
Overview

This standard is designed to demonstrate your competence in assisting with your specified minerals processing activity. You will interpret your work requirement from your instructions and specifications: to assist with the movement and storing of materials and components; and to assist with and support the activity as required.

During this work the candidate must take account of the relevant operational requirements and safe working practices.

This standard would apply to those who work as a member of a team, or work with and support specific mineral processing activities i.e. one or more (in combination) of the following categories: crushing/screening/washing; drying; concrete/mortar production; asphalt production; density/fluid separation; chemical separation; forming; heat treatment; sawing/splitting/shaping; packaging; water monitoring.

**Performance
criteria**

- You must be able to:*
- P1 receive and confirm understanding of information and instruction for the work activity
 - P2 provide assistance with the work activity in accordance with instruction, required standards and specifications
 - P3 carry out activities without damage and disruption to the work and environment
 - P4 inspect, use and maintain tools and equipment according to **approved policies, procedures and practices**
 - P5 move and store materials or components according to **approved policies, procedures and practices**
 - P6 report problems or conditions outside your limits of responsibility to an authorised person

Knowledge and understanding

You need to know and understand:

- K1 the **approved policies, procedures and practices** applicable to the work and work environment
- K2 the categories of materials and components in the work activity and their uses
- K3 the processes and sequence of events in the work activity
- K4 the terminology used for the work activity
- K5 the methods of handling, transferring and storing materials and components for the work activity
- K6 the tools and equipment used for your work
- K7 how to check, use, maintain and store the tools and equipment for your work activity
- K8 the types of **materials and waste** associated with your work activity
- K9 the procedures for disposal of surplus **materials and waste**
- K10 how to report damaged or faulty tools and equipment, processing or other problems
- K11 the limits of your responsibility

MPQPO04

Assist with the specified minerals processing activity

Additional Information

Scope/range

- 1 **approved policies, procedures and practices:** organisational; operational; emergency; health and safety; environmental

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**Scope/range
related to
knowledge and
understanding**

1 **materials and waste:** hazardous; non-hazardous

Glossary**Categories of Processing Operations for the E&MPI****1. Crushing/Screening/Washing**

The reduction in size of as extracted material by mechanical crushing equipment (fixed or mobile), grading by size and water washing of that material. This would also include blending or adding water to meet customer specification.

2. Drying

The application of heat in any type of oven to remove excess water from the as extracted or processed material

3. Concrete/Mortar Production

The production of concrete, mortar and similar materials, by batch (wet batch or dry batch) or continuous production. It is limited to the production of the material, and does not include the subsequent use of the material to make a product, for example a concrete block by casting/forming.

4. Asphalt/Coated Materials Production

The production of asphalt and other similar coated materials by any type of batch or continuous production

5. Density/Fluid Separation

Includes all processes to increase the purity and quality of the rock or minerals, or to separate different minerals utilising their differing physical properties (e.g. weight, density, shape, solubility), which may be a dry process or with the assistance of a fluid (e.g. air, water, other liquids).

6. Chemical Separation

The separation of rocks or minerals utilising their different chemical properties, or differing reactivity, which may involve the introduction of another chemical substance or substances to select the desired product. Note; this may often be combined with Density/fluid separation. This will also include those operations used to release the separated mineral from the separating additive

7. Forming

Moulding, casting, forming, compressing or similar operations to produce a solid product of a shape to meeting customer requirements or aid transportation

8. Heat Treatment

The application of higher levels and duration of heat to change the physical or chemical properties of the rock or mineral, e.gs. calcining, cement production.

9. Sawing/Splitting/Shaping

The use of specific plant/machinery to change the physical size and/or shape of a piece of (usually) dimensional stone to meet customer requirements

10. Packaging

The partial or total enclosure of the rock or mineral, which would normally be done to aid storage or transportation, or to meet customer requirements.

11. Water Monitoring

The extraction of a mineral from a mineral body (solid or broken) or a tip/stockpile by the use of a high pressure water jet.

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Assist with the specified minerals processing activity

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