Notice of Requirements for Granting of Certificates of Competence Under the Health and Safety in Employment (Mining Operations and Quarrying Operations) Regulations 2013

Under Regulation 34 of the Health and Safety in Employment (Mining Operations and Quarrying Operations) Regulations 2013, WorkSafe New Zealand gives notice of the requirements to be met for the granting of certificates of competence under those regulations.

Interpretation

In this notice, unless the context otherwise requires:

 ${\bf Board}$ means the New Zealand Mining Board of Examiners, established under section 20D of the Health and Safety in Employment Act 1992

employed means employed as an employee or engaged as a contractor

former regulations means the Health and Safety in Employment (Mining Administration) Regulations 1996

regulations means the Health and Safety in Employment (Mining Operations and Quarrying Operations) Regulations 2013

unit standard means a unit standard listed on the New Zealand Qualifications Framework referred to in section 248 of the Education Act 1989

Commencement and revocation

- 1. This notice comes into force on 1 January 2015.
- The notice of the Requirements of Holders of Certificates of Competence under the Health and Safety in Employment (Mining Administration) Regulations 1996 (*New Zealand Gazette*, 12 September 2008, No. 139, page 3783) is revoked.

Certificate of competence as a site senior executive

The applicant for a certificate of competence as a site senior executive must:

- a. have passed the unit standards set out in Group A of the Appendix; and
- b. satisfy the Board that he or she has been employed in an operational management role acceptable to the Board in the extractives industry for a period or periods totalling not less than 12 months.

Certificate of competence as a first-class mine manager

- 1. The applicant for a certificate of competence as a first-class mine manager must have:
 - a. the qualifications set out in one of paragraphs (2) and (3) and
 - b. the qualifications and experience set out in one of paragraphs (4), (5) and (6), as applicable
- 2. The applicant must:
 - a. have passed the unit standards set out in Group B and Groups 10, 12 and 13 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as a first-class mine manager under the former regulations; and
 - b. have passed the unit standards set out in Group A of Appendix 2; and
 - c. hold a first aid certificate.
- 4. If the applicant holds or held a certificate of competence as a first-class coal mine manager under the Coal Mines Act 1979 or regulations made under the Health and Safety in Employment Act 1992, the applicant must satisfy the Board that he or she has been employed in the underground workings of a mine or a tunnel for a period or periods totalling not less than 12 months, of which not more than six months was in a tunnel.
- 5. If the holder has a degree in Mineral Technology (Mining) conferred by the University of Otago, or has a qualification in mining from another institution, deemed equivalent by the New Zealand Qualifications Authority to a four-year Bachelor's degree in mining, he or she must satisfy the Board that:

a. he or she has been employed in the underground workings of a mine or tunnel for a period or periods

totalling not less than three years (including any periods served in the course of study); and

- b. at least 12 months of the employment described in subparagraph (a) was at the face of a mine or a tunnel; and
- c. no more than six months of the work experience referred to in subparagraph (b) was in a tunnel.
- 6. In cases to which paragraphs (3) or (4) do not apply, the applicant must satisfy the Board that he or she has been employed at the face of a mine or a tunnel for a period or periods totalling not less than three years, of which not more than six months was in a tunnel.

Certificate of competence as a first-class coal mine manager

- 1. The applicant for a certificate of competence as a first-class coal mine manager must have:
 - a. the qualifications set out in one of paragraphs (2) and (3); and
 - b. the qualifications and experience set out in one of paragraphs (4), (5), and (6), as applicable.
- 2. The applicant must:
 - a. have passed the unit standards set out in Groups C and E and in Groups 3, 4, 5, 6, 12 and 13 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as a first-class coal mine manager under the former regulations; and
 - b. have passed the unit standards set out in Group B of Appendix 2; and
 - c. hold a first aid certificate.
- 4. If the applicant has held a certificate of competence as a first-class mine manager under the Mining Act 1971 or regulations made under the Health and Safety in Employment Act 1992, he or she must satisfy the Board that he or she has been employed in the underground workings of a coal mine for a period or periods totalling not less than 12 months.
- 5. If the holder has a degree in Mineral Technology (Mining) conferred by the University of Otago, or has a qualification in mining from another institution, deemed equivalent by the New Zealand Qualifications Authority to a four-year Bachelor's degree in mining, he or she must satisfy the Board that:
 - a. he or she has been employed in the underground workings of a coal mine for a period or periods totalling not less than three years (including any periods served in the course of study); and
 - b. at least 12 months of the employment referred to in subparagraph (a) was at the face of a coal mine.
- 6. In cases to which paragraph (3) or (4) does not apply, the applicant must satisfy the Board that:
 - a. he or she has been employed in the underground workings of a coal mine for a period or periods totalling not less than five years; and
 - b. at least 12 months of the employment described in subparagraph (a) was at the extraction face of a coal mine.

