Victorian Purchasing Guide for RII Resources and Infrastructure Industry Training Package Release 6

May 2021





© State of Victoria (Department of Education and Training) 2021.

Copyright of this material is reserved to the Crown in the right of the State of Victoria. This work is licensed under a Creative Commons Attribution-NoDerivs 3.0 Australia licence (See <u>Creative Commons</u> for more information). You are free to use, copy and distribute to anyone in its original form as long as you attribute Higher Education and Skills, Department of Education and Training (DET) as the author, and you license any derivative work you make available under the same licence.

Disclaimer

In compiling the information contained in and accessed through this resource, the Department of Education and Training has used its best endeavours to ensure that the information is correct and current at the time of publication but takes no responsibility for any error, omission or defect therein.

To the extent permitted by law, DET, its employees, agents and consultants exclude all liability for any loss or damage (including indirect, special or consequential loss or damage) arising from the use of, or reliance on the information contained herein, whether caused or not by any negligent act or omission. If any law prohibits the exclusion of such liability, DET limits its liability to the extent permitted by law, for the resupply of the information.

Third party sites

This resource may contain links to third party websites and resources. DET is not responsible for the condition or content of these sites or resources as they are not under its control.

Third party material linked from this resource is subject to the copyright conditions of the third party. Users will need to consult the copyright notice of the third party sites for conditions of usage.

Victorian Purchasing Guide — Release History

Note: RTOs should refer to the National Register for the detail of changes made in each Release. (See <u>National Register</u> for more information)

Training Package Release	Date VPG Approved	Comments	
RII Resources and Infrastructure Industry Training Package Release No 6.0	n/a	26 May 2021 - minor update to correct typographical errors to nominal hours.	
RII Resources and Infrastructure Industry Training Package Release No 6.0	14 May 2021	This Training Package release includes updates to a number of qualifications and units of competency as noted below: - 10 revised equivalent qualifications - 8 newly created units of competency - 2 non equivalent units of competency - 159 equivalent units of competency updated to align content with industry skills and standards	
RII Resources and Infrastructure Industry Training Package Release 5.0	14 January 2021	This Training Package release includes updates to a number of qualifications, units of competency and skill sets as noted below. - 17 revised equivalent qualifications - 1 deleted qualification: - 12 newly created native units of competency - 27 deleted units of competency - 216 equivalent units of competency updated to align content with industry skills needs and standards	
RII Resources and Infrastructure Industry Training Package Release 4.0	26 August 2020	RII Release 4 contains: One (1) new qualification RII41319 Certificate IV in Emergency Response Coordination Four (4) revised qualifications RII20819 Certificate II in Bituminous Surfacing RII30719 Certificate III in Emergency Response and Rescue RII30919 Certificate III in Civil Construction RII31619 Certificate III in Trenchless Technology Four (4) new units of competency Sixty-four (64) revised units of competency Some components of RII release 4 were updated in release 4.1 and 4.2. These additional changes are reflected in this VPG. For nominal hours of superseded units within RII Release 4 please refer to RII VPG Release 3.	
RII - Resources and Infrastructure Industry Training Package Release 3.0	21 February 2019	RII Release 3 contains: - Three (3) revised qualifications - Fifty-five (55) revised units of competency - Four (4) units of competence deleted - Two (2) new units of competency	

Training Package Release	Date VPG Approved	Comments
RII Resources and Infrastructure Industry Training Package Release 2.0	5 April 2016	RII Release 2 contains: One (1) new qualification RII21315 Certificate II in Cross Industry Operations Six (6) new units of competency Fifty-one (51) revised units of competency



RII Resources and Infrastructure Industry Training Package Release 6.0 Victorian Purchasing Guide

CONTENTS

INTRODUCTION	2
What is a Victorian Purchasing Guide?	2
Registration	2
Transition	2
QUALIFICATIONS	3
UNITS OF COMPETENCY AND NOMINAL HOURS	6
CONTACTS AND LINKS	50
GLOSSARY	53



INTRODUCTION

What is a Victorian Purchasing Guide?

The Victorian Purchasing Guide provides information for use by Registered Training Organisations (RTOs) in the provision of Victorian government subsidised training.

Specifically the Victorian Purchasing Guide provides the following information related to the delivery of nationally endorsed Training Packages in Victoria:

- The maximum and minimum payable hours available for each qualification.
- Nominal hours for each unit of competency within the Training Package.

Registration

RTOs must be registered by either the Victorian Registration and Qualifications Authority (VRQA) or the Australian Skills Qualification Authority (ASQA) regulatory body to be eligible to issue qualifications and Statements of Attainment under the Australian Qualifications Framework (AQF).

The VRQA is the regulatory authority in Victoria responsible for the registration of Vocational Education and Training (VET) providers who offer courses to domestic students in Victoria only.

ASQA is the regulatory authority responsible for the registration of VET providers who offer training in Victoria, nationally and / or internationally.

Transition

The relationship between new units and any superseded or replaced units from the previous version of **RII Resources and Infrastructure Industry Training Package Release 5.0** is provided in the Training Package Companion Volume Implementation Guide. (See Companion Volumes for more information).

Information regarding transition arrangements can be obtained from the state or national VET Regulatory Authority (see Contacts and Links section).

RTOs must ensure that all training and assessment leading to issuance of qualifications or Statements of Attainment from the RII Resources and Infrastructure Industry Training Package Release 6.0 is conducted against the Training Package units of competency and complies with the assessment requirements.



QUALIFICATIONS

Code	Title	Minimum Payable Hours	Maximum Payable Hours
RII10115	Certificate I in Resources and Infrastructure Operations	135	140
RII20120	Certificate II in Resources and Infrastructure Work Preparation	285	300
RII20215	Certificate II in Surface Extraction Operations	255	270
RII20320	Certificate II in Underground Coal Mining	305	320
RII20415	Certificate II in Underground Metalliferous Mining	380	420
RII20515	Certificate II in Resource Processing	325	340
RII20620	Certificate II in Mining / Field Exploration	455	480
RII20720	Certificate II in Civil Construction	490	520
RII20819	Certificate II in Bituminous Surfacing	357	376
RII20920	Certificate II in Drilling Operations	375	395
RII21015	Certificate II in Drilling Oil/Gas (Offshore)	375	395
RII21120	Certificate II in Drilling Oil/Gas (On shore) and Well Servicing	350	370
RII30115	Certificate III in Surface Extraction Operations	570	600
RII30220	Certificate III in Underground Coal Operations	620	650
RII30315	Certificate III in Underground Metalliferous Mining	640	670
RII30415	Certificate III in Resource Processing	430	450
RII30520	Certificate III in Mining Exploration	540	570
RII30615	Certificate III in Small Mining Operations	475	500
RII30719	Certificate III in Emergency Response and Rescue	416	438
RII30820	Certificate III in Civil Construction Plant Operations	1207	1270
RII30920	Certificate III in Civil Construction	1144	1204
RII31220	Certificate III in Civil Foundations	804	846
RII31619	Certificate III in Trenchless Technology	830	874
RII31820	Certificate III in Drilling Operations	530	555
RII31915	Certificate III in Drilling Oil & Gas (Off shore)	430	450
RII32020	Certificate III in Drilling Oil/Gas (Onshore)	390	410



Code	Title	Minimum Payable Hours	Maximum Payable Hours
RII32220	Certificate III in Well Servicing Operations	430	450
RII40115	Certificate IV in Surface Extraction Operations	820	860
RII40220	Certificate IV in Surface Coal Mining (Open Cut Examiner)	630	660
RII40315	Certificate IV in Metalliferous Mining Operations (Underground)	715	750
RII40420	Certificate IV in Underground Coal Operations	740	780
RII40515	Certificate IV in Resource Processing	540	570
RII40720	Certificate IV in Civil Construction	817	860
RII40820	Certificate IV in Civil Construction Design	827	870
RII40920	Certificate IV in Drilling Operations	510	535
RII41015	Certificate IV in Drilling Oil & Gas (Off shore)	520	545
RII41120	Certificate IV in Drilling Oil & Gas (On shore)	415	435
RII41220	Certificate IV in Well Servicing Operations	500	525
RII41319	Certificate IV in Emergency Response Coordination	466	490
RII50115	Diploma of Surface Operations Management	930	980
RII50215	Diploma of Underground Metalliferous Mining Management	750	790
RII50315	Diploma of Minerals Processing	855	900
RII50420	Diploma of Civil Construction Management	969	1020
RII50520	Diploma of Civil Construction Design	1482	1560
RII50620	Diploma of Drilling Operations	760	800
RII50715	Diploma of Drilling Oil & Gas (Off shore)	1150	1210
RII50820	Diploma of Drilling Oil & Gas (On shore)	610	640
RII50920	Diploma of Underground Coal Mining Management	705	740
RII51020	Diploma of Well Servicing Operations	850	895
RII60115	Advanced Diploma of Metalliferous Mining	1400	1470
RII60215	Advanced Diploma of Extractive Industries Management	1310	1380
RII60320	Advanced Diploma of Underground Coal Mining Management	950	1000



