MPQBL10

Produce profiles of rock faces and landforms

Overview

What is this standard about?

This standard specifies the skills, knowledge and understanding required to demonstrate competence to accurately take measurements of rock faces, including and in relation to designated fixed points, to produce a profile of the face, which may be used as a source of information for other work. These would typically be quarry rock faces requiring blasting, but could be any rock free face, or landform. It involves correctly evaluating information and instruction, accurate positioning, taking accurate measurements (of, for example, the rock face, its height inclination and profile, and of fixed points including associated bore/shot holes, azimuth and inclination) using specialised equipment, and presenting information based on these measurements and observation.

During this work account must be taken of the relevant operational requirements and safe working practices.

Safety and security are paramount to these operations. Procedures need to be followed habitually to ensure maximum safety for all within the site, and in the immediate surrounding area, reviewed, and improved to meet changing situations.

Who is this standard for?

This standard applies in full to anyone who may be required to produce a profile of a rock face or landform for blasting purposes. This may be their core function, or they may carry this out as part of a wider role, such as geotechnical engineering, surveying, blast designing or shotfiring. When producing a profile for any other purpose performance criteria 7 does not apply.

Performance criteria

You must be able to:

1. confirm the work requirements with the **relevant persons**
2. identify the work area in accordance with the work specification
3. check for health and safety hazards and risks, and environmental aspects and impacts that could affect the work activity
4. locate, check, prepare, set up and adjust the profiling equipment for the work activity
5. relate the survey position to a datum reference
6. carry out profiling
7. check each blast hole position for condition, dimension, angle, inclination and direction
8. identify and record physical features of the survey site
9. process and evaluate profile data produced
10. record and report results to **relevant persons** according to work requirements
11. carry out work activities according to the **approved policies, procedures and practices**

Knowledge and understanding

You need to know and understand:

1. the **approved policies, procedures and practices** in the context of the work activity
2. your responsibilities under the health and safety statutory requirements, and site environmental restraints
3. the hazards and environmental conditions that could affect the work activity
4. the types of equipment in relation to the work activity, and the capability and limitations of equipment
5. surveying techniques for the work activity
6. how to check, prepare, set up and adjust the equipment for the work activity
7. how equipment is calibrated
8. the types of defects found in the equipment and how to report or record defects
9. how to record and report results of profiling
10. the purpose and use of the profiling results
11. how to identify and record the physical features of rock faces or landforms that affect the profiling or following work activity
12. plans, profiles and terminology relevant to the work activity
13. methods of locating positions
14. profiling data processing systems for the work activity
15. the purpose and significance of information produced
16. the roles and responsibilities of **relevant persons**, as appropriate to site, associated with the work activity
17. the hazards and risks associated with the use of measuring equipment and technology
18. the problems and conditions that can occur, and how to respond to them
19. the limits of your responsibilities

Scope/range

1. **approved policies, procedures and practices**: legislative, organisational, operational, accident or emergency, health and safety, first aid, and environmental as appropriate to the work site and work activity
2. **relevant persons:** supervision, work colleagues, maintenance engineers, designated persons and/or those affected by the work activity, as appropriate to the work activity

MPQBL10

Produce profiles of rock faces and landforms

Developed by	MPQC
Version Number	1
Date Approved	December 2015
Indicative Review Date	January 2021
Validity	Current
Status	Original
Originating Organisation	MPQC
Original URN	MPQBL10
Relevant Occupations	Blast designer; Explosives supervisor; Face profiler; Quarry workers and related operatives; Shotfirer; Surveyor
Suite	Blasting Operations
Keywords	blasting; rock face; landform; profile; survey