Certificate of competence as an A-grade opencast coal mine manager

- 1. The applicant for a certificate of competence as an A-grade opencast mine manager must have:
 - a. the qualifications and experience set out in one of paragraphs (2) and (3); and
 - b. the experience set out in paragraph (4).
- $2. \ The \ applicant \ must:$
 - a. have passed the unit standards set out in Groups 1, 2, 12 and 13 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as an A-grade opencast coal mine manager under the former regulations; and
 - b. have passed the unit standards set out in Group C of Appendix 2; and
 - c. hold a first aid certificate.

- 4. The applicant must satisfy the Board that:
 - a. he or she has been employed in the workings of an opencast coal mine for a period or periods totalling no less than two years; or
 - b. he or she has been employed:
 - i. in the workings of an opencast coal mine for a period or periods totalling not less than 12 months; and
 - ii. in the underground workings of a mine, coal mine, or tunnel for a period or periods totalling not less than two years; or
 - c. he or she:
 - i. holds a certificate of competence as a first-class mine manager or as a first-class coal mine manager whether under the regulations or the former regulations; and
 - ii. has been employed in the workings of an opencast coal mine for a period or periods totalling not less than 12 months.

Certificate of competence as a B-grade opencast coal mine manager

- 1. The applicant for a certificate of competence as a B-grade opencast coal mine manager must have:
 - a. the qualifications set out in one of paragraphs (2) and (3); and
 - b. the experience set out in paragraph (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Group 1, 12 and 14 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as an B-grade opencast coal mine manager under the former regulations; and
 - b. have passed the unit standards set out in Group D of Appendix 2; and
 - c. hold a first aid certificate
- 4. The applicant must satisfy the Board that:
 - a. he or she has been employed in the workings of an opencast coal mine for a period or periods totalling not less than two years; or
 - b. he or she has been employed:
 - i. in the workings of an opencast coal mine for a period or periods totalling not less than 12 months; and
 - ii. in the underground workings of a mine, coal mine, or tunnel for a period or periods totalling not less than two years; or
 - c. he or she:
 - i. holds a certificate of competence as a first-class mine manager or as a first-class coal mine manager whether under the regulations or the former regulations; and
 - ii. has been employed in the workings in an opencast coal mine for a period or periods totalling not less than 12 months.

Certificate of competence as an A-grade quarry manager

- 1. The applicant for a certificate of competence as an A-Grade quarry manager must have:
 - a. the qualifications set out in one of paragraphs (2) and (3) and
 - b. the experience set out in paragraph (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Groups 1, 2, 12 and 13 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:

- a. hold a certificate of competence as an A-grade quarry manager under the former regulations; and
- b. have passed the unit standards set out in Group E of Appendix 2; and
- c. hold a first aid certificate
- 4. The applicant must satisfy the Board that:
 - a. he or she has been employed in the workings of an opencast mine or quarry for a period or periods totalling not less than two years; or
 - b. he or she has been employed:
 - i. in the workings of an opencast mine or quarry for a period or periods totalling not less than 12 months; and
 - ii. in the underground workings of a mine, coal mine, or tunnel for a period or periods totalling not less than two years; or
 - c. he or she:
 - i. holds a certificate of competence as a first-class mine manager or as a first-class coal mine manager whether under the regulations or the former regulations; and
 - ii. has been employed in the workings of an opencast mine or quarry for a period or periods totalling not less than 12 months.

Certificate of competence as a B-grade quarry manager

- 1. The applicant for a certificate of competence as a B-grade quarry manager must have:
 - a. the qualifications set out in one of paragraphs (2) and (3) and
 - b. the experience set out in paragraph (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Groups 1 and 14 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as an B-grade quarry manager under the former regulations; and
 - b. have passed the unit standards set out in Group F of Appendix 2; and
 - c. hold a first aid certificate.
- 4. The applicant must satisfy the Board that:
 - a. the or she has been employed in the workings of an opencast mine or quarry for a period or periods totalling not less than two years; or
 - b. he or she has been employed
 - i. in the workings of an opencast mine or quarry for a period or periods totalling not less than 12 months; and
 - ii. in the underground workings of a mine, coal mine, or tunnel for a period or periods totalling not less than two years; or
 - c. he or she:
 - i. holds a certificate of competence as a first-class mine manager or as a first-class coal mine manager whether under the regulations or former regulations; and
 - ii. has been employed in the workings of in an opencast mine or quarry for a period or periods totalling not less than 12 months.