Code	Title	Minimum Payable Hours	Maximum Payable Hours
RII60415	Advanced Diploma of Drilling Management	805	845
RII60520	Advanced Diploma of Civil Construction Design	988	1040
RII60620	Advanced Diploma of Civil Construction	1330	1440
RII60720	Advanced Diploma of Surface Coal Mining Management	1290	1360



UNITS OF COMPETENCY AND NOMINAL HOURS

Unit Code	Unit Title	Nominal Hours
RIIBEF201E	Plan and organise work	20
RIIBEF202E	Identify and rectify site operating problems	40
RIIBEF302E	Monitor site production activities	20
RIIBEF401E	Manage non-routine and complex technical situations	80
RIIBEF601E	Conduct business negotiations	100
RIIBEF602E	Establish and evaluate operational performance management systems	120
RIIBEF604E	Conduct a feasibility study	100
RIIBHD301E	Conduct surface blast hole drilling operations	60
RIIBHD302E	Conduct underground development drilling	28
RIIBHD303E	Conduct long hole drilling	28
RIIBLA201E	Support shotfiring operations	30
RIIBLA204E	Store, handle and transport explosives in underground coal mines	30
RIIBLA205E	Store, handle and transport explosives	20
RIIBLA301E	Conduct surface shotfiring operations	50
RIIBLA302E	Conduct shotfiring operations in underground coal mines	60
RIIBLA303E	Conduct underground development shotfiring	50
RIIBLA304E	Conduct underground production shotfiring	50
RIIBLA305E	Conduct secondary blasting	35
RIIBLA307E	Conduct a blast survey	20
RIIBLA401E	Manage blasting operations	40
RIIBLA402E	Monitor and control the effects of blasting on the environment	40



Unit Code	Unit Title	Nominal Hours
RIIBLA403	Design blasts	40
RIICBM201E	Strip pile heads	20
RIICBM301E	Maintain concrete bridges	80
RIICBM302E	Install pre-cast girders	80
RIICBM303E	Install pre-cast parapets	80
RIICBM304E	Operate bridge inspection units	80
RIICBM305E	Install pre-cast concrete bridge decks	80
RIICBM306E	Undertake concreting work on concrete bridges	80
RIICBM307E	Construct formwork and false work on concrete bridges	120
RIICBS202E	Hand spread asphalt	18
RIICBS203D	Safely handle bituminous materials	18
RIICBS203E	Safely handle bituminous materials	18
RIICBS207E	Take samples of road surfacing materials	10
RIICBS301E	Conduct profile planer operations	80
RIICBS302E	Conduct paver screeding operations	58
RIICBS303E	Conduct materials transfer vehicle operations	56
RIICBS304E	Compact asphalt with rollers	44
RIICBS305E	Conduct asphalt paver operation	52
RIICBS306E	Conduct micro surfacing operations	80
RIICBS307E	Conduct bitumen sprayer operations	100
RIICBS308E	Load aggregate using purpose built loaders	20
RIICBS309E	Conduct self-propelled aggregate spreader operations	30



Unit Code	Unit Title	Nominal Hours
RIICBS310E	Conduct patching operations	60
RIICBS311E	Produce asphalt products	100
RIICBS312E	Conduct bitumen tanker operations	64
RIICBS313	Conduct tack coat spraying operations	20
RIICBS314	Conduct aggregate spreader box operations	18
RIICBS315	Roll aggregate in sprayed sealing operations	26
RIICBS316	Conduct pavement sweeping operations	18
RIICBS317	Conduct road maintenance operations	36
RIICBS401E	Supervise asphalt paving and compaction operations	40
RIICBS402E	Supervise the application of bituminous sprayed treatments	45
RIICBS403E	Supervise the application of polymer modified binders	25
RIICBS404E	Supervise the selection and use of bituminous emulsions	20
RIICBS405E	Supervise micro surfacing operations	40
RIICBS406E	Supervise pavement profiling operations using a profiler	30
RIICBS407E	Supervise the manufacture and delivery of hot mix asphalt	40
RIICBS408E	Supervise the manufacture of cold mixes	40
RIICBS409E	Supervise the manufacture of polymer modified binders	40
RIICBS410E	Supervise the manufacture of bituminous emulsions	40
RIICBS411E	Supervise the manufacture of micro surfacing mixes	40
RIICCM201E	Carry out measurements and calculations	20
RIICCM202E	Identify, locate and protect underground services	30
RIICCM203E	Read and interpret plans and job specifications	40



Unit Code	Unit Title	Nominal Hours
RIICCM204E	Place and fix reinforcement materials	40
RIICCM205F	Carry out manual excavation	8
RIICCM206E	Support plant operations	8
RIICCM207E	Spread and compact materials manually	12
RIICCM208E	Carry out basic levelling	16
RIICCM209E	Carry out concrete work	40
RIICCM210E	Install trench support	16
RIICCM211E	Construct and dismantle fences and gates	40
RIICCM302	Track directional boring operations	35
RIICCM303	Conduct vacuum excavations	35
RIICCR401E	Develop and maintain positive community relations	30
RIICCR601D	Manage customer relationships	60
RIICFW301E	Construct underpinning	60
RIICFW302E	Install temporary and permanent rock anchors	24
RIICFW303E	Install primary ground supports	24
RIICFW304E	Conduct pile driving operations	40
RIICFW305E	Conduct cast in-situ pilings operations	40
RIICFW306E	Direct pile driving operations	40
RIICFW307E	Direct cast in-situ piling operations	40
RIICFW308	Conduct screw piling operations	40
RIICOM201E	Communicate in the workplace	20
RIICOM301D	Communicate Information	20



Unit Code	Unit Title	Nominal Hours
RIICOM301E	Communicate information	30
RIICOM302D	Communicate workplace information	20
RIICPL301E	Install water mains pipelines	40
RIICPL302E	Install stormwater systems	40
RIICPL303E	Install sewer pipelines	40
RIICPL304E	Install pre-cast gully pits	40
RIICPL305E	Install pre-cast access chambers	40
RIICPL401E	Supervise the installation of underground services using open excavation	60
RIICRC201E	Repair potholes	36
RIICRC202E	Install signs	16
RIICRC203E	Install sub-soil drainage	20
RIICRC204E	Install and maintain roadside fixtures	30
RIICRC205E	Install utility poles	40
RIICRC206E	Install pre-cast concrete crash barriers	40
RIICRC207E	Install noise barriers	40
RIICRC208E	Lay pipes	40
RIICRC209E	Lay reinforced concrete box culverts	40
RIICRC301E	Maintain drainage systems	16
RIICRC302E	Place and form concrete kerb, channel and fixtures	36
RIICRC303E	Lay pavers	24
RIICRC304E	Maintain sealed roads	32
RIICRC305E	Conduct road construction paver screeding operations	58



Unit Code	Unit Title	Nominal Hours
RIICRC306E	Conduct earthworks	80
RIICRC307E	Conduct road pavement construction	24
RIICRC308E	Conduct paver operations	80
RIICRC309E	Conduct stabiliser operations	80
RIICRC310E	Construct and maintain roads	60
RIICRC311E	Conduct concrete road paver operations	60
RIICRC312E	Set up and maintain concrete paver stringlines	40
RIICRC313E	Conduct concrete road curing and texturing operations	24
RIICRC314E	Handle concrete materials	24
RIICRC315E	Use concreting materials and equipment	60
RIICRC316E	Place and compact concrete	170
RIICRC317E	Finish concrete pavements	40
RIICRC318E	Cure concrete	16
RIICRC319E	Saw and cut concrete pavements to initiate planned cracks	16
RIICRC320E	Seal concrete pavements	12
RIICRC321E	Use automated paving guidance systems	80
RIICRC322E	Receive, check and record concrete deliveries	8
RIICRC323E	Insert tie bars in fresh concrete	8
RIICRC401E	Supervise flexible pavement construction	50
RIICRC402E	Supervise rigid pavement construction	50
RIICRC403E	Supervise the stabilisation of materials	50
RIICRC404E	Inspect and report on pavement condition	40



Unit Code	Unit Title	Nominal Hours
RIICRC405E	Carry out pavement condition measurement	50
RIICRC406E	Supervise pavement maintenance	50
RIICRM201F	Escort mobile works	24
RIICRM202E	Handle and store road marking materials	8
RIICRM203E	Conduct pedestrian road marking operations	24
RIICRM204E	Prepare surfaces for road marking	16
RIICRM205E	Conduct road marking measuring operations	16
RIICRM206E	Conduct airless and atomised spraying operations	20
RIICRM207E	Install raised pavement markers	16
RIICRM301E	Conduct ride on road marking operations	16
RIICRM302E	Conduct long line road marking operations	40
RIICRM303E	Conduct thermo plastic road marking operations	30
RIICSG401E	Supervise civil concrete structure construction	100
RIICSG402E	Supervise civil steel structure construction	100
RIICSG403E	Supervise civil timber structure construction	100
RIICSG404E	Supervise civil masonry, crib and gabion structure construction	100
RIICSG405E	Carry out inspections of civil structures	100
RIICSG406E	Supervise maintenance of civil structures	100
RIICTB201E	Maintain timber bridges	64
RIICTB202E	Apply bridge durability treatments	40
RIICTB203E	Produce bridge drawings and sketches	24
RIICTB301E	Undertake visual inspections	64



