



Australian Government

RIICTC306 Conduct tunnel boring machine operations

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 6.0.

Application

This unit describes the skills and knowledge required to assist the operation of tunnel boring machines (TBM) in civil construction, including conducting TBM pre-operational checks and monitoring, operating and adjusting TBM controls.

It applies to those working in operational roles. They generally work under minimal supervision to undertake a broad range of tasks in varied work contexts, using some discretion and judgement in selecting equipment, services or contingency measures.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Users must check requirements with relevant body before applying the unit.

Unit Sector

Civil construction

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to conduct TBM operations	1.1 Obtain, interpret and confirm work instructions 1.2 Access, interpret and apply documentation required to conduct TBM operations and confirm work activity is compliant 1.3 Identify environmental issues and potential hazards and implement control measures within scope of own role 1.4 Select and wear personal protective equipment according to site requirements 1.5 Confirm and comply with environmental protection, safety and traffic management signage requirements 1.6 Select plant, tools and equipment required for tasks, check for

	faults and report or rectify as required 1.7 Obtain and interpret emergency procedures and identify steps required to respond to emergencies
2. Conduct TBM pre-operational checks	2.1 Confirm TBM parameters and conditions against permit to bore and design limitations for tunnel and TBM 2.2 Confirm required works that prevent tunnelling are completed before tunnelling commences 2.3 Confirm required materials and services are available to permit tunnelling to commence 2.4 Confirm required keys on operating dashboard are functioning according to manufacturer specifications 2.5 Report technical faults to required personnel as required
3. Operate TBM	3.1 Operate TBM according to manufacturer specifications and job and site requirements 3.2 Adjust operations according to job requirements 3.3 Communicate with required personnel and report problems as required 3.4 Carry out operator maintenance according to manufacturer specifications and site requirements 3.5 Carry out troubleshooting to operation as required 3.6 Monitor operating parameters when TBM is at docking mode 3.7 Assist with required tasks on TBM as required
4. Conduct housekeeping activities	4.1 Clear work area and recycle or dispose of materials according to site requirements 4.2 Clean, check, perform maintenance on and store plant, tools and equipment according to manufacturer specifications and site requirements 4.3 Complete records according to site procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Numeracy	Identifies and interprets information from site requirements and documentation
Oral communication	Uses communication techniques and systems to communicate with others
Self-management	Monitors and minimises own exposure to worksite risks and hazards

	during activities
Writing	• Completes records using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

New unit

Links

Companion Volume Implementation Guide is found on VETNet -

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