

Unit Ref:	BL617
Ofqual Ref:	K/615/4618
Title:	Designing and Arranging for the Authorisation of the Blast Specification
Level:	5
Credit value:	18
Guided Learning Hours:	110
Performance learning outcomes <i>The learner will:</i>	Performance assessment criteria <i>The learner can:</i>
1. Be able to design and arrange for the authorisation of the blast specification.	<ul style="list-style-type: none"> 1.1 Establish the operational requirements from the blast. 1.2 Determine and identify the location and dimensions of the blast. 1.3 Identify and select equipment for the work activity. 1.4 Select the explosive materials and initiation system to be used. 1.5 Determine the burden, spacing and pattern to achieve the operational requirements. 1.6 Identify all environmental protection requirements, conditions and restrictions. 1.7 Collect available blast site information or records. 1.8 Identify the geological and geotechnical aspects and issues that could affect the blast. 1.9 Prepare a blast design. 1.10 Review the design against information available, regulatory requirements and organisational requirements. 1.11 Prepare the blast specification. 1.12 Communicate specification to relevant persons. 1.13 Ensure the blast specification is approved. 1.14 Carry out work activities according to the approved policies, procedures and practices.
Knowledge learning outcomes <i>The learner will:</i>	Knowledge assessment criteria <i>The learner will know and understand:</i>
2. Understand how to design and arrange for the authorisation of the blast specification.	<ul style="list-style-type: none"> 2.1 The approved policies, procedures and practices in the context of the work activity. 2.2 Own responsibilities under the health and safety statutory requirements. 2.3 The geological anomalies and geotechnical information related to the work activity and location. 2.4 Blast designs and blast specifications. 2.5 The effects of changing blast parameters. 2.6 The capability of blast site equipment. 2.7 The principles and practice of risk assessment. 2.8 How to account for the strength of mineral strata. 2.9 The effects of multi-row blasting and decking. 2.10 The site requirements for the blasted material. 2.11 The types of blasting accessories, their strengths and characteristics. 2.12 The types of initiating systems, their strengths and characteristics. 2.13 Why and how delays are created, and the effects of changing delays. 2.14 How to make an assessment of the extent of the danger zones. 2.15 How to interpret information from preparation activities. 2.16 The types of explosive materials, their strengths and characteristics. 2.17 The measurement, control and analysis of blast vibration. 2.18 Own responsibilities in regard to varying the blast specification. 2.19 The environmental and planning conditions applicable to the site and the work activity. 2.20 The roles and responsibilities of the relevant persons involved in the work activity. 2.21 The potential consequences and hazards arising from incorrect blast design or specification.