Unit Code	Unit Title	Nominal Hours
RIICTB302E	Install temporary support members	40
RIICTB303E	Erect temporary modular support systems (baileys) on existing bridges	48
RIICTB304E	Install or replace sub-structure members	48
RIICTB305E	Install or replace super-structure members	48
RIICTB306E	Splice and connect timber members	40
RIICTB307E	Assemble and disassemble temporary modular bridges	48
RIICTB308E	Install or replace truss members	40
RIICTB309E	Construct, maintain and remove coffer dams	60
RIICTB310E	Construct specialised timber deck systems	64
RIICTC301E	Install tunnelling constructions services	80
RIICTC302E	Line tunnels	80
RIICTC303E	Excavate tunnel by machine	32
RIICTC304E	Muck out tunnel earthworks	16
RIICTC305E	Construct portals	24
RIICTC306	Conduct tunnel boring machine operations	200
RIICTC401E	Supervise tunnel construction	100
RIICTC402	Supervise tunnel boring machine operations	200
RIICTT301E	Conduct fluid assisted directional boring	80
RIICTT302E	Conduct impact moling, ramming and augering operations	80
RIICTT303E	Control micro tunnelling and pipe-jacking operations	80
RIICTT304E	Undertake on-line replacement for existing pipeline systems	80
RIICTT305E	Undertake localised repair and sealing of existing pipeline systems	80



Unit Code	Unit Title	Nominal Hours
RIICTT306E	Install cure in-place linings for existing pipeline systems	80
RIICTT307E	Spray linings for existing pipeline systems	80
RIICTT308E	Install close-fit linings for existing pipeline systems	80
RIICTT309E	Install slip lining in existing pipeline systems	80
RIICTT310E	Renovate large diameter pipes and chambers	80
RIICTT401E	Supervise the installation of underground services using trenchless technology	60
RIICTT402E	Supervise repair and rehabilitation of underground services using trenchless technology	60
RIICWD501E	Prepare detailed design of foundations	100
RIICWD502E	Prepare detailed design of lighting	100
RIICWD503E	Prepare traffic management plans and traffic guidance schemes	50
RIICWD504E	Prepare detailed design of environmental controls	100
RIICWD505E	Prepare detailed design of landscaping	100
RIICWD506E	Prepare detailed design of canals	100
RIICWD508E	Prepare detailed design of rural roads	100
RIICWD509E	Prepare detailed design of urban roads	100
RIICWD510E	Prepare detailed design of busways	100
RIICWD511E	Prepare detailed design of sub-divisions	100
RIICWD512E	Prepare detailed design of motorways and interchanges	100
RIICWD513E	Prepare detailed design of rail civil infrastructure	100
RIICWD514E	Prepare detailed design of dams	100
RIICWD515E	Prepare detailed design of airfield civil works	100



Unit Code	Unit Title	Nominal Hours
RIICWD516E	Prepare detailed design of bicycle ways	50
RIICWD517E	Prepare detailed design of industrial hardstands	100
RIICWD518E	Prepare detailed design of open car parks	50
RIICWD519E	Prepare detailed design of intermodal facilities civil works	100
RIICWD520E	Prepare detailed design of rigid pavements	100
RIICWD521E	Prepare detailed design of flexible pavements	100
RIICWD522E	Prepare stabilised material mix design	100
RIICWD523E	Prepare asphalt mix design	60
RIICWD524E	Prepare design of spray seal surfacing	60
RIICWD525E	Select pavement surfacing	60
RIICWD526E	Prepare detailed traffic analysis	100
RIICWD527E	Prepare detailed design of traffic signals	100
RIICWD528E	Prepare detailed design of traffic management systems	100
RIICWD529E	Prepare detailed design of underground services	100
RIICWD530E	Prepare detailed design of surface drainage	100
RIICWD531E	Prepare detailed design of subsurface drainage	100
RIICWD532E	Prepare detailed design of tunnels	100
RIICWD533E	Prepare detailed design of civil concrete structures	100
RIICWD534E	Prepare detailed design of civil steel structures	100
RIICWD535E	Prepare detailed design of civil timber structures	100
RIICWD536E	Prepare detailed design of civil masonry, crib and gabion structures	100
RIICWD537E	Prepare detailed design of marine structures civil works	120



Unit Code	Unit Title	Nominal Hours
RIICWD538	Prepare traffic management plans and traffic guidance schemes for high volume roads	50
RIICWD539	Prepare traffic management plans and traffic guidance schemes for motorways and freeways	50
RIICWD601E	Manage civil works design processes	300
RIICWM401E	Supervise civil works	80
RIICWM402E	Supervise civil works contractors	100
RIICWM501E	Implement civil construction plans	120
RIICWM502E	Implement civil works maintenance programs	120
RIICWM503E	Prepare civil works cost estimates	100
RIICWM504E	Prepare civil works bill of quantities	100
RIICWM505E	Prepare civil works schedule of rates	100
RIICWM601E	Establish civil construction plans	300
RIICWM602E	Establish civil works maintenance programs	300
RIIDML401E	Supervise demolitions	100
RIIEGS202E	Conduct field work	40
RIIEGS301E	Operate and maintain instruments and field equipment	40
RIIEGS303E	Provide geological field assistance	40
RIIEGS304E	Mobilise equipment and materials	40
RIIEGS305E	Navigate in remote or trackless areas	40
RIIENV201E	Identify and assess environmental and heritage concerns	20
RIIENV202E	Suppress airborne contaminants	30
RIIENV301E	Conduct atmospheric monitoring	40



Unit Code	Unit Title	Nominal Hours
RIIENV302D	Apply environmentally sustainable work practices	30
RIIENV302E	Apply environmentally sustainable work practices	30
RIIENV401E	Supervise dust and noise control	40
RIIENV402E	Implement and monitor environmental policies	40
RIIENV501E	Implement and maintain environmental management plans	120
RIIENV502E	Undertake process or project environmental impact assessments	120
RIIENV601E	Establish and maintain the environmental management system	100
RIIERR203E	Escape from hazardous situations unaided	40
RIIERR301E	Respond to work site incidents	20
RIIERR303E	Operate in self-contained regenerative oxygen breathing apparatus	20
RIIERR305E	Control underground fires	30
RIIERR306E	Conduct underground searches	20
RIIERR307E	Extricate casualties from underground incidents	30
RIIERR308E	Extricate and transport people involved in incidents	40
RIIERR401E	Apply and monitor emergency preparedness and response systems in surface operations	60
RIIERR402E	Apply and monitor underground coal mine emergency preparedness and response systems	60
RIIERR403E	Lead rescue teams	40
RIIERR405	Control emergencies and critical situations	30
RIIERR406	Provide support for rescue operations	20
RIIERR501E	Implement underground coal mine emergency preparedness and response systems	60
RIIERR504D	Manage major incidents and emergencies	120



Unit Code	Unit Title	Nominal Hours
RIIERR504E	Manage major incidents and emergencies	120
RIIERR601E	Establish and maintain mine emergency preparedness and response systems	120
RIIERR602E	Establish and maintain underground coal mine emergency preparedness and response systems	80
RIIFIA401E	Manage financial records	50
RIIGOV201E	Comply with site work processes/procedures	20
RIIGOV401E	Apply, monitor and report on compliance systems	80
RIIGOV501E	Identify, implement and maintain legal compliance requirements	80
RIIGOV601E	Establish, maintain and develop a statutory compliance management system	120
RIIHAN203E	Conduct lifting operations	40
RIIHAN208E	Perform dogging	80
RIIHAN213E	Work effectively in the drilling industry	50
RIIHAN305D	Operate a gantry or overhead crane	40
RIIIMG301D	Maintain site records	10
RIIIMG301E	Maintain site records	10
RIILAT401E	Provide leadership in the supervision of Indigenous employees	50
RIILAT402E	Provide leadership in the supervision of diverse work teams	50
RIILAT601E	Manage group processes	120
RIIMCO202E	Conduct mobile conveyor operations	40
RIIMCO303E	Conduct auger miner operations	80
RIIMCU208E	Conduct basic strata control operations	40
RIIMCU209E	Conduct roadway maintenance	20



