MPQMG26
Charge blast holes to specification

Overview

This standard specifies the skills, knowledge and understanding required to demonstrate competence to charge blast holes to specification. The standard covers checking blasting areas prior to charging by checking the setting out and profiling of the drill holes, finalising the blast specifications and confirming the charge, preparing the explosive materials and charging blast holes with the explosive materials. The standard also covers disposing of surplus packaging and removing surplus explosive material from the blasting area.

This standard is specifically designed for those with responsibility for charging blast holes with explosive materials, normally referred to as shotfirers.

Performance criteria

You must be able to:

P1 carry out the work activity according to the **approved policies, procedures and practices** for the work activity and blasting location

P2 obtain and check information on the blasting area, design and the **explosive materials** to be used

P3 identify hazards and risks arising from adverse environmental conditions and take precautionary action

P4 check the position, condition and dimensions of each blast hole, and the surrounding area

P5 identify, record and report all aspects that require attention or amendment to the blast specification

P6 handle **explosive materials** in conformity with manufacturers' recommendations

P7 establish precautions to protect **explosive materials** and personnel

P8 identify, select and inspect the tools and equipment for the charging operations

P9 prepare **explosive materials** in accordance with the blasting specification

P10 check the **explosive materials** to ensure they conform in quantity and type to the blasting specification requirements

P11 check the **explosive materials** are in good condition

P12 charge blast holes in accordance with the blasting specification

P13 position detonators and primers in conformity with the blasting specification

P14 use **non-explosive materials** as specified for the blast

P15 identify, record and report variations between the blasting specification and the actual conditions at the time of charging

P16 package, label, record and return surplus or unsuitable **explosive materials** to storage or disposal site

P17 check, remove and dispose of packaging

Knowledge and understanding

You need to know and understand:

K1 the **approved policies, procedures and practices** as appropriate to the work activity and blasting location

K2 the hazards and risks associated with the **explosive materials** and the work activity, how they affect yourself, others and the work environment, and how they are controlled

K3 the dangers from and the effects of adverse environmental and site conditions on the **explosive materials**, system performance and premature ignition

K4 the personal responsibilities of you and others involved in the blasting process under health and safety and blasting statutory regulations for the work environment

K5 the sources of information in relation to the **explosive materials** and the blast requirements, and how to interpret them

K6 the organisational communications, recording and reporting arrangements relating to the work activity

K7 the principles and practices of ensuring blast hole suitability

K8 blast hole measuring and inspection equipment and techniques

K9 the types and range of **explosive materials** for the work activity, their limitations and susceptibility to accidental or premature detonation

K10 the characteristics of detonation devices and primers for the work activity

K11 manufacturers' recommendations and site rules for handling **explosive materials**

K12 the range of tools and equipment for handling explosive materials and charging blast holes, why they are used, and how to inspect, use and store them after use

K13 the effects of water in blast holes, how this imposes limitations on the choice of **explosive materials** and blast initiation systems, and actions to deal with wet blast holes

K14 the causes of blockages in blast holes, and how to take remedial action

K15 the tools, procedures and methods for clearing overfilled or incorrectly charged blast holes

K16 the methods for the removal and disposal of surplus materials

K17 the regulations and practice requirements for packaging and labelling explosives

K18 the limits of your own role and responsibilities

Additional information

Scope/range

1 **explosive materials**: explosive articles or substances as defined in the Classification and Labelling of Explosives Regulations 1983, or subsequent legislation that supersedes it, as appropriate to the work activity and store

2 **approved policies, procedures and practices**: legislative, organisational, operational, accident or emergency, health and safety, first aid, and environmental as appropriate to the blasting area and work activity

3 **non-explosive materials**: stemming, sleeves and other materials required to support charging or blasting as appropriate to the work activity and the work environment

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Developed by	MPQC
Version number	1
Date approved	February 2014
Indicative review date	December 2019
Validity	Current
Status	Original
Originating organisation	MPQC
Original URN	MPQMG26
Relevant occupations	Mineworker; Coal Mining Operatives; Shotfirer; Manager in Mining
Suite	Mining Operations
Key words	explosive; mine; quarry; detonators; store; receive; issue; security; mining; quarrying; blasting