

Summary of draft training products

Extractive

Metalliferous Mining

New and Emerging Technology

15 June 2020



1. Introduction

The Mining, Drilling and Civil Infrastructure (MDCI) Industry Reference Committees (IRCs) have identified that the Resources and Infrastructure Industry (RII) Training Package has significant training product gaps for job roles and skills across the coal and metalliferous mining, resource processing and extractive industry sectors. In response, PwC's Skills for Australia and the MDCI IRCs are currently undertaking three projects to ensure RII training products are fit for purpose and reflect industry's needs: **Extractive, Metalliferous Mining** and **New and Emerging Technology**.

2. About the projects

Extractive

This project aims to update training products to reflect current skills needs in open cut coal and metalliferous mining and quarrying. It responds to increased fatalities and critical injuries relating to the planning and construction of dumps, ground control and dust management activities. It also aims to clarify and strengthen training pathways for learners and employers involved in surface extraction operations. Its scope of work includes:

- **Update six qualifications** to clarify and strengthen career progression pathways workers in open cut coal and metalliferous mining and quarrying, from entry-level through to management.
- **Update eleven units of competency** to address health, safety and environmental risk management relating to dust management, dredging, stockpiling and explosives systems.
- **Create one new unit of competency**, *RIIMEX408 Supervise overburden dump operations*, to address health, safety and environmental risk management skills gaps relating to supervision of overburden dump operations.

Metalliferous Mining

This project aims to update training products to reflect skills needs in underground and open cut metalliferous mining and resource processing. It responds to increased industry focus on tailings dam safety and environmental compliance and aims to clarify and strengthen career progression pathways for learners and employers in the sector. It also aims to delete superfluous and obsolete training products from the RII Resources and Infrastructure Industry Training Package where appropriate. Its scope of work includes:

- **Update seven qualifications** to clarify and strengthen career progression pathways workers in underground and open cut metalliferous mining and resources processing, from entry-level through to management, including through adding specialisation streams for specialist job roles in underground metalliferous mining.
- **Delete three qualifications**, *RII30615 Certificate III in Small Mining Operations*, *RII50215 Diploma of Underground Metalliferous Mining Management* and *RII50315 Diploma of Minerals Processing* due to identified low industry use and relevance.
- **Update four units of competency** relating to tailings dam operations to reflect current industry standards and practices for health, safety and environmental risk management.
- **Delete six units of competency** relating to small mining operations due to identified low industry use and relevance.
- **Create five new units of competency** to address skills and training product gaps for operators and supervisors transporting, handling, applying and storing polymeric chemicals in underground environments.

New and Emerging Technology

This project aims to create new training products to address new and emerging technology in the resources and infrastructure sector, including autonomous mining systems and remotely piloted aircraft systems (RPAS). Its scope of work includes:

- **Create eight new units of competency** to address skills and training product gaps for new and existing job roles involved in autonomous operations in coal and metalliferous mining.

- **Create one new unit of competency** to address skills and training products gaps for individuals operating RPAS in the resources and infrastructure industries.

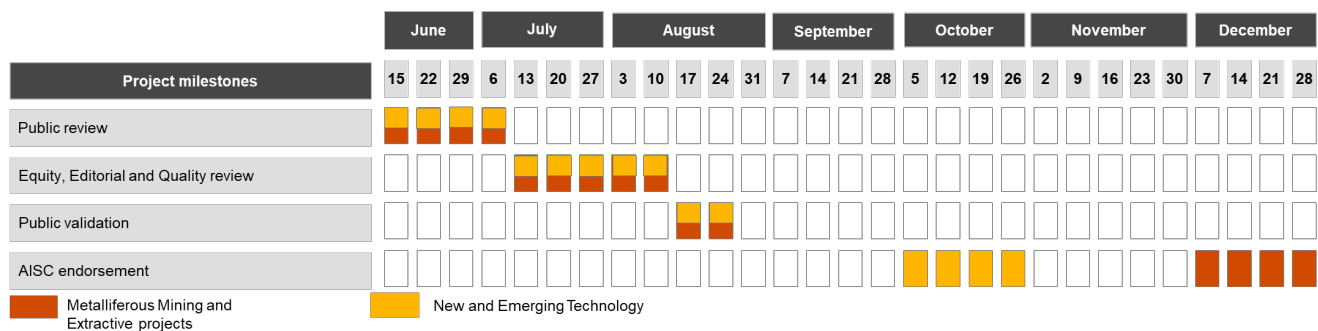
Three Cases for Change were established based on initial research and consultation and were endorsed by the Australian Industry Skills Committee (AISC) on behalf of the MDCI IRCs in June 2018 (New and Emerging Technology) and August 2019 (Metalliferous Mining and Extractive).

From November 2019 to June 2020, PwC's Skills for Australia conducted industry consultations for these projects to identify the required changes to training products, including individual and group consultations with employees, peak bodies, unions, registered training organisations and regulators. Following MDCI IRC member reviews of the key findings from consultation and proposed recommendations, we have drafted training products that aim to reflect the changes required by industry.

This is your chance to provide detailed and specific feedback to ensure draft training products meet industry needs.