Unit Code	Unit Title	Nominal Hours
RIIMCU213E	Conduct feeder breaker operations	40
RIIMCU214E	Conduct ventilation operations	40
RIIMCU217	Apply spontaneous combustion management measures	40
RIIMCU301E	Conduct specialised strata control operations	40
RIIMCU302F	Construct and maintain ventilation devices	40
RIIMCU303E	Conduct continuous miner operations	120
RIIMCU304E	Conduct shuttle car operations	40
RIIMCU305E	Conduct outburst mining operations	40
RIIMCU306E	Conduct shearer operations	40
RIIMCU307E	Conduct longwall face equipment operations	120
RIIMCU308E	Install and recover longwall equipment	40
RIIMCU309E	Operate breaker line supports	40
RIIMCU310E	Conduct flexible conveyor train (FCT) operations	40
RIIMCU311E	Monitor control processes	40
RIIMCU401E	Conduct special roadway operations	60
RIIMCU403E	Apply and monitor the gas management plan	60
RIIMCU406E	Apply and monitor the inrush management plan	70
RIIMCU407E	Apply and monitor the strata management plan	60
RIIMCU408E	Apply the spontaneous combustion management plan	60
RIIMCU501E	Implement the spontaneous combustion management plan	60
RIIMCU502E	Implement the gas management plan	60
RIIMCU505E	Implement the inrush management plan	80



Unit Code	Unit Title	Nominal Hours
RIIMCU506E	Implement the strata management plan	60
RIIMCU601E	Establish and maintain spontaneous combustion management systems	80
RIIMCU602E	Establish and maintain gas management systems	80
RIIMCU605E	Establish and maintain inrush management systems	100
RIIMCU606E	Establish and maintain the mining method and strata management systems	80
RIIMEX303	Conduct local geotechnical risk control in surface operations	80
RIIMEX403E	Supervise canal construction	100
RIIMEX404E	Apply and monitor systems for stable mining	80
RIIMEX405E	Apply and monitor systems and methods of surface coal mining	80
RIIMEX407	Apply and monitor the ground control management plan	80
RIIMEX504	Implement the ground control management plan	90
RIIMPO310F	Conduct grader operations	40
RIIMPO316E	Conduct self-propelled compactor operations	40
RIIMPO317F	Conduct roller operations	80
RIIMPO320F	Conduct civil construction excavator operations	200
RIIMPO321F	Conduct civil construction wheeled front end loader operations	160
RIIMPO322E	Conduct civil construction tracked front end loader operations	80
RIIMPO323E	Conduct civil construction dozer operations	240
RIIMPO324F	Conduct civil construction grader operations	240
RIIMPO327E	Conduct pipe layer operations	80
RIIMPO329F	Conduct dragline operations	120



Unit Code	Unit Title	Nominal Hours
RIIMPO331E	Conduct operations with stockpile dozer	80
RIIMPO334E	Conduct skid steer loader operations using attachments	80
RIIMPO337E	Conduct articulated haul truck operations	40
RIIMPO339A	Conduct side tipper operations	40
RIIMPO402D	Apply the principles of earthworks construction	40
RIIMPO501D	Implement, monitor, rectify and report on mobile plant and equipment systems	60
RIIMSM307E	Install and maintain ventilation systems and equipment	40
RIINHB201E	Load, secure and unload drilling equipment and materials	40
RIINHB202E	Set up and pack up drill sites	40
RIINHB203E	Support drilling processes	60
RIINHB205F	Assist continuous flight auger drilling	40
RIINHB208E	Assist diamond core drilling	40
RIINHB209E	Assist guided boring	40
RIINHB210E	Assist surface directional drilling	40
RIINHB211E	Assist mud rotary drilling	40
RIINHB216E	Assist underground in-seam directional drilling	40
RIINHB217E	Assist horizontal direction drilling	40
RIINHB218E	Assist grouting and cementing operations	40
RIINHB219E	Assist with reverse circulation drilling	40
RIINHB220	Assist coil tube drilling	40
RIINHB221	Assist rotary air drilling	40
RIINHB222	Assist sonic drilling operations	40



Unit Code	Unit Title	Nominal Hours
RIINHB223	Prepare, run and cement casing	40
RIINHB301E	Set up and prepare for drilling operations	65
RIINHB304E	Conduct reverse circulation drilling operations	65
RIINHB306E	Conduct large diameter auger drilling	65
RIINHB311E	Conduct mud rotary drilling operations	65
RIINHB313D	Conduct cable tool drilling	65
RIINHB320D	Construct monitoring bores	65
RIINHB322E	Construct multiple aquifer production bores	65
RIINHB324E	Conduct grouting or cementing operations	40
RIINHB325E	Construct single aquifer bores	70
RIINHB326	Conduct coil tube drilling	65
RIINHB327	Conduct cyber chair drilling operations	65
RIINHB328	Conduct rotary air drilling	65
RIINHB329	Conduct sonic drilling operations	65
RIINHB330	Conduct down-hole hammer drilling	40
RIINHB401E	Plan and supervise the mobilisation of equipment, crew and materials	50
RIINHB402E	Supervise drilling operations	50
RIINHB411E	Construct artesian (flowing) aquifer bores	65
RIINHB501F	Plan drilling	60
RIIOGD202E	Carry out equipment and basic rig maintenance procedures	40
RIIOGD203F	Prepare and operate drilling fluid systems	30
RIIOGD204F	Perform rig floor operations	50



Unit Code	Unit Title	Nominal Hours
RIIOGD205E	Support blow out prevention operations	20
RIIOGD206E	Assist and monitor well control operations	20
RIIOGD209F	Operate and maintain ancillary equipment	40
RIIOGD302F	Assist in running casing	30
RIIOGD303F	Trip pipe	30
RIIOGD305E	Apply blow out prevention operational procedures	40
RIIOGD401E	Rig up, conduct pre-spud operations and rig down	30
RIIOGD402E	Participate in nippling-up and pressure tests	30
RIIOGD403E	Conduct drilling operations	30
RIIOGD404E	Coordinate air drilling operations	30
RIIOGD405E	Carry out well control and blow out prevention operations	65
RIIOGD406D	Shut down rig	30
RIIOGD501F	Manage rig operations	40
RIIOGD502E	Plan and evaluate rig operations	40
RIIOGD503E	Oversee drilling operations	80
RIIOGD504E	Manage drilling operations	80
RIIOGD505E	Manage drilling and well servicing induction and orientation	50
RIIOGF203D	Contribute to the control of offshore emergencies	20
RIIOGF301E	Monitor, operate and maintain mud pits and equipment	30
RIIOGF302E	Operate drilling fluids and mud pits	40
RIIOGN201F	Carry out rig lease operations	30
RIIOGN302F	Operate mud pumps	20



Unit Code	Unit Title	Nominal Hours
RIIOGN303E	Operate, monitor and maintain mud systems	40
RIIPEO201E	Conduct conveyor operations	40
RIIPEO202E	Provide deck support for conveyor-car high wall mining operations	40
RIIPEO207E	Carry out conveyor system shift	20
RIIPEO208E	Extend, retract and maintain conveyor componentry	20
RIIPEO301E	Conduct conveyor-car high wall mining operations	40
RIIPEO302E	Operate and monitor ore car dumpers	40
RIIPHA303D	Operate agglomeration circuit	32
RIIPRM501E	Implement, monitor, rectify and report on contracts	80
RIIQUA201E	Maintain and monitor site quality standards	20
RIIQUA401D	Apply a quality management system on site	60
RIIQUA401E	Apply a quality management system on site	60
RIIQUA501D	Implement, monitor and develop quality management plans	100
RIIQUA501E	Implement, monitor and develop quality management plans	100
RIIQUA601E	Establish and maintain a quality system	100
RIIRAI505D	Implement the surface mine mechanical plant management plan	100
RIIRAI507D	Implement the underground coal mine mechanical plant management plan	80
RIIRAI510D	Implement, monitor, rectify and report on interfaces between electrical and mechanical componentry	80
RIIRAI602D	Establish and maintain mine mechanical plant, services and infrastructure systems	120
RIIRAI603E	Establish and maintain mine transport systems and production equipment	80



Unit Code	Unit Title	Nominal Hours
RIIRAI604E	Establish and maintain mine services and infrastructure systems	80
RIIRAI605D	Establish and maintain an underground mine mechanical plant management system	100
RIIRAI609D	Establish and maintain electrical installations, reticulation and protection system	120
RIIRAI610D	Establish & maintain mechanical standard/engineering practices for transport/ production equipment	120
RIIRAI611D	Establish and maintain a surface mine mechanical plant management system	100
RIIRIS201E	Conduct local risk control	20
RIIRIS202E	Respond to site based spills	20
RIIRIS301D	Apply risk management processes	40
RIIRIS301E	Apply risk management processes	40
RIIRIS401E	Apply site risk management system	40
RIIRIS402E	Carry out the risk management process	60
RIIRIS403E	Manage and coordinate spill response	50
RIIRIS501E	Implement and maintain management systems to control risk	80
RIIRIS601D	Establish and maintain the risk management system	100
RIIRIS601E	Establish and maintain risk management systems	100
RIIRTM201E	Position, set-up and operate variable message signs	40
RIIRTM202E	Position, set-up and operate portable traffic signals	40
RIIRTM203E	Work as a safety observer/spotter	20
RIIRTM301E	Operate truck or trailer mounted attenuators	40
RIISAM201E	Handle resources and infrastructure materials and safely dispose of nontoxic materials	16