Certificate of competence as an A-grade tunnel manager

- 1. The applicant for a certificate of competence as an A-grade tunnel manager must have:
 - a. the qualifications set out in one of paragraphs (2) and (3); and
 - b. the experience set out in paragraph (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Group D and in Groups 7, 8, 9, 12 and 13 of Appendix 1;

- b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as an A-grade tunnel manager under the former regulations; and
 - b. have passed the unit standards set out in Group G of Appendix 2; and
 - $c. \ hold \ a \ first \ aid \ certificate$
- $\label{eq:constraint} \textbf{4.} \ \textbf{The applicant must satisfy the Board that:}$
 - a. he or she has been employed in the workings of a tunnel for a period or periods totalling not less than two years; or
 - b. he or she has been employed:
 - i. in the workings of a tunnel for a period or periods totalling not less than 12 months; and
 - ii. in the underground workings of a mine or coal mine for a period or periods totalling not less than two years; or
 - c. he or she:
 - i. holds a certificate of competence as a first-class mine manager or as a first-class coal mine manager, whether under the regulations or the former regulations; and
 - ii. has been employed in the workings of a tunnel for a period or periods totalling not less than 12 months.

Certificate of competence as a B-grade tunnel manager

- 1. The applicant for a certificate of competence as a B-grade tunnel manager must have:
 - a. the qualifications set out in one of paragraphs (2) or (3); and
 - b. the experience set out in paragraph (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Group D and in Group 7, 12 and 14 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as a B-grade tunnel manager under the former regulations; and
 - b. have passed the unit standards set out in Group H of Appendix 2; and
 - c. hold a first aid certificate.
- 4. The applicant must satisfy the Board that:
 - a. he or she has been employed in the workings of a tunnel for a period or periods totalling not less than two years; or
 - b. he or she has been employed:
 - i. in the workings of a tunnel for a period or periods totalling not less than 12 months; and
 - ii. in the underground workings of a mine or coal mine for a period or periods totalling not less than two years; or
 - c. he or she:
 - i. holds a certificate of competence as a first-class mine manager or as a first-class coal mine manager, whether under the regulations or the former regulations; and
 - ii. has been employed in the workings of a tunnel for a period or periods totalling not less than 12 months.

Certificate of competence as a coal mine deputy

- 1. The applicant for a certificate of competence as a coal mine deputy must have:
 - a. the qualifications set out in one of paragraphs (2) or (3); and have the experience set out in one of paragraphs (4) and (5), as applicable.
- 2. The applicant must:
 - a. have passed the unit standards set out in Group E and in Groups 3, 4, 12 and 14 of Appendix 1; and

- b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as a coal mine deputy under the former regulations; and
 - b. have passed the unit standards set out in Group I of Appendix 2; and
 - c. hold a first aid certificate.
- 4. If the applicant holds a certificate of competence as a first-class mine manager, a first-class coal mine manager or an A-grade tunnel manager (in each case whether under the regulations or the former regulations), the applicant must satisfy the Board that he or she has been employed actively engaged in the extraction of coal and support of the face openings for a period or periods totalling not less than 12 months.
- 5. In cases where paragraph (4) does not apply, the applicant must satisfy the Board that he or she has been employed in the underground workings of a coal mine or of a metalliferous mine or in tunnel construction for a period or periods totalling not less than five years, including:
 - a. two years' employment actively engaged in the development and extraction of coal and support of the face openings; and
 - b. one year's employment that includes experience in all the types of shift work referred to in paragraph (6).
- 6. The shift work is:
 - a. preparing for and installing either mechanical or hydraulic transport of coal; and
 - b. building permanent or temporary stoppings; and
 - c. installation of auxiliary ventilation; and
 - $d. \ erection of either steel or timber sets; and % \label{eq:def-equation}$
 - e. installation of roof bolts; and
 - $f. \ installation \ of \ services.$

Certificate of competence as a coal mine underviewer

- 1. The applicant for a certificate of competence as a coal mine underviewer must have:
 - a. the qualifications set out in one of paragraphs (2) and (3); and
 - b. the qualifications and experience set out in one of paragraphs (4) and (5), as applicable.
- 2. The applicant must:
 - a. have passed the unit standards set out in Group E and in Groups 3, 4, 5, 12 and 13 of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a certificate of competence as a coal mine underviewer under the former regulations; and
 - b. have passed the unit standards set out in Group J of Appendix 2; and
 - c. hold a first aid certificate.
- 4. If the applicant holds a certificate of competence as a first-class mine manager, a first-class coal mine manager or an A-grade tunnel manager (in each case whether under the regulations or the former regulations), the applicant must satisfy the Board that he or she has been actively engaged in the winning of coal and support of the face openings for a period or periods totalling not less than 12 months.
- 5. In cases where paragraph (3) does not apply, the applicant must satisfy the Board that he or she has been employed in the underground workings of a coal mine or of a metalliferous mine or in tunnel construction for a period or periods totalling not less than five years, including:
 - a. two years' employment actively engaged in the winning of coal and support of the face openings; and
 - b. 12 months' employment that involves experience in all the types of shift work referred to in paragraph (5).
- 6. The shift work is:
 - a. preparing for and installing either mechanical or hydraulic transport of coal; and
 - b. building permanent or temporary stoppings; and

- c. installation of auxiliary ventilation; and erection of either steel or timber sets; and
- d. installation of roof bolts; and
- e. installation of services.

