear protective dothing
After use Care	 Cuts and abrasions Fingers jammed 	 Ensure hand tools are returned to a safe condition Tidy area, return aids and ensure site is left clean and tidy Report any faults or rectify 	



TASK OPERATION: Manual Handling

SPECIAL COMMENTS: This procedure is to be used with any operating manuals or training relevant to the tasks.

All persons involved in Manual Handling tasks must receive appropriate training and supervision.

ACTIVITY	HAZARDS	HOW TO DO IT	
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	PPE required
Preparation and Operation	Strain Injury Crushing Injury Injury by Falling Objects	A Risk Assessment must take into account the following factors: - The actions and movements involved in the Manual Handling. The Workplace and Workstation layout. The postures and positions that must be taken by each person involved in the Manual Handling. The duration and frequency of the Manual Handling. The location of the loads and the distances that they must be moved. The weights and forces involved. The characteristics of the loads and of any equipment that is used in the task. The organisation of work at the Workplace. The work environment. The skill and experience of each person who must carry out the Manual Handling. The personal characteristics of each person who must carry out the Manual Handling. The clothing that is worn during the Manual Handling. Risk Control must be in place, when necessary by: - Redesign of the Manual Handling task or use one or a combination of the following measures: - Provide Mechanical Aids. Provide Personal Protective Equipment. Arrange for Team Lifting.	Wear grotedive dothing



No: SWI005

Safe Work Instruction (SWI)

TASK OPERATION: Safe use of MAP Gas

SPECIAL COMMENTS: This procedure is to be used with any operating manuals or training relevant to the tasks.

All persons using this equipment must be fully trained in the working procedures.

ACTIVITY	HAZARDS	HOW TO DO IT	
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	PPE required
Preparation	Explosion Burns Escaping Gas Fire	 Check plant for leaks with soapy water. Physically check cylinder and attachments for damage Check area for combustible materials e.g., petrol, oil, gas, grass, rags carpet insulation etc. Check equipment for correct operation. Provide appropriate Fire Fighting Equipment appropriate for the task. Ensure cylinder is upright and secure. 	Wear protective clothing
Flashback	Explosion Burns Escaping Gas Fire	Recognition: * Shrill hissing or squeaking	
Backfire	Explosion Burns Escaping Gas Fire	Where persistent backfire occurs, shut down and check for causes i.e., too close to work, dirty tip, loose nozzles, over heating tip.	
Shut down	Explosion Burns Escaping Gas Fire	Close cylinder valve. Check area from burning/smouldering material.	



TASK OPERATION: Safe Use of Pipe Benders

SPECIAL COMMENTS: All Pipe Benders should be inspected to ensure they are in good working order.

To be used in conjunction with operating manuals or training relevant to the task.

No:38

	ro be asea in conju	nction with operating manuals or training relevant to the task.	INU:38
ACTIVITY	HAZARDS	HOW TO DO IT	
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	PPE required
Preparation	Cuts and abrasionsFingers jammed	Inspect Pipe Benders for any visual defects	
Operation	 Cuts and abrasions Fingers jammed Impact injury Back Strain 	 Ensure correct Pipe Bender is used for the task being performed Ensure appropriate space is available to complete task Ensure operation of Pipe Benders is not likely to cause injury to the operator or others 	Wear protective dothing
After use Care	 Cuts and abrasions Fingers jammed 	 Ensure Pipe Benders are returned to a safe condition Tidy area, return aids and ensure site is left clean and tidy Report any faults or rectify 	



TASK OPERATION: Safe Use of Manual Pipe / Tube Cutters

SPECIAL COMMENTS: All Pipe / Tube Cutters should be inspected to ensure they are in good working order.

No:51

ACTIVITY	HAZARDS	HOW TO DO IT	
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	PPE required
Preparation	Cuts and abrasions Fingers jammed	Inspect Pipe / Tube Cutters for any visual defects	
Operation	 Cuts and abrasions Fingers jammed impact injury 	 Ensure correct hand tool is used for the task being performed Ensure appropriate space is available to complete task Ensure operation of Pipe / Tube Cutters is not likely to cause injury to others 	wear protective clothing
After use Care	Cuts and abrasionsFingers jammed	 Ensure Pipe / Tube Cutters are returned to a safe condition Tidy area, return aids and ensure site is left clean and tidy Report any faults or rectify 	



TASK OPERATION: Use of Battery Drills

SPECIAL COMMENTS: This procedure is to be used with any operating manuals or training relevant to the tasks.