Unit Code	Unit Title	Nominal Hours
RIISAM202E	Isolate and access plant	30
RIISAM203E	Use hand and power tools	80
RIISAM204E	Operate small plant and equipment	20
RIISAM205E	Cut, weld and bend materials	40
RIISAM207E	Apply operational maintenance skills	40
RIISAM208E	Perform plant operational maintenance	50
RIISAM209E	Carry out operational maintenance	40
RIISAM212E	Service mine plant and equipment	40
RIISAM213E	Position and set up mobile lighting	10
RIISAM215E	Carry out drilling industry operational maintenance	40
RIISAM301F	Test operational functions of vehicles and equipment	30
RIISAM303E	Shutdown dredge for operator maintenance	40
RIISAM304E	Install, commission and maintain major conveyor equipment and systems	80
RIISAM306E	Service and maintain conveyors, feeders and hoppers	40
RIISAM307E	Service and maintain crushers	40
RIISAM308E	Service and maintain screens	40
RIISAM309E	Service and maintain pumps	40
RIISAM401E	Apply site plant, equipment and infrastructure maintenance management plans	40
RIISAM403E	Commission/recommission plant	66
RIISAM404	Monitor oil and gas equipment maintenance	40
RIISAM501E	Implement and maintain the site plant, equipment and infrastructure maintenance plans	60



Unit Code	Unit Title	Nominal Hours
RIISAM502E	Manage general drilling equipment maintenance	60
RIISAM601E	Establish and maintain plant, equipment and infrastructure maintenance systems	120
RIISAM602E	Establish and maintain maintenance management system for mechanical plant and equipment	120
RIISTD201E	Read and interpret maps	40
RIISTD202E	Collect routine site samples	40
RIISTD302E	Process data and maintain accurate records	40
RIISTD401	Monitor quarry laboratory operations and the quality of results	60
RIIUND202E	Operate from elevated work platform underground	30
RIIUND205E	Respond to a workforce incident	32
RIIUND207E	Conduct underground lifting operations	40
RIIUND208E	Conduct skip operations	24
RIIUND209E	Operate automated winder	24
RIIUND301E	Operate manual winder	32
RIIUND302E	Conduct cage operations	32
RIIUND303E	Operate winder for shaft sinking	32
RIIUND310E	Apply shotcrete underground	40
RIIUND401E	Apply and monitor the ventilation management plan	60
RIIUND501E	Implement the ventilation management plan	70
RIIUND601E	Establish and maintain ventilation management systems	120
RIIVEH201E	Operate a light vehicle	30
RIIVEH202F	Operate a medium vehicle	30



Unit Code	Unit Title	Nominal Hours
RIIVEH203E	Operate a light vehicle underground	40
RIIVEH302E	Operate multi-combination vehicle	40
RIIVEH303F	Drive heavy combination vehicle	40
RIIVEH304E	Conduct tip truck operations	60
RIIVEH305F	Operate and maintain a four wheel drive vehicle	40
RIIVEH306E	Operate a mine service vehicle	20
RIIVEH307F	Operate a heavy rigid vehicle	40
RIIWHS201E	Work safely and follow WHS policies and procedures	20
RIIWHS202E	Enter and work in confined spaces	30
RIIWHS204E	Work safely at heights	20
RIIWHS205E	Control traffic with stop-slow bat	20
RIIWHS206	Control traffic with portable traffic control devices and temporary traffic signs	20
RIIWHS207	Control traffic on high volume roads	20
RIIWHS301E	Conduct safety and health investigations	30
RIIWHS302E	Implement traffic management plans	20
RIIWHS303	Position, set up and program portable traffic control devices	25
RIIWHS304	Implement traffic management plans on high volume roads	20
RIIWHS305	Implement traffic management plans on motorways and freeways	20
RIIWHS401E	Supervise work in confined spaces	60
RIIWHS402E	Examine and maintain mine safety	50
RIIWHS403E	Apply the work health and safety management system	80
RIIWHS404E	Implement and monitor health and hygiene management systems	50



Unit Code	Unit Title	Nominal Hours
RIIWHS601E	Establish and maintain the WHS management system	120
RIIWHS602E	Incorporate health and hygiene factors into mine management	60
RIIWMG203E	Drain and dewater civil construction sites	20
RIIWMG301E	Control construction site water tables	24
RIIWSV203E	Prepare equipment for well servicing air operations	30
RIIWSV301F	Conduct and maintain well servicing derrick operations	50
RIIWSV302E	Trip production string for well servicing operations	30
RIIWSV303E	Operate fluid systems	40
RIIWSV304E	Prepare well servicing fishing operations	40
RIIWSV401E	Rig up and rig down for well servicing operations	30
RIIWSV402D	Conduct well servicing milling operations	30
RIIWSV403E	Participate in well servicing nippling-up and pressure test	30
RIIWSV404D	Conduct fishing operations	30
RIIWSV501D	Manage well servicing induction and orientation	50
RIIWSV502E	Manage well completion and rig release	50
RIIWSV503E	Manage and monitor rig-up operations	40
RIIBEF201D	Plan and organise work	20
RIIBEF301D	Run on-site operations	40
RIIBEF401D	Manage non-routine, complex technical situations	80
RIIBEF402D	Supervise on-site operations	50
RIIBEF601D	Conduct business negotiations	100
RIIBEF603D	Manage the decision making process	120



Unit Code	Unit Title	Nominal Hours
RIIBEF605D	Resource site plans and objectives	120
RIIBHD301D	Conduct surface blast hole drilling operations	60
RIIBHD304D	Set up and prepare for open-cut drilling operations	40
RIIBHD305D	Conduct down-hole hammer drilling	40
RIIBHD401D	Supervise blast hole drilling operations	40
RIIBHD501D	Manage blast hole drilling operations	50
RIIBLA201D	Support shotfiring operations	30
RIIBLA202F	Support underground shotfiring operations	20
RIIBLA203E	Conduct mobile mixing of explosives	30
RIIBLA205D	Store, handle and transport explosives	20
RIIBLA301D	Conduct surface shotfiring operations	50
RIIBLA302D	Conduct shotfiring operations in underground coal mines	60
RIIBLA303D	Conduct underground development shotfiring	50
RIIBLA304D	Conduct underground production shotfiring	50
RIIBLA305D	Conduct secondary blasting	35
RIIBLA306D	Conduct accretion firing	30
RIIBLA308D	Conduct electronic blasting operations	40
RIIBLA402D	Monitor and control the effects of blasting on the environment	40
RIIBLA601E	Design blasts	40
RIIBLA602D	Establish and maintain a blasting system	120
RIICAR301D	Rehabilitate exploration site	40
RIICAR302D	Rehabilitate small mine site	40



Unit Code	Unit Title	Nominal Hours
RIICAR401D	Supervise rehabilitation operations	40
RIICCM201D	Carry out measurements and calculations	20
RIICCM203D	Read and interpret plans and job specifications	40
RIICCM205E	Carry out manual excavation	8
RIICCM206D	Support plant operations	8
RIICCM207D	Spread and compact materials manually	12
RIICCM208D	Carry out basic levelling	16
RIICCM209D	Carry out concrete work	40
RIICCM210D	Install trench support	16
RIICCR501D	Conduct sales in construction materials operations	80
RIICOM201D	Communicate in the workplace	20
RIICPL301D	Install water mains pipelines	40
RIICPL302D	Install stormwater systems	40
RIICPL303D	Install sewer pipelines	40
RIICPL304D	Install pre-cast gully pits	40
RIICRC201D	Repair potholes	36
RIICRC203D	Install sub-soil drainage	20
RIICRC208D	Lay pipes	40
RIICRC309D	Conduct stabiliser operations	80
RIICRC310D	Construct and maintain roads	60
RIICRC311D	Conduct concrete road paver operations	60
RIICRC312D	Setup and maintain concrete paver stringlines	40



Unit Code	Unit Title	Nominal Hours
RIICRC313D	Conduct concrete road curing and texturing operations	24
RIICRC314D	Handle concrete materials	24
RIICRC315D	Use concreting materials and equipment	60
RIICRC316D	Place and compact concrete	170
RIICRC317D	Finish concrete pavements	40
RIICRC318D	Cure concrete	16
RIICRC319D	Saw and cut concrete pavements to initiate planned cracks	16
RIICRC320D	Seal concrete pavements	12
RIICRC321D	Use automated paving guidance systems	80
RIICRC322D	Receive, check and record concrete deliveries	8
RIICRC323D	Insert tie bars in fresh concrete	8
RIICWD507D	Prepare detailed geotechnical design	100
RIIDES301D	Inspect, test and maintain diesel engine systems and their ancillary systems	80
RIIDES302D	Inspect, test and maintain joints on diesel engine systems	40
RIIDES303D	Inspect, test and maintain cooling systems on diesel engine systems	20
RIIDES304D	Inspect, test and maintain inlet systems on diesel engine systems	20
RIIDES305D	Inspect, test and maintain exhaust systems on diesel engine systems	20
RIIDES306D	Inspect, test and maintain safety shutdown systems on diesel engine systems	40
RIIDES307D	Test, determine the cause and rectify excessive emission levels on diesel engine systems	20
RIIEGS201D	Operate in isolated and remote situations	40