Certificate of competence as a supervisor

The applicant for a certificate of competence as a supervisor must have the qualifications set out in one of paragraphs (1) to (4), as appropriate.

- A supervisor of an underground metalliferous mining operationmust hold a certificate of competence as a B-grade tunnel manager, or an A-grade tunnel manager, or a first-class mine manage, or a first class coal mine manager.
- 2. A supervisor of a tunnelling operation must hold a certificate of competence as a B-grade tunnel manager or an A-grade tunnel manager, or a first-class mine manager, or a first-class coal mine manager.
- 3. A supervisor of an opencast coal mining operation must hold a certificate of competence as a B-grade opencast coal mine manager or an A-grade opencast coal mine manager or a first-class mine manager, or a first class coal mine manager.
- 4. A supervisor of an opencast metalliferous mining operation must hold a certificate of competence as a B-grade quarry manager, or an A-grade quarry manager, or a first-class mine manager, or a first-class coal mine manager.

Certificate of competence as a mine surveyor

- 1. The applicant for a certificate of competence as a mine surveyor must have:
 - a. the qualifications set out in paragraph (2) or (3) and
 - b. the qualifications and experience set out in paragraph (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Group F of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must hold:
 - a. a certificate of competence as a mine surveyor under the former regulations, and;
 - b. must hold a first aid certificate.
- 4. The applicant must:
 - a. hold a New Zealand Diploma of Surveying, or a degree in surveying, conferred by a New Zealand university or other New Zealand tertiary institution, or hold a qualification in surveying from another institution, deemed equivalent by the New Zealand Qualifications Authority to a four-year Bachelor's degree in surveying or a New Zealand Diploma of Surveying; and
 - b. have had at least three years' practical work experience in surveying including 12 months' work experience underground in the surveying of mines.

Certificate of competence as a ventilation officer

The applicant for a certificate of competence as a ventilation officer must:

- a. have passed the unit standards set out in Group G of Appendix 1; and
- b. have passed either unit standard 21280 or unit standard 23550; and
- c. satisfy the Board that he or she has been employed in the workings of an underground mining operation for a period or periods totalling not less than two years; and
- d. hold a first aid certificate.

Certificate of competence as a winding engine driver

The applicant for a certificate of competence as a winding engine driver must:

a. have passed the unit standards set out in Group 11 of Appendix 1; and

- b. hold a first aid certificate; and
- c. demonstrate to the satisfaction of the Board that he or she has:
 - i. the ability to operate a winder and respond to standard industry signals: and
 - ii. knowledge of, and the appropriate skill to respond to, emergency procedures.

Certificate of competence as a mechanical superintendent

- 1. The applicant for a certificate of competence as a mechanical superintendent must have:
 - a. the qualifications set out in paragraph (2); and
 - b. the qualifications and experience set out in one of paragraphs (3) and (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Group H of Appendix 1; and
 - b. hold a first aid certificate.
- 3. The applicant must:
 - a. hold a New Zealand national qualification in mechanical fitting or have a national qualification in mechanical engineering acceptable to the Board or hold a qualification in mechanical engineering from another institution, deemed equivalent by the New Zealand Qualifications Authority to a New Zealand national qualification in mechanical engineering, acceptable to the Board; and
 - b. satisfy the Board that he or she has a minimum of three years' work experience acceptable to the Board in the extractives or heavy industry
- 4. The applicant must:
 - a. hold a degree in mechanical engineering conferred by a New Zealand university or hold a qualification in mechanical engineering from another institution, deemed equivalent by the New Zealand Qualifications Authority to a four-year Bachelor's degree in mechanical engineering, acceptable to the Board; and
 - b. satisfy the Board that he or she has one year's work experience acceptable to the Board in the extractive or heavy industry.

