



Australian Government

MEM19066 Identify the requirements for establishing a gemstone-cutting workshop

Release: 1

MEM19066 Identify the requirements for establishing a gemstone-cutting workshop

Modification History

Release 1. New unit.

Application

This unit of competency defines the skills and knowledge required to identify and document the requirements for establishing a gemstone-cutting workshop. It is based on deleted unit CUVOPA406A Identify the requirements for establishing an opal-cutting workshop.

This unit applies to individuals who use specialised knowledge of gemstone processing and broader business practices to determine options for a gemstone workshop operation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: B

Unit Weight: 2

Pre-requisite Unit

MEM13015 Work safely and effectively in manufacturing and engineering

MEM16006 Organise and communicate information

Competency Field

Jewellery

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine job requirements	1.1 Follow standard operating procedures (SOPs) 1.2 Comply with work health and safety (WHS) requirements at all times 1.3 Identify job requirements from specifications 1.4 Record and organise information to inform decisions about setting up a workshop

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Store all information securely
2. Assess gemstone-cutting workshop requirements	2.1 Determine the work to be done and the number of people working there 2.2 Determine the specifications for the building, including size, power, water and drainage requirements 2.3 Identify the consumables, fixtures and fittings needed for the workshop 2.4 Identify essential and desirable machinery needed for a workshop 2.5 Investigate the work health and safety issues for the workshop and determine control measures required 2.6 Establish the environmental protection requirements and determine compliance measures required
3. Identify suppliers of machinery and consumables and establish set-up cost	3.1 Identify manufacturers and suppliers/agents for new and second-hand lapidary equipment 3.2 Compare prices, advantages and disadvantages of obtaining new and second-hand equipment and machinery 3.3 List suppliers of consumables and compare prices
4. Determine finances required to set up the workshop	4.1 Obtain estimates of the cost of services required to set up the workshop 4.2 Develop a draft budget and cash flow for the first year of operation 4.3 Identify and investigate sources of finance and repayment schedules

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Specifications include one or more of the following:	• client requirements • job sheets • work instructions.
Fixtures and fittings include one or more of the following:	• air conditioning • benches • chairs • chemical cupboards • cupboards • floor coverings • safes • security requirements, including door and window locks alarms • shelving • telephone • windows and doors.
Machinery and equipment include one or more of the following:	• bench grinder 6" or 8" • combination units for grind, sand and polish • diamond grinding, sanding and polishing units • drum or belt sanders • dry sanding units • free-hand saws • grinding arbours with belt drive • leather or felt polishing units • multi-blade saws • slab saws • trim saws • ventilation system and filters • wet sanding units.
WHS issues include one or more of the following:	• appropriate clothing and footwear • chemicals • cleanliness of work areas • dangers of using electricity and water in the same environment • dust and fumes • ergonomics • fire extinguishers • first aid kit • guarding for machinery • lighting

	• naked flames • noise • safety glasses • ventilation.
Electrical fittings include one or more of the following:	• cabling and machine wiring • exhaust fans and dust extraction • hardwired control and fuse box • lighting primary and secondary • switches and safety stops • waterproof power outlets.
Water and drainage requirements include one or more of the following:	• hosing to machinery • sludge traps • splash guards • taps • water drainage and disposal • water supply, mains or gravity fed • water trays.
Goods and service tax (GST) include one or more of the following:	• bank charges • currency exchange • duty or excise • freight • initial cost of machine • insurance • ongoing maintenance • postage • set-up costs.
Services include one or more of the following:	• electrical • plumbing • gas.
Sources of finance include one or more of the following:	• banks • credit unions • partnerships • private loans.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM19066 Identify the requirements for establishing a gemstone-cutting workshop

Modification History

Release 1. New unit.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following standard operating procedures (SOPs) and complying with work health and safety (WHS) requirements at all times
- investigating, analysing and documenting all requirements for setting up and financing a gemstone-cutting workshop
- developing a draft budget and cash flow projection
- organising the information to inform decision-making
- storing information securely.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- gemstone-cutting workshop requirements:
 - equipment
 - fixtures and fittings
 - water and drainage
 - other services
 - safety considerations
- manufacturers and suppliers of gemstone-cutting equipment
- purpose and components of a budget and cash flow
- sources of business finance and potential repayment obligations.
-

Assessment Conditions

- Assessors must:
 - have vocational competency in identifying the requirements to establish a gemstone-cutting workshop at least to the level being assessed with relevant industry knowledge and experience

- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
-

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>