Unit Code	Unit Title	Nominal Hours
RIIEGS301D	Operate and maintain instruments and field equipment	40
RIIEGS302D	Plan and undertake field trip	40
RIIEGS306D	Prepare drill site	40
RIIENV201D	Identify and assess environmental and heritage concerns	20
RIIENV501D	Implement and maintain environmental management plan	120
RIIENV601D	Establish and maintain the environmental management system	100
RIIERR201E	Conduct fire team operations	40
RIIERR202E	Contribute to the control of emergencies and critical situations	30
RIIERR203D	Escape from hazardous situations unaided	40
RIIERR204E	Provide aided rescue to endangered personnel	40
RIIERR205D	Apply initial response First Aid	20
RIIERR301D	Respond to mine incident	20
RIIERR302E	Respond to local emergencies and incidents	20
RIIERR303D	Operate in self-contained regenerative oxygen breathing apparatus	20
RIIERR304D	Control emergencies and critical situations	30
RIIERR308D	Extricate and transport people involved in incidents	40
RIIERR309D	Establish and operate from fresh air base	20
RIIERR310D	Provide support for rescue operations	20
RIIERR401D	Apply and monitor surface operations emergency preparedness and response systems	60
RIIERR402D	Apply and monitor underground coal mine emergency preparedness and response systems	60
RIIERR403D	Lead rescue team	40



Unit Code	Unit Title	Nominal Hours
RIIERR404D	Apply and monitor underground Metalliferous mine emergency preparedness and response systems	60
RIIERR503D	Implement emergency preparedness and response systems	70
RIIGOV201D	Comply with site work processes/procedures	20
RIIGOV401D	Apply, monitor and report on compliance systems	80
RIIGOV501D	Identify, implement and maintain legal compliance requirements	80
RIIGOV601D	Establish, maintain and develop a statutory compliance management system	120
RIIHAN201E	Operate a forklift	40
RIIHAN202D	Handle and store cargo	20
RIIHAN204D	Load and unload cargo/goods	20
RIIHAN205D	Secure cargo	12
RIIHAN206E	Transport plant, equipment and personnel	30
RIIHAN207D	Operate personnel and materials hoists	30
RIIHAN208D	Perform dogging	80
RIIHAN209E	Perform basic rigging	40
RIIHAN210D	Perform intermediate rigging operations	40
RIIHAN211D	Conduct basic scaffolding operations	56
RIIHAN212E	Conduct non-slewing crane operations	40
RIIHAN301E	Operate elevating work platform	40
RIIHAN302D	Conduct intermediate scaffolding operations	40
RIIHAN304E	Conduct slewing crane operations	80
RIIHAN307E	Operate a vehicle loading crane	40



Unit Code	Unit Title	Nominal Hours
RIIHAN308F	Load and unload plant	20
RIIHAN309F	Conduct telescopic materials handler operations	80
RIIHAN310E	Conduct crane operations underground	40
RIIHAN311F	Conduct operations with integrated tool carrier	80
RIIHAN401D	Organise and monitor wharf/terminal operations	24
RIIHAN402D	Process movement of containers and cargo	28
RIILAT401D	Provide leadership in the supervision of Indigenous employees	50
RIILAT402D	Provide leadership in the supervision of diverse work teams	50
RIIMCO201D	Conduct spreader operations	60
RIIMCO301D	Conduct control centre operations	60
RIIMCO302D	Conduct surface miner operations	60
RIIMCP202D	Conduct rail dispatch operations	40
RIIMCP301D	Monitor plant operations for coal preparation	60
RIIMCU201D	Operate power tram	40
RIIMCU202D	Conduct tracked vehicle/plant operations	40
RIIMCU203D	Conduct wheeled vehicle operations (non-articulated)	40
RIIMCU204D	Conduct wheeled vehicle operations (articulated)	40
RIIMCU205D	Conduct rotational drilling	40
RIIMCU206D	Install, maintain and recover gas drainage systems	40
RIIMCU207D	Install, maintain and recover electrical services	20
RIIMCU210D	Conduct stonedusting operations	20
RIIMCU211D	Install and maintain explosion barriers	20



Unit Code	Unit Title	Nominal Hours
RIIMCU212E	Construct and maintain basic ventilation devices	20
RIIMCU215D	Operate longwall ancillary equipment	40
RIIMCU216D	Maintain lamp cabin operations	40
RIIMCU404E	Apply and monitor the gas drainage management plan	60
RIIMCU405D	Apply and monitor the outburst management plan	60
RIIMCU503D	Implement the gas drainage management plan	60
RIIMCU504D	Implement the outburst management plan	60
RIIMCU603D	Establish and maintain the gas drainage management plan	80
RIIMCU604D	Establish and maintain the outburst management plan	80
RIIMEX201D	Suppress dust in open-cut environment	30
RIIMEX202D	Install open-cut mine ground support	25
RIIMEX203D	Break oversize rock	32
RIIMEX204D	Conduct workboat/barge operations	30
RIIMEX301D	Conduct dredging operations	40
RIIMEX302D	Assess ground conditions	20
RIIMEX401D	Apply pit plan	190
RIIMEX402D	Supervise dredging operations	40
RIIMEX405D	Apply and monitor systems and methods of surface coal mining	80
RIIMEX406D	Apply and monitor mine transport systems and production equipment	60
RIIMEX501D	Implement pit plan	90
RIIMEX502D	Implement systems and methods of mining	70
RIIMEX503D	Manage dredging operations	60



Unit Code	Unit Title	Nominal Hours
RIIMEX601D	Plan pit development	120
RIIMEX602D	Establish and maintain surface mining ground control and slope stability systems	120
RIIMEX603D	Establish and maintain underground mining ground control and stable mining systems	120
RIIMEX604D	Establish and maintain surface product haulage and transport systems	120
RIIMEX605D	Establish, implement and maintain operational management plans	120
RIIMPG201D	Connect and disconnect reefer refrigeration units	20
RIIMPG301D	Control and monitor automated plant/machinery	40
RIIMPO201E	Operate roller/compactor underground	24
RIIMPO205E	Operate roller/compactor	20
RIIMPO206D	Conduct bulk water truck operations	30
RIIMPO208F	Operate support equipment	60
RIIMPO210E	Conduct underground truck operations	24
RIIMPO301E	Conduct hydraulic excavator operations	40
RIIMPO302E	Conduct hydraulic shovel operations	45
RIIMPO303E	Conduct rope shovel operations	50
RIIMPO304E	Conduct wheel loader operations	40
RIIMPO305F	Conduct coal stockpile dozer operations	40
RIIMPO306D	Operate plant/machinery on live stockpiles	30
RIIMPO307E	Conduct wheel grader operations in underground mines	60
RIIMPO308F	Conduct tracked dozer operations	40
RIIMPO309F	Conduct wheeled dozer operations	40



Unit Code	Unit Title	Nominal Hours
RIIMPO312E	Conduct scraper operations	40
RIIMPO313E	Conduct face loader operations	40
RIIMPO314E	Operate small open cut mine equipment	30
RIIMPO315E	Conduct tractor operations	60
RIIMPO318F	Conduct civil construction skid steer loader operations	80
RIIMPO319E	Conduct backhoe/loader operations	200
RIIMPO325E	Conduct civil construction scraper operations	160
RIIMPO326E	Conduct water vehicle operations	40
RIIMPO328E	Conduct continuous bucket trencher operations	40
RIIMPO330E	Conduct bucket-wheel operations	80
RIIMPO333E	Conduct underground load, haul and dump truck operations	40
RIIMPO335E	Conduct skid steer loader operations without attachments	80
RIIMPO336E	Conduct belly dump truck operations	60
RIIMPO338E	Conduct rigid haul truck operations	40
RIIMPO401D	Supervise mobile plant operations	40
RIIMPO403D	Monitor interaction of heavy and light vehicles and mining equipment	100
RIIMPO502D	Manage the interaction of heavy and light vehicles and mining equipment	100
RIIMPO503D	Manage laser levelling of operating plant	80
RIIMSM301D	Establish a mining claim	30
RIIMSM302D	Plan small mine operations	40
RIIMSM303D	Install underground shaft	40