Certificate of competence as an electrical superintendent

- 1. The applicant for a certificate of competence as an electrical superintendent must have:
 - a. the qualifications set out in paragraph (2); and
 - b. the qualifications and experience set out in one of paragraphs (3) and (4).
- 2. The applicant must:
 - a. have passed the unit standards set out in Group H of the Appendix; and
 - b. hold an appropriate practising licence under the Electricity Act 1992; and
 - $c. \ hold \ a \ first \ aid \ certificate.$
- 3. The applicant must:
 - a. have a New Zealand national qualification as an electrician or have a national qualification in electrical engineering or hold a qualification in electrical engineering from another institution, deemed equivalent by the New Zealand Qualifications Authority to a New Zealand national qualification in electrical engineering, acceptable to the Board; and
 - b. satisfy the Board that he or she has a minimum of three years' work experience acceptable to the Board in the extractive or heavy industry.
- 4. The applicant must:
 - a. have a degree in electrical engineering conferred by a New Zealand university or by another university acceptable to the Board or has a qualification in electrical engineering from another institution, deemed equivalent by the New Zealand Qualifications Authority to a four-year Bachelor's degree in electrical engineering, acceptable to the Board; and
 - b. satisfy the Board that he or she has one year's work experience acceptable to the Board in the extractive or heavy industry.

Other requirements to be met for the granting of certificates of competence

Log book or other employment record to be supplied

- Where this notice requires an applicant to satisfy the Board that he or she has been employed for a specified period of time, or had a specified period of work experience, the applicant must supply a certified copy of the applicant's verified log book demonstrating the applicant has been employed for the specified period or had the specified work experience.
- 2. However, in respect of employment or work experience prior to 1 January 2014, the Board may accept other satisfactory evidence of employment or work experience.

Examination by panel of examiners

- 1. An applicant for a certificate of competence listed in paragraph (3) must satisfy a panel of examiners, approved by the Board, by way of oral examination or other examination or both, that he or she has satisfactory knowledge of good mining practice in the subject areas covered by the requirements set for the relevant certificate of competence.
- 2. The Board may require an applicant for a certificate of competence listed in paragraph (4) to satisfy a panel of examiners, approved by the Board, by way of oral examination or other examination or both, that he or she has satisfactory knowledge of good mining practice in the subject areas covered by the requirements set for the relevant certificate of competence.
- 3. Paragraph (1) applies to the following certificates of competence:
 - a. site senior executive;
 - b. first-class mine manager;
 - c. first-class coal mine manager;
 - d. A-grade opencast coal mine manager;
 - e. A-grade quarry manager;
 - f. A-grade tunnel manager;
 - g. coal mine deputy;
 - h. electrical superintendent;
 - i. mechanical superintendent;
 - j. ventilation officer;
 - k. winding engine driver;
 - l. coal mine underviewer.
- 4. Paragraph (2) applies to the following certificates of competence:
 - a. B-grade opencast coal mine manager:
 - b. B-grade quarry manager;
 - c. B-grade tunnel manager.
- 5. Nothing in paragraph (1) or (2) applies to an applicant for a certificate of competence of a type set out in paragraph (6) if he or she holds a certificate of fitness of a corresponding type under the former regulations.
- 6. The certificates of competence are:
 - a. a certificate of competence as a first-class mine manager;
 - $b. \ a \ certificate \ of \ competence \ as \ a \ first-class \ coal \ mine \ manager;$
 - c. a certificate of competence as an A-grade opencast coal mine manager;
 - d. a certificate of competence as a B-grade opencast coal mine manager;
 - e. a certificate of competence as an A-grade quarry manager;
 - f. a certificate of competence as a B-grade quarry manager;
 - g. a certificate of competence as an A-grade tunnel manager;
 - h. a certificate of competence as a B-grade tunnel manager;
 - $i. \ a \ certificate \ of \ competence \ as \ a \ coal \ mine \ deputy;$

- j. a certificate of competence as a coal mine underviewer;
- k. a certificate of competence as a winding engine driver.

Changes to unit standards

Replacement Unit Standards

In the case of a unit standard expiring and being replaced with a new unit standard, as verified with New Zealand Qualificaitons Authority (NZQA), for the purposes of meeting certificate of competence requirements either the unit standard listed in this notice or the replacement unit standard can be used to meet the requirements of this notice.

Exemption from Unit Standards

In the case of the unit standard listed in this notice being a replacement for a unit standard that has expired, for the purposes of meeting certificate of competence requirements, a person who has completed an expired unit standard that was replaced by a unit standard listed in this notice, as verified with NZQA, is exempt from the requirement to gain credit for the replacement standard.

Further Information

Information regulating this notice can be obtained from the Board of Examiners Secretariat, High Hazards & Specialist Services, PO Box 165, Wellington 6140.

Dated at Wellington this 18th day of December 2014.

GREGOR COSTER, Chairperson, WorkSafe New Zealand.

