



Australian Government

RIIMCU505D Implement the intrush management plan

Release: 2

RIIMCU505D Implement the inrush management plan

Modification History

Release	Comment
1	This unit replaces RIIMCU505A Implement the inrush management plan
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to implement the inrush management plan in Coal mining.

This unit is appropriate for those working in supervisory roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Coal mining (Underground)

Elements and Performance Criteria

1. Plan and prepare the implementation of the inrush management plan	1.1 Access, interpret and apply inrush management plan implementation documentation, and ensure the work activity is compliant 1.2 Identify and communicate to the relevant persons roles and responsibilities, as specified in the inrush management system 1.3 Identify, forecast, schedule and record resources required for the implementation of the inrush management system 1.4 Identify training needs
2. Implement the inrush management plan	2.1 Implement inrush hazard control procedures in accordance with the inrush management system 2.2 Implement personnel safety measures and techniques in accordance with the inrush management system

	2.3 Implement services and infrastructure protection measures in accordance with the inrush management system 2.4 Implement the mine monitoring requirements relating to inrush 2.5 Implement inrush information recording and reporting procedures 2.6 Implement actions and procedures required in response to inrush indicators 2.7 Implement permit-to-mine procedures in accordance with the inrush management system 2.8 Implement emergency response and evacuation plans and procedures
3. Implement the systems for the audit and review of the effectiveness of the inrush management systems	3.1 Audit inrush management system in accordance with legislative and site requirements 3.2 Audit recording and reporting systems in accordance with legislative and site requirements 3.3 Audit inrush management operational procedures in accordance with legislative and site requirements 3.4 Audit inrush training plan for currency, relevance and compliance with the requirements of the inrush management system 3.5 Implement procedures for response to instances of non-compliance or other discrepancies/deficiencies revealed by audit

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Mapping Information

RIIMCU505A Implement the inrush management plan

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIIMCU505D Implement the inrush management plan

Modification History

Release	Comment
1	This unit replaces RIIMCU505A Implement the inrush management plan
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant legislation, documentation, policies and procedures
- implements the procedures and techniques for the safe, effective and efficient implementation of the inrush management plan including:
 - operating hand held monitoring equipment
 - accessing and interpreting data from monitoring systems and equipment
 - accessing and interpreting design criteria for inrush prevention and management systems and devices
 - performing inrush planning mathematical calculations
 - interpreting and applying mathematical and scientific theorems / laws related to inrush
 - interpreting computer spreadsheets and inrush modeling/ simulations
 - accessing and interpreting archival and historical inrush information related to the mine
- works with others to undertake and complete the implementation of the inrush management plan that meets all of the required outcomes including:
 - communicating clearly and concisely with others to receive and clarify work instructions, and convey work progress
 - identifying roles and responsibilities in accordance with the inrush management plan
 - identifying the relevant information and scope of the work necessary to meet the required outcomes

- interpreting inrush training requirements
- demonstrates completion of implementing the inrush management plan that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying viable options and selecting the inrush management plan elements that best meet the required outcomes
 - conducting audits/enquiries/investigations and preparing reports

Knowledge Evidence

The candidate must demonstrate knowledge of implementing inrush management plans through:

- systems of mining including:
 - tunnels, drifts, stone drivage, shaft sinking, pillar extraction, partial extraction, punch mining and fault drivage
- factors affecting stability of mining structures including:
 - stress analysis: including mining induced stress and topography
 - sedimentology: including subsidence, water bearing strata, permeability of seam and strata, hydrology, hydrogeology, physical property testing, caving characteristics, outburst, over and underlying strata
 - mining structure failure modes
- systems of work including:
 - bord and pillar, place changing, longwall, highwall, auger mining, pillar extraction, partial extraction and punch mining
- identifying and applying mining and general engineering principles relevant to the behaviour of excavations in rock and coal including:
 - audit methodologies
 - mine mapping of inrush zones, related geology and features
- differing geological features and conditions on inrush zones including:
 - the effects of coal seam characteristics on inrush
 - faults, dykes, intrusions and strata deformities
- monitoring systems and techniques including:
 - fixed monitoring systems: types, uses/limitations, design criteria, specifications and design processes
 - portable monitoring equipment: types, uses/limitations
 - the use of simulation techniques and applications relevant to inrush
 - use of computer-based systems for real time monitoring
 - methods of control of inrush
 - types of inrush control zones
 - processes and techniques for determining alarms and trigger points/levels
 - emergency response and evacuation/disaster planning processes and techniques

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this Unit is being assessed outside of the Resources and Infrastructure Sectors assessor and/or Industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no Industry standard is specified should comply with any relevant regulation.	

*Assessors can demonstrate current work experience through employment within Industry in a role relevant to the outcomes of the Unit; or, for external assessors this can be demonstrated through exposure to Industry by conducting frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>