Unit Code	Unit Title	Nominal Hours
RIIMSM304D	Inspect small mines operations	30
RIIMSM305D	Conduct materials extraction operations underground	40
RIIMSM306D	Design, develop and maintain pillar system and ground control	40
RIINHB206E	Assist large diameter auger drilling	40
RIINHB213D	Assist cable tool drilling	45
RIINHB302D	Conduct reaming	65
RIINHB303D	Install product pipe	40
RIINHB305E	Conduct continuous flight auger drilling	65
RIINHB307D	Conduct conventional core drilling	65
RIINHB308D	Conduct wireline core drilling	65
RIINHB309E	Conduct guided boring	65
RIINHB310D	Conduct surface directional drilling	65
RIINHB312D	Conduct raise boring	65
RIINHB315D	Conduct top-hole hammer drilling	65
RIINHB316D	Conduct underground in-seam directional drilling	40
RIINHB317D	Install underground in-seam directional drilling standpipes	40
RIINHB318D	Install and operate water and gas control equipment	40
RIINHB319D	Install de-watering conduit and gas drainage equipment	40
RIINHB323D	Conduct horizontal directional drilling	65
RIINHB403D	Supervise geotechnical drilling operations	50
RIINHB412D	Construct geothermal wells	65
RIIOGD201D	Assist in maintaining rig safety and emergency procedures	40



Unit Code	Unit Title	Nominal Hours
RIIOGD202D	Carry out equipment and basic rig maintenance	40
RIIOGD203E	Prepare and operate drilling fluid systems	30
RIIOGD204E	Perform rig floor operations	50
RIIOGD209E	Operate and maintain ancillary equipment	40
RIIOGD301E	Conduct and maintain derrick operations	50
RIIOGD302E	Trip casing	30
RIIOGD303E	Trip pipe	30
RIIOGD304D	Apply effective coal seam gas control practices	40
RIIOGD305D	Apply blow out prevention operational procedures	40
RIIOGD401D	Rig up, conduct pre-spud operations and rig down	30
RIIOGD402D	Participate in nippling-up and pressure test	30
RIIOGD403D	Conduct drilling operations	30
RIIOGD404D	Coordinate air drilling operations	30
RIIOGD405D	Carry out well control and blow out prevention	65
RIIOGD501E	Manage rig operations	40
RIIOGD502D	Plan and evaluate rig operations	40
RIIOGD503D	Oversee drilling operations	80
RIIOGD504D	Manage drilling operations	80
RIIOGD505D	Manage drilling induction and orientation	50
RIIOGD506D	Manage rig move and camp move	50
RIIOGD507D	Manage and monitor rig-up and rig-up to spud operations	50
RIIOGD508D	Manage well completion and abandonment	50



Unit Code	Unit Title	Nominal Hours
RIIOGD601D	Manage multiple drilling operations	80
RIIOGF201D	Carry out deck operations	20
RIIOGF202D	Assist in the transfer of passengers and freight during helicopter operations	20
RIIOGN303D	Operate mud systems	40
RIIPBE201D	Conduct aeration process	28
RIIPBE202D	Conduct digestion process	32
RIIPBE203D	Conduct precipitation operations	32
RIIPBE204D	Conduct reduction process	32
RIIPBE205D	Conduct roasting operations	32
RIIPBE301D	Conduct calcinations activities	26
RIIPBE302D	Conduct bacterial oxidation	32
RIIPBE303D	Conduct filtering process	26
RIIPBE304D	Conduct heavy media separation	32
RIIPBE305D	Conduct high tension separation	28
RIIPBE306D	Conduct leaching process	32
RIIPBE307D	Conduct pressure oxidation	32
RIIPBE308D	Conduct thickening and clarifying process	24
RIIPBE309D	Conduct wet gravity separation	28
RIIPBE310D	Conduct flotation process	38
RIIPBE311D	Conduct magnetic separation	28
RIIPBP202D	Conduct air cleaning activities	32
RIIPBP301D	Process lime products	32



Unit Code	Unit Title	Nominal Hours
RIIPBP302D	Control operations in acid plant	40
RIIPEO202D	Provide deck support for conveyor-car high wall mining operations	40
RIIPEO203D	Conduct stacker operations	30
RIIPEO204D	Conduct shore side mooring operations	30
RIIPEO205D	Conduct ship loading operations	30
RIIPEO206D	Lay and recover cables and hoses	20
RIIPEO301D	Conduct conveyor-car high wall mining operations	40
RIIPGP201D	Conduct pump operations	16
RIIPGP202D	Handle reagents	28
RIIPGP203D	Operate compressors	24
RIIPGP204D	Carry out bore-field operations	30
RIIPGP205D	Handle, store and use cyanide	30
RIIPGP301D	Conduct drying activities	26
RIIPGP302D	Monitor and operate auxiliary plant and equipment	40
RIIPHA201D	Operate raw material feed systems	20
RIIPHA301D	Conduct milling/grinding	32
RIIPHA302D	Operate and monitor filter processes	24
RIIPRE201D	Conduct solvent extraction	36
RIIPRE202D	Prepare and carry out electrolytic cleaning process	26
RIIPRE203D	Prepare for sintering activities	14
RIIPRE204D	Sinter materials	14
RIIPRE301D	Conduct electrowinning/electro-refining operations	36



Unit Code	Unit Title	Nominal Hours
RIIPRE302D	Conduct elution processes	32
RIIPRE303D	Conduct gold room operations	40
RIIPRE304D	Monitor casting quality	24
RIIPRM501D	Implement, monitor, rectify and report on contracts	80
RIIPRO201D	Conduct crushing operations	30
RIIPRO202D	Conduct screening and conveying operations	30
RIIPRO203D	Operate programmable logic control systems	30
RIIPRO204D	Bulk package and store product	20
RIIPRO205D	Conduct blending plant operations	30
RIIPRO301D	Conduct crushing and screening plant operations	50
RIIPRO302D	Perform process control room operations	50
RIIPRO303D	Conduct sand wash plant operations	30
RIIPRO401D	Supervise processing operations	60
RIIPRO402D	Supervise recycled materials operations	40
RIIPRO501D	Implement site processing plant operations	40
RIIPRO502D	Develop, implement and maintain process control systems	40
RIIPRO601D	Design processing plant	150
RIIPSM201D	Tap furnaces	24
RIIPSM202D	Prepare for pelletising activities	14
RIIPSM203D	Produce pellets	14
RIIPSM301D	Cast a blast furnace	34
RIIPSM302D	Cast ingots	20



Unit Code	Unit Title	Nominal Hours
RIIPSM303D	Operate a blast furnace	70
RIIPSM304D	Operate furnaces	32
RIIPSM305D	Operate converters	32
RIIPSM306D	Supply molten metal and additives to furnaces	28
RIIPSM307D	Control molten metal in holding furnace/vessel	32
RIIPSM308D	Monitor and maintain furnace gas efficiency	32
RIIPSM309D	Monitor and maintain flue gas efficiency	32
RIIQUA201D	Maintain and monitor site quality standards	20
RIIQUA601D	Establish and maintain a quality system	100
RIIRAI401D	Apply and monitor mine services and infrastructure systems	60
RIIRAI402D	Apply and monitor site plant and resource management plan	60
RIIRAI501D	Implement mine transport systems and production equipment	60
RIIRAI502D	Develop and implement site plant and resource management plan	70
RIIRAI503D	Implement site services and infrastructure systems	70
RIIRAI504D	Select and install surface plant and equipment	70
RIIRAI506D	Implement, monitor, rectify and report on inventory control system	80
RIIRAI508D	Implement mine services systems	80
RIIRAI509D	Implement mine fixed plant and infrastructure systems	80
RIIRAI601D	Establish and maintain the site infrastructure and fixed plant systems	120
RIIRAI606D	Establish and maintain mine closure management systems	120
RIIRAI607D	Establish quarry operations	100
RIIRAI608D	Establish quarry development	180



Unit Code	Unit Title	Nominal Hours
RIIRAI612D	Establish and maintain underground product haulage and transport systems	120
RIIRIS201D	Conduct local risk control	20
RIIRIS202D	Respond to site based spills 20	
RIIRIS401D	Apply site risk management system 4	
RIIRIS402D	Carry out the risk management process 6	
RIIRIS403D	Manage and coordinate spill response	50
RIIRIS501D	Implement and maintain management systems to control risk	80
RIISAM201D	Handle resources and infrastructure materials and safely dispose of nontoxic materials	16
RIISAM202D	Isolate and access plant	30
RIISAM203D	Use hand and power tools	80
RIISAM204D	Operate small plant and equipment	20
RIISAM205D	Cut, weld and bend materials	40
RIISAM207D	Apply operational maintenance skills	40
RIISAM212D	Service mine plant and equipment	40
RIISAM214D	Provide support to electrical tradesperson	40
RIISAM301E	Test operational functions of vehicles and equipment	30
RIISAM302D	Service and handover plant and machines	30
RIISAM304D	AM304D Install, commission and maintain major conveyor equipment and systems	
RIISAM305D	Repair and splice conveyor belting 40	
RIISAM310D	Install and commission plant, machinery and services	40
RIISAM311D	Maintain winder equipment	40