Appendix 1

For a certificate of competence as a site senior executive

GROUP A

Unit No.	Title	Level	Credits
7142	Demonstrate knowledge of the application of regulatory requirements to manage an extractive site	6	25
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
23547	Establish the risk management system at an extractive site	7	20
23548	Establish and maintain the Occupational Health and Safety management system at an extractive site	7	20
16810	Develop a Workplace Emergency Management Plan	6	10

For a certificate of competence as a first-class mine manager

GROUP B

Unit No.	Title	Level	Credits
7146	Demonstrate basic knowledge and ability required to work in an underground mine	2	6
8905	Construct and maintain access roads within surface extraction sites	3	3
8909	Maintain working surfaces at surface extraction sites	2	2
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
15664	Demonstrate knowledge of the geological nature of surface extraction sites	3	5
15672	Demonstrate knowledge of the Mines Rescue Service	2	2
21153	Demonstrate and apply knowledge of dewatering, pump maintenance, and cleaning settling ponds at extraction sites	3	12

21155	Review consent conditions and demonstrate knowledge of the use of		
	water at surface extraction sites	3	10

For a certificate of competence as a first-class coal mine manager GROUP C

Unit No.	Title	Level	Credits
8905	Construct and maintain access roads within surface extraction sites	3	3
8909	Maintain working surfaces at surface extraction sites	2	2

For a certificate of competence B-grade tunnel manager GROUP D

Unit No.	Title	Level	Credits
2401	Safely shut down and isolate machines and equipment	3	3
3271	Suppress fire with hand extinguishers and fixed hose reels	2	1
7146	Demonstrate basic knowledge and ability required to work in an underground mine	2	6
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
15672	Demonstrate knowledge of the Mines Rescue Service	2	2

For a certificate of competence as a coal mine deputy

GROUP E

Unit No.	Title	Level	Credits
2401	Safely shut down and isolate machines and equipment	3	3
3271	Suppress fire with hand extinguishers and fixed hose reels	2	1
7146	Demonstrate basic knowledge and ability required to work in an underground mine	2	6
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
15672	Demonstrate knowledge of the Mines Rescue Service	2	2
21821	Supply, maintain, deliver, and store services for an underground mine	3	15

For a certificate of competence as a mine surveyor

GROUP F

Unit No.	Title	Level	Credits
7142	Demonstrate knowledge of the application of regulatory requirements to manage an extractive site	6	25
7146	Demonstrate basic knowledge and ability required to work in an underground mine	2	6
15665	Demonstrate knowledge of the geology of surface extraction	4	5
15666	Demonstrate knowledge of geology for underground extraction	4	10
17741	Demonstrate specialist underground survey techniques	6	15
17742	Survey and draw an underground extractive site plan	6	20
17745	Survey and draw a surface extractive site plan	5	10

For a certificate of competence as a ventilation officer GROUP G

Unit No.	Title	Level	Credits
2401	Safely shut down and isolate machines and equipment	3	3
3271	Suppress fire with hand extinguishers and fixed hose reels	2	1
7142	Demonstrate knowledge of the application of regulatory requirements to manage an extractive site	6	25
7145	Design, establish, and maintain effective ventilation systems for an underground mine	5	20
7146	Demonstrate basic knowledge and ability required to work in an underground mine		
		2	6
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
17691	Use mathematics to solve problems in an extractive industries workplace	4	15
17744	Read and interpret an underground extractive site plan	4	5
21821	Supply, maintain, deliver, and store services for an underground mine	3	15

For a certificate of competence as a mechanical superintendent and electrical superintendent GROUP H

Unit No.	Title	Level	Credits
2401	Safely shut down and isolate machines and equipment	3	3
7142	Demonstrate knowledge of the application of regulatory requirements to manage an extractive site	6	25
3271	Suppress fire with hand extinguishers and fixed hose reels	2	1
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
16686	Conduct an incident investigation at an extraction site	5	8
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
22903	Demonstrate knowledge of modern manufacturing concepts and their significance in plant maintenance	4	3
22904	Demonstrate knowledge of modern engineering plant maintenance practice	4	5
22905	Perform planned maintenance work on mechanical equipment	4	5
26856	Carry out the risk management processes at an extractive site	4	10

GROUP 1 - Surface Extraction

Unit No.	Title	Level	Credits
8902	Prepare and implement safety plans for surface face and benching operations	4	4
8905	Construct and maintain access roads within surface extraction sites	3	3
8909	Maintain working surfaces at surface extraction sites	2	2
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
16686	Conduct an incident investigation at an extraction site	5	8
21153	Demonstrate and apply knowledge of dewatering, pump maintenance, and cleaning settling ponds at extraction sites	3	12

21155	Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites	3	10
21156	Plan, implement, and describe surface extraction production to minimise environmental impacts	5	15
26856	Carry out the risk management processes at an extractive site	4	10

