



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CUVOPA03B Complete precutting processes for solid opals**

**Release: 1**

## **CUVOPA03B Complete precutting processes for solid opals**

### **Modification History**

Not Applicable

## Unit Descriptor

### Unit descriptor

This unit covers skills and knowledge required to determine market needs as a basis for decision-making, to plan the stones to be cut and complete the precutting processes. It includes documenting and recording all aspects of the procurement and cutting process.

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

## Application of the Unit

### Application of the unit

This unit requires the application of research skills to determine market preferences for buying of cut and polished opal so that decisions can be made on how to cut the opal to gain the best yield and show of colour. It also covers the ability to carry out all the precutting planning, cleaning and preforming of the gemstone while working safely with materials and equipment. Advanced processes needed for pre-cutting black and boulder opals is covered by CUVOPA13B Apply advanced pre-cutting processes to complex opals

Where appropriate the outcomes of this unit could be contextualised to apply to other gemstones. Examples of aspects of the unit that may need to be adjusted would include:

- the specific properties of each gemstones
- industry and market requirements
- underpinning knowledge
- Range Statement.

## Licensing/Regulatory Information

Refer to Unit Descriptor

## Pre-Requisites

### Prerequisite units

This unit may be assessed on its own or it may be assessed with other units that cover related skills and knowledge.

Evidence is most relevant when provided through an integrated activity which combines the Elements of competency for the unit, or a cluster of units of competency.

## Employability Skills Information

### Employability skills

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 <b>Survey market requirements as a basis for making a decision on opal cutting strategy.</b>	1.1 Establish the current client <i>opal buying preferences</i> (cut and polished) in the retail, and wholesale markets. 1.2 Determine the Internet buying preferences for cut and polished opal. 1.3 Document client buying preferences for cut and polished opal.
2 <b>Weigh opal and record information.</b>	2.1 Weigh opal before cleaning as a basis for determining yield. 2.2 Record <i>relevant information</i> .
3 <b>Clean and orient opal to determine yields and shape.</b>	3.1 Make an assessment of the stone and consult with supervisor, colleagues, client or other appropriate persons. 3.2 Rub down (clean) to expose the colour face using <i>appropriate equipment</i> . 3.3 Determine best orientation for gemstone. 3.4 Establish the top and bottom of the stone. 3.5 Remove <i>unwanted material</i> . 3.6 Check for internal flaws with powerful light source. 3.7 Determine where to cut the stone (or stones) to maximise value taking yield and colour play into consideration and cut stone.
4 <b>Process opal to pre-form state.</b>	4.1 Remove unwanted material from the planned gemstones using appropriate equipment. 4.2 Grind to the desired shape. 4.3 Check for internal flaws and correct if necessary.
5 <b>Follow OHS principles when operating machinery.</b>	5.1 Follow all <i>general OHS principles and Safe Operating Procedures</i> when using machinery, tools, materials and equipment for opal cutting.

**ELEMENT****PERFORMANCE CRITERIA****Required Skills and Knowledge****REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit.

**Required skills:**

- research skills
- use of appropriate equipment
- planning skills
- ability to determine colour and yield to achieve greatest value.

**Required knowledge:**

- characteristics of opal gemstone structure
- the importance of achieving yield when cutting a gemstone
- market trends and industry requirements.

**Evidence Guide****EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessment must confirm knowledge of the current buying trends, retail, wholesale and Internet. Based on this information and knowledge of opal structure and value, decisions are made on what the final product should be and how to cut the stone to achieve the desired outcome maximizing the yield and colour play from each stone. Assessment must confirm the safe completion of cleaning and shaping and preforming.

## EVIDENCE GUIDE

### **Context of and specific resources for assessment**

This unit may be assessed in a work environment, in a simulated work environment or in a combination of these situations.

### **Method of assessment**

For valid and reliable assessment of this unit, evidence should be gathered through a range of methods to indicate consistent performance.

Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on underpinning knowledge and skills and other methods as required.

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Assessment methods should closely reflect workplace demands (e.g. literacy) and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties such as speakers of languages other than English, remote communities and those with interrupted schooling).

Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the range of variables and contexts applicable to the work environment.

Assessment of this competency requires access to:

- a computer
- an opal cutting workshop
- a qualified workplace assessor or assessment team.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Determining ***opal buying preferences*** may involve:

- accessing Internet auction sites
- accessing Internet opal specific sites
- making contact with opal dealers
- making contact with opal-cutters
- phoning jewellery wholesalers
- phoning other jewellers
- talking with local jewellery store owner
- targeting opal specific stores.

***Relevant information*** to be recorded may include:

- date of purchase
- description
- description of area where mined
- field
- mining lease number
- number of classes
- purchase price
- type of opal
- vendor
- weight.

***Appropriate equipment*** may include:

- cleaning equipment
- diamond grinder
- diamond sawing
- free-hand saw
- silicon carbide grinder
- slab saw
- trim saw.



**RANGE STATEMENT**

*Unwanted material* may include:

- cracked material
- iron stone
- materials with inclusions or stains
- matrix
- poor colour
- potch
- sandstone.

*General OHS principles and Safe Operating Procedures* sheet may include:

- complying with the safe operating procedures for each machine
- good housekeeping, in particular avoiding contaminants
- using personal protective equipment where required.

**Unit Sector(s)**

Not Applicable

**Competency field**

**Competency field**            Opal cutting and polishing