ACTIVITY	HAZARDS	HOW TO DO IT	
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	PPE required
Preparation	Electrocution Cuts	 Do not operate electrical equipment (battery charger) in wet areas Ensure adequate lighting is provided at all times Ensure the Battery Drill is correctly sized for the purpose Isolate from power and check battery charger for damage. Ensure ELCB/RCD is connected and is at supply end of any extension lead/battery charger. Secure loose clothing and long hair Inspect bits (screwing attachment) for set and sharpness. Ensure battery charger has a current Inspection Tag. 	Wear protective dothing
Operation	Electrocution Cuts Eye Damage Burns	 Keep hand and body parts clear of drill bit/screwing attachment. Do not exert undue force when drilling/screwing. Ensure drill stops before placing down Note: Any faults or abnormal actions, stop use and or disconnect from power (battery charger), DANGER tag and report to supervisor. Battery drill and charger should be kept away from water, including rain. 	
After Use Care		 Pack drill, battery charger, and ELCB/RCD in their designated storage area. Battery drill and charger should be stored away from water, including rain. 	



TASK OPERATION: Safe Use of Hacksaw

SPECIAL COMMENTS: Hacksaws should be inspected to ensure they are in good working order.

No: 51

ACTIVITY	HAZARDS	HOW TO DO IT	PPE required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	Cuts and abrasionsFingers jammed	 Inspect hacksaw for any visual defects. Ensure correct blade for material to be cut. Ensure "blade" is in good working order. Ensure the teeth on the blade are facing away from the handle. Ensure the material is properly secured before cutting. 	Wear protective dothing
Operation	Cuts and abrasionsFingers jammedImpact injury	 Ensure both hands are used to guide the hacksaw. Ensure appropriate space is available to complete task. Ensure operation of hacksaw is not likely to cause injury to others. Ensure cut is completed on the "correct" side of the vice. Ensure the strokes are even and smooth without undue force or pressure. 	
After use Care	Cuts and abrasionsFingers jammed	 Tidy area, return aids and ensure site is left clean and tidy. Report any faults or rectify . 	



TASK OPERATION: Hazardous Substances

SPECIAL COMMENTS: This procedure is to be used in conjunction with any operating manuals or training relevant to the tasks.				
ACTIVITY	HAZARDS	HOW TO DO IT		
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	PPE required	
*Preparation	Burns to Skin Eyes Face - Inhalation	When working with Hazardous Substances ensure Hazardous Substance Register is maintained with M.S.D.S. (Material Safety Data Sheet). Carry out Hazardous Substance Risk Assessment e.g. 1. Task(s) to be performed 2. Substance in Use 3. Health Hazards 4. Work Process 5. Controls in Use 6. Actions Ensure compliance with Company Procedure control of Hazardous Substances is strictly adhered to. Do not use any Hazardous Substances you have not been trained to use. * SPECIAL NOTE: Approved Respirators to be worn as and when required	Wear protective clothing	



TASK OPERATION: Safe use of Flaring Tool

SPECIAL COMMENTS: This procedure is to be used in conjunction with any operating manuals or training relevant to the tasks.

No: SWI Flaring

Tool			
ACTIVITY	HAZARDS	HOW TO DO IT	PPE required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	TT E Tequilleu
Preparation	Flaring ends of non-ferrous pipes	 Ensure adequate lighting is provided at all times. Inspect flaring tool for damage. Ensure flaring tool is clean (free from oil/grease residue). Secure loose clothing and long hair. Ensure area adjacent to work area is clear of rubbish and debris (minimum of 1 metre). 	Wear projective doming
Operation	Crush/impact injuries Cuts Eye Damage Dropping of tools/material.	 Ensure there are adequate clearances around the work area and aisle space is maintained. Keep all body parts clear of compression/mechanism area. Do not exert undue force on flaring tool screw down mechanism. Ensure the flaring tool and material is well supported. Ensure the correct wearing of personal protective equipment. 	
After Use Care		Note: Any faults or abnormal actions, stop work and report it to teacher/store personal. Carry out general housekeeping.	