GROUP 2 - Surface Extraction

Unit No.	Title	Level	Credits
7143	Inspect and report on extractive site and operations	5	10
7144	Review and implement plans for ongoing operations of an extractive site	5	15
8899	Plan storage for product processed at extractive sites	4	8
15658	Select excavation and transportation plant for surface extraction	4	8
15663	Design and maintain stockpiles and sloping surfaces in surface excavations and stockpiles	6	20
15664	Demonstrate knowledge of the geological nature of surface extraction sites	3	5
15667	Demonstrate knowledge of extraction methods and the effects of geological features on these methods	5	10
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
21151	Demonstrate knowledge of planning rehabilitation operations of an extractives site	6	15
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
25878	Demonstrate knowledge of crushing and screening plant for extractive industries	4	15
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10

GROUP 3 - Underground coal

Unit No.	Title	Level	Credits
7143	Inspect and report on extractive site and operations	5	10
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
21278	Describe, install and reassess support systems for an underground mine	4	15
21629	Evaluate and implement plans to manage old workings and inundations in underground sites	5	10
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP 4 - Underground coal

Unit No.	Title	Level	Credits
7144	Review and implement plans for ongoing operations of an extractive site	5	15
8899	Plan storage for product processed at extractive sites	4	8

16686	Conduct an incident investigation at an extraction site	5	8
17691	Use mathematics to solve problems in an extractive industries workplace	4	15
17705	Describe, develop, and maintain basic ventilation systems for an underground mine or tunnel	4	15
21661	Demonstrate knowledge of the use of electrical reticulation plant and equipment in underground mines	4	10
21662	Demonstrate knowledge of development and extraction plant and methods for underground coal mining	4	15
21281	Interpret and test for gases in an underground extraction site	4	15
22057	Demonstrate knowledge of fluid power systems used in underground mines and tunnels	4	10

GROUP 5 - Underground coal

Unit No.	Title	Level	Credits
7145	Design, establish, and maintain effective ventilation systems for an	_	
	underground mine	5	20
15666	Demonstrate knowledge of geology for underground extraction	4	10
17743	Demonstrate knowledge of survey principles and apply to an extraction		
	site	4	4
17744	Read and interpret an underground extractive site plan	4	5
21151	Demonstrate knowledge of planning rehabilitation operations of an		
	extractives site	6	15
21153	Demonstrate and apply knowledge of dewatering, pump maintenance,		
	and cleaning settling ponds at extraction sites	3	12
21823	Analyse and select mining and transportation plant for underground		
	coalmines	6	15

GROUP 6 - Underground coal

Unit No.	Title	Level	Credits
8902	Prepare and implement safety plans for surface face and benching operations	4	4
15658	Select excavation and transportation plant for surface extraction	4	8
15662	Evaluate ground conditions and design support methods for underground mines and tunnels	6	20
15663	Design and maintain stockpiles and sloping surfaces in surface excavations and stockpiles	6	20
15665	Demonstrate knowledge of the geology of surface extraction	4	5
15667	Demonstrate knowledge of extraction methods and the effects of geological features on these methods	5	10
15668	Demonstrate knowledge of mining methods for underground coal	6	20
17693	Explain and determine water flow, select pumps and structures for an extraction site	6	20
21156	Plan, implement, and describe surface extraction production to minimise environmental impacts	5	15
21280	Demonstrate knowledge of and design an effective ventilation system in an underground mine	6	20

22056	Demonstrate knowledge of theoretical mechanics for extractive industries	5	20
25878	Demonstrate knowledge of crushing and screening plant for extractive industries	4	15

GROUP 7 - Tunnels

Unit No.	Title	Level	Credits
7143	Inspect and report on extractive site and operations	5	10
7144	Review and implement plans for ongoing operations of an extractive site	5	15
8899	Plan storage for product processed at extractive sites	4	8
16686	Conduct an incident investigation at an extraction site	5	8
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
17691	Use mathematics to solve problems in an extractive industries workplace	4	15
17705	Describe, develop, and maintain basic ventilation systems for an underground mine or tunnel	4	15
21278	Describe, install, and reassess support systems for an underground mine	4	15
21281	Interpret and test for gases in an underground extraction site	4	15
21661	Demonstrate knowledge of the use of electrical reticulation plant and equipment in underground mines	4	10
21821	Supply, maintain, deliver, and store services for an underground mine	3	15
22057	Demonstrate knowledge of fluid power systems used in underground mines and tunnels	4	10
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP 8 - Tunnels

Unit No.	Title	Level	Credits
7145	Design, establish, and maintain effective ventilation systems for an underground mine	5	20
15660	Analyse and select mining and transportation plant for a Metalliferous underground extractive site	6	15
15666	Demonstrate knowledge of geology for underground extraction	4	10
15669	Demonstrate knowledge of tunnelling methods	5	15