Unit Code	Unit Title	Nominal Hours
RIISAM312D	Inspect and maintain shafts and structures	24
RIISAM313D	Monitor, inspect and service ropes and attachments	32
RIISAM314D	Manage oil and gas drilling equipment maintenance	40
RIISAM315A	Manage tyre, wheel and rim assembly applications	40
RIISAM401D	Apply site plant, equipment and infrastructure maintenance management plan	40
RIISAM402D	Supervise operation of electrical equipment and installations	40
RIISAM502D	Manage general drilling equipment maintenance	60
RIISAM601D	Establish and maintain plant, equipment and infrastructure maintenance system	120
RIISDM501D	Conduct mine surveying operations	80
RIISRM301D	Blend stockpile materials	20
RIISRM302D	Conduct stockpile reclaiming operations	40
RIISRM303D	Move and position materials to form stockpiles	24
RIISRM304D	Maintain stockpiles	20
RIISRM401D	Apply and monitor the site stockpile management plan	60
RIISRM501D	Implement the stockpile management plan	60
RIISRM502D	Design stockpile formations and reclaiming systems	40
RIISRM601D	Establish and maintain the stockpile management system	120
RIISTD201D	Read and interpret maps	40
RIISTD202D	Collect routine site samples	40
RIISTD301D	Take environmental samples and measurements	120
RIIUMM201D	Install ground support	30



Unit Code	Unit Title	Nominal Hours
RIIUMM202D	Install and maintain vent	24
RIIUMM203D	Prepare and perform manual scaling operations	14
RIIUMM301D	Conduct wet filling activities	16
RIIUMM302D	Install sets	32
RIIUMM303D	Conduct hand held mining	40
RIIUMM304D	Construct and maintain underground roads	40
RIIUMM305D	Install and remove a secondary fan	16
RIIUMM306D	Conduct mechanical scaling	22
RIIUMM307D	Maintain underground stockpiles	24
RIIUND201D	Install, maintain and recover reticulation systems	24
RIIUND204D	Refuel vehicles/machines underground	32
RIIUND205D	Respond to a workforce incident	32
RIIUND206D	Install hand held underground ground support	20
RIIUND208D	Conduct skip operations	24
RIIUND209D	Operate automated winder	24
RIIUND301D	Operate manual winder	32
RIIUND302D	Conduct cage operations	32
RIIUND303D	Operate winder for shaft sinking	32
RIIUND304D	Recover equipment	30
RIIUND305D	Recover underground equipment	40
RIIUND306D	Conduct line of sight remote operations	28
RIIUND307D	Conduct tele-remote operations	28



Unit Code	Unit Title	Nominal Hours
RIIUND308D	Conduct control room operations	40
RIIUND309D	Conduct mechanical underground ground support drilling and installation	40
RIIUND310D	Apply shot-crete underground	40
RIIUND401D	Apply and monitor the ventilation management plan	60
RIIUND501D	Implement the ventilation management plan	70
RIIUND601D	Establish and maintain the ventilation management system	120
RIIUND602D	Establish and maintain mine services systems	120
RIIUND603D	Manage, operate and maintain the mine ventilation system	60
RIIVEH201D	Operate light vehicle	30
RIIVEH202E	Operate a medium vehicle	30
RIIVEH203D	Operate light vehicle underground	40
RIIVEH301D	Conduct rail haulage operations	40
RIIVEH305E	Operate and maintain a four wheel drive vehicle	40
RIIWBP201D	Treat and dispose of rejects and tailings	30
RIIWBP202D	Distribute tailings	16
RIIWBP203D	Monitor tailings dam environment	16
RIIWBP401D	Apply and monitor site waste and by-products management plan	60
RIIWBP501D	Implement site waste and by-product management plan	70
RIIWBP502D	Plan and monitor recycled material operations	40
RIIWBP601D	Establish and maintain waste and by-product management system	120
RIIWHS201D	Work safely and follow WHS policies and procedures	20
RIIWHS202D	Enter and work in confined spaces	30



Unit Code	Unit Title	Nominal Hours
RIIWHS204D	Work safely at heights	20
RIIWHS301D	Conduct safety and health investigations	30
RIIWHS302D	Implement traffic management plan	20
RIIWHS402D	Examine and maintain mine safety	50
RIIWHS403D	Apply the mine work health and safety management plan	80
RIIWHS404D	Implement and monitor health and hygiene management systems	50
RIIWHS405D	Maintain standard procedures and safe working practices	20
RIIWHS601D	Establish and maintain the WHS management system	120
RIIWMG201D	Conduct dewatering activities in surface operations	30
RIIWMG202D	Conduct dewatering operations in underground mining operations	30
RIIWMG203D	Drain and dewater civil construction site	20
RIIWMG302D	Reclaim and treat water	20
RIIWMG401D	Apply and monitor the site water management plan	60
RIIWMG402D	Monitor and coordinate waste and process water treatment	40
RIIWMG501D	Implement the site water management plan	70
RIIWMG601D	Establish and maintain water management system	120



CONTACTS AND LINKS

Curriculum Maintenance Manager (CMM)				
Civil Construction	The CMM Service is provided on behalf of Higher Education and Skills. CMM Service Executive Officers can assist with questions on payable and nominal hours.	Name: Teresa Signorello Address: PO Box 42 Holmesglen, VIC 3148 Phone: 03 9564 1987 Email: teresa.signorello@holmesglen.edu.au		
Coal, Drilling, Extractive Industries and Metalliferous Mining		Name: George Ada Address: Box Hill Institute Private Bag 2014, Box Hill VIC 3128 Phone: 03 9286 9880 Email: g.adda@boxhill.edu.au		
Service Skills Organi	sation (SSO)			
PWC Skills for Australia	This SSO is responsible for developing this Resources and Infrastructure Industry Training Package and can be contacted for further information.	Info line: 1800 714 819 Email: info@skillsforAustralia.com The SSO website can be found here		
National Register for	VET in Australia			
Training.gov.au (TGA)	TGA is the Australian government's official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs.	See the <u>National Register</u> for more information.		
Australian Governme	Australian Government			
Department of Education, Skills and Employment	The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training.	See the Commonwealth Department of Education, Skills and Employment website for more information.		
State Government	State Government			
Department of Education and Training (DET)	DET is the State Training Authority responsible for supporting implementation of Vocational Education and Training (VET) in Victoria.	(03) 9637 2000 See the <u>Victorian Department of Education and Training website</u> for more information.		
National VET Regula	tory Authority			
Australian Skills Quality Authority (ASQA)	ASQA is the national regulator for Australia's VET sector.	Info line: 1300 701 801 See the ASQA website for more information.		



Victorian State VET Regulatory Authority		
Victorian Registration and Qualifications Authority (VRQA)	The VRQA is a statutory authority responsible for the registration and regulation of Victorian RTOs and for the regulation of apprenticeships and traineeships in Victoria.	(03) 9637 2806 See the VRQA website for more information.



Industry Regulatory Bodies		
Department of Environment, Land, Water & Planning. (for shot firing in relation to mines and/or quarries)	The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.	Phone: 136 186 DELWP's website can be found <u>here</u>
Victorian Drillers' Licensing Board Secretariat	Licensing is compulsory for drilling wells or bores to access water from underground. Please contact Southern Rural Water	Phone: 1300 139 Southern Rural Water's website can be found <u>here</u>
WorkSafe Victoria (for shot firing in relation to sectors other than mines and/or quarries) Licensing Branch	WorkSafe needs to provide written verification before High Risk Work Units can be added to an RTO's scope of registration.	Info Line: 1800 136 089 WorkSafe Victoria's website can be found here
Australian Drilling Industry Training Committee Ltd	Information on the 'National Water Well Drillers' Licensing System'	(02) 9428-3444 ADITC's website can be found <u>here</u>
Minerals & Petroleum Regulation Branch	Information to undergo assessment by the 'Quarry Managers' Advisory Panel' to gain certification as a quarry manager.	(03) 9412-4011
VicRoads	Information on registering Vic Roads work sites.	(03) 9854-2666 VicRoads website can be found <u>here</u>



GLOSSARY

Code	Nationally endorsed Training Package qualification code.
Title	Nationally endorsed Training Package qualification title.
Unit Code	Nationally endorsed Training Package unit code.
Unit Title	Nationally endorsed Training Package unit title.
Maximum Payable Hours	The maximum number of hours the Victorian Government will subsidise under Skills First funding for the achievement of the minimum realistic vocational outcome of the qualification, as determined by the qualification packaging rules. The Maximum Payable Hours do not cover every possible combination of core and elective units available for a specific qualification. Minimum payable hours reflect a calculated minimum number of hours that could deliver a minimum realistic vocational outcome, based on efficiencies of contextualisation and integration.
Scope of Registration	Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide.
Nominal Hours	Nominal hours reflect the anticipated time taken to deliver and assess the outcomes of a unit of competency excluding unsupervised delivery or the time taken for repeated practical application of skills. Nominal hours are determined by the Victorian State Training Authority (DET) and are primarily developed for funding purposes in Victoria.