Once public feedback has been received, considered and addressed accordingly by the MDCI IRCs, the draft training products will be provided to external quality assurance panellist for review. The draft training products will then be uploaded for an additional two weeks of public review to validate the final training products before endorsement by the MDCI IRCs and submission to the AISC in October 2020 (for the New and Emerging Technology project) and December 2020 (for the Extractive and Metalliferous Mining projects), as outlined in [Figure 1](#) below.

Figure 1 Indicative training product development and review timeline



3. How to provide feedback

We want to hear from you. We will be accepting feedback on the final draft training products until **close of business Friday 10 July 2020**. We cannot guarantee that feedback received after this date will be considered.

Please provide your feedback by emailing our team at info@skillsforaustralia.com. Feedback can be provided in the following ways:

- Providing detailed comments and tracked changes in the Word documents included in the zip file
- Providing high level feedback via email
- Contacting PwC's Skills for Australia to set up a time to discuss feedback with a member of our team.

Please note feedback will only be considered where it relates to the final draft training products included in the scope of this project.

4. Draft training products available for review

Zip files for each project contain the final draft training products outlined in [Table 1](#) below. Please note the draft units of competency have been grouped according to their technical field.

Table 1 Final draft training products available for review

Code	Type	Title	Modification
Extractive			
RII20220	Qualification	Certificate II in Surface Extraction Operations	Amended
RII30120	Qualification	Certificate III in Surface Extraction Operations	Amended
RII40120	Qualification	Certificate IV in Surface Extraction Operations	Amended
RII50120	Qualification	Diploma of Surface Operations Management	Amended
RII60220	Qualification	Advanced Diploma of Extractive Industries Management	Amended
RIIMEX201E	Unit	Suppress dust in open-cut environment	Amended
RIIMEX402E	Unit	Supervise dredging operations	Amended
RIIMEX503E	Unit	Manage dredging operations	Amended
RIISRM301E	Unit	Blend stockpile materials	Amended
RIISRM302E	Unit	Conduct stockpile reclaiming operations	Amended
RIISRM303E	Unit	Move and position materials to form stockpiles	Amended
RIISRM304E	Unit	Maintain stockpiles	Amended
RIISRM501E	Unit	Implement stockpile management plans	Amended
RIISRM502E	Unit	Design stockpile formations and reclaiming systems	Amended
RIISRM601E	Unit	Establish and maintain the stockpile management systems	Amended
RIIBLA602E	Unit	Establish and maintain explosives safety and securement management systems	Amended
RIIMEX408	Unit	Supervise overburden dump operations	Newly Created
Metalliferous Mining			
RII20420	Qualification	Certificate II in Underground Metalliferous Mining	Amended
RII20520	Qualification	Certificate II in Resource Processing	Amended
RII30320	Qualification	Certificate III in Underground Metalliferous Mining	Amended
RII30420	Qualification	Certificate III in Resource Processing	Amended
RII30615	Qualification	Certificate III in Small Mining Operations	Deleted
RII40320	Qualification	Certificate IV in Underground Metalliferous Mining Operations	Amended
RII40520	Qualification	Certificate IV in Resource Processing	Amended
RII50220	Qualification	Diploma of Underground Metalliferous Mining Management	Deleted
RII50320	Qualification	Diploma of Minerals Processing	Deleted
RII60120	Qualification	Advanced Diploma of Metalliferous Mining	Deleted
RIIWBP201E	Unit	Treat and dispose of rejects and tailings	Amended
RIIWBP202E	Unit	Distribute tailings	Amended
RIIWBP203E	Unit	Monitor tailings dam environment	Amended
RIISMS301D	Unit	Establish a mining claim	Deleted
RIISMS302D	Unit	Plan small mine operations	Deleted
RIISMS303D	Unit	Install underground shaft	Deleted
RIISMS304D	Unit	Inspect small mines operations	Deleted

Summary of draft training product changes

RIIMSM305D	Unit	Conduct materials extraction operations underground	Deleted
RIIMSM306D	Unit	Design, develop and maintain pillar system and ground control	Deleted
RIIRAI508E	Unit	Implement mine services systems	Amended
RIIMCU218	Unit	Work safely with polymeric chemicals in underground coal mining	Newly Created
RIIMCU312	Unit	Apply polymeric chemicals in underground coal mining	Newly Created
RIIMCU313	Unit	Mix and pump polymeric chemicals in underground coal mining	Newly Created
RIIMCU314	Unit	Transport and handle polymeric chemicals in underground coal mining	Newly Created
RIIMCU409	Unit	Apply and monitor polymeric chemical management plans	Newly Created
New and Emerging Technology			
RIIARO301	Unit	Work safely in autonomous environments	Newly Created
RIIARO302	Unit	Work safely with remotely piloted aircraft systems	Newly Created
RIIARO303	Unit	Operate equipment in autonomous environments	Newly Created
RIIARO304	Unit	Coordinate and interact with autonomous systems	Newly Created
RIIARO305	Unit	Build and maintain routes for autonomous operations	Newly Created
RIIARO306	Unit	Monitor and reset autonomous operations	Newly Created
RIIARO307	Unit	Activate and deactivate autonomous machinery	Newly Created
RIIARO401	Unit	Supervise autonomous operations	Newly Created