GROUP 9 - Tunnels

Unit No.	Title	Level	Credits
15662	Evaluate ground conditions and design support methods for underground mines and tunnels	6	20
21151	Demonstrate knowledge of planning rehabilitation operations of an extractives site	6	15

GROUP 10 - Underground Metalliferous

Unit No.	Title	Level	Credits
7143	Inspect and report on extractive site and operations	5	10
7144	Review and implement plans for ongoing operations of an extractive site	5	15
7145	Design, establish, and maintain effective ventilation systems for an underground mine	5	20
8899	Plan storage for product processed at extractive sites	4	8
8902	Prepare and implement safety plans for surface face and benching operations	4	4
15658	Select excavation and transportation plant for surface extraction	4	8
15662	Evaluate ground conditions and design support methods for underground mines and tunnels	6	20
15663	Design and maintain stockpiles and sloping surfaces in surface excavations and stockpiles	6	20
15665	Demonstrate knowledge of the geology of surface extraction	4	5
15666	Demonstrate knowledge of geology for underground extraction	4	10
15667	Demonstrate knowledge of extraction methods and the effects of geological features on these methods	5	10
15670	Demonstrate knowledge of mining methods for Metalliferous mines	6	20
16686	Conduct an incident investigation at an extraction site	5	8
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
17693	Explain and determine water flow, select pumps, and structures for an extraction site	6	20
17744	Read and interpret an underground extractive site plan	4	5
17691	Use mathematics to solve problems in an extractive industries workplace	4	15
22056	Demonstrate knowledge of theoretical mechanics for extractive industries	5	20
21151	Demonstrate knowledge of planning rehabilitation operations of an extractives site	6	15
21156	Plan, implement, and describe surface extraction production to minimise environmental impacts	5	15
21278	Describe, install, and reassess support systems for an underground mine	4	15
21280	Demonstrate knowledge of and design an effective ventilation system in an underground mine	6	20
21281	Interpret and test for gases in an underground extraction site	4	15
21629	Evaluate and implement plans to manage old workings and inundations in underground sites	5	10
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
25878	Demonstrate knowledge of crushing and screening plant for extractive industries	4	15
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP 11 - Winding Engines

Unit No.	Title	Level	Credits
7164	Describe and operate a winding engine in an underground extractive		
	Site	4	6

GROUP 12 - Explosives

Unit No.	Title	Level	Credits
17694	Demonstrate knowledge of explosives and their properties	3	10
21152	Demonstrate and apply knowledge of storing explosives for use.	4	10

GROUP 13 - Legislation A

Unit No.	Title	Level	Credits
7142	Demonstrate knowledge of the application of regulatory requirements to		
	manage an extractive site	6	25

GROUP 14 - Legislation B

Unit No.	Title	Level	Credits
28742	Explain the health and safety legislation, and supporting documents, applicable to an extractive site	4	8

OR

Unit No.	Title	Level	Credits
7142	Demonstrate knowledge of the application of regulatory requirements to		
	manage an extractive site	6	25

Appendix 2

GROUP A - For a certificate of competence as a first-class mine manager

Unit No.	Title	Level	Credits
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP B - For a certificate of competence as a first-class coal mine manager

Unit No.	Title	Level	Credits
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP C - For a certificate of competence as an A-grade opencast coal mine manager

Unit No.	Title	Level	Credits
16686	Conduct an incident investigation at an extraction site	5	8
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP D - For a certificate of competence as a B-grade opencast coal mine manager

Unit No.	Title	Level	Credits
16686	Conduct an incident investigation at an extraction site	5	8
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP E - For a certificate of competence as an A-grade quarry manager

Unit No.	Title	Level	Credits
16686	Conduct an incident investigation at an extraction site	5	8
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP F - For a certificate of competence as an B-grade quarry manager

Unit No.	Title	Level	Credits
26856	Carry out the risk management processes at an extractive site	4	10

GROUP G - For a certificate of competence as an A-grade tunnel manager

Unit No.	Title	Level	Credits
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

Unit No.	Title	Level	Credits
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP H - For a certificate of competence as a B-grade tunnel manager

GROUP I - For a certificate of competence as a coal mine deputy

Unit No.	Title	Level	Credits
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10

GROUP J - For a certificate of competence as a coal mine underviewer

Unit No.	Title	Level	Credits
17279	Demonstrate knowledge of the coordinated incident management system (CIMS)	2	2
22445	Describe the roles and functions of a CIMS Incident Management Team (IMT) at an incident	4	4
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	5	10
26856	Carry out the risk management processes at an extractive site	4	10
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