



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **SUGSCT2A Construct turnouts**

**Revision Number: 1**

## **SUGSCT2A Construct turnouts**

### **Modification History**

Not applicable.

### **Unit Descriptor**

#### **Unit descriptor**

This is a Specialist unit. It covers the skills and knowledge required to construct turnouts. It can apply to both construction of new turnouts and repair of existing turnouts.

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

### **Elements and Performance Criteria Pre-Content**

Not applicable.

## Elements and Performance Criteria

<b>Element</b>	<b>Performance criteria</b>
1. Plan and prepare work	<ul style="list-style-type: none"><li>1.1 The location and scope of work are identified</li><li>1.2 Materials required to complete the work are confirmed and available</li><li>1.3 Equipment status is confirmed and pre-operational checks are carried out</li><li>1.4 Personal protective equipment is selected, correctly fitted and used</li><li>1.5 Safety procedures are followed to confirm that work is clearly signed and relevant authorities are advised that work is in progress</li><li>1.6 Site is inspected prior to commencing work to identify and remove potential hazards</li></ul>
2. Construct turnouts	<ul style="list-style-type: none"><li>2.1 Sleepers for turnouts are placed in required position for track junctions</li><li>2.2 Base plates for switching are fixed to sleepers in specified locations</li><li>2.3 Switch rails are positioned and fitted to specification</li><li>2.4 Switching gear is installed to specification</li></ul>
3. Complete work	<ul style="list-style-type: none"><li>3.1 The construction area is cleared of debris</li><li>3.2 Unused materials are stored as required</li><li>3.3 Tools, plant and equipment is cleaned and stored as required</li><li>3.4 Workplace information is recorded according to workplace recording requirements</li></ul>

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

### Evidence guide

The assessment process must address all of the following items of evidence.

#### Ability to:

1. Interpret workplace information such as drawings and related instructions to identify the project requirements
2. Estimate materials required for a given project
3. Assess operational status of equipment and carry out pre-operational checks
4. Construct turnouts to meet design and construction specifications
5. Confirm that switching gear is operational
6. Identify faulty operation of equipment
7. Identify unacceptable work outcomes
8. Take corrective action in response to abnormal or unacceptable performance
9. Use appropriate communication methods and equipment
10. Report and/or record corrective action as required
11. Maintain work area to meet housekeeping standards

#### Knowledge of:

12. Relevant state OHS legislation, standards and codes of practice relating to work responsibilities
13. Overview of cane transport system
14. Track system layout and characteristics of each section
15. Understanding of the steps involved in laying/repairing track
16. Functions and basic operating principles of equipment
17. The impact of turnout construction on related track laying operations
18. Factors that can affect turnout construction
19. Traffic control signage, communication and procedures
20. Safe work procedures including awareness of health and safety hazards related to track laying and associated control measures. This includes safe manual handling procedures
21. Purpose and limitations of protective clothing and equipment
22. Environmental issues and controls
23. Requirements to liaise/advise related work areas
24. Housekeeping standards for the work area
25. Reporting and recording systems

### Relationship with other standards

#### *Pre-requisite units*

The pre-requisite for this competency standard is:

- SUGSLRT201A Lay rails.

#### *Co-assessment of related units*

Other units of competency relevant to the work role should be assessed in conjunction with this unit.

### Resources required for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- Site and related project information
- Relevant codes of practice and industry standards

- Turnout construction equipment
- Materials handling equipment and relevant hand and power tools
- Operating procedures and related advice on equipment operation
- Track work
- Switching gear
- Personal protective clothing and equipment
- Communication systems and equipment
- Housekeeping standards and procedures
- Workplace information recording systems, requirements and procedures

### **Assessment requirements**

For information on how to assess this competency standard and who can assess, refer to the Assessment Guidelines for this Training Package.

## **Range Statement**

### **Range statement**

The range statement indicates the context for demonstrating competence. This statement is a guide and unless otherwise indicated, items may or may not apply as required by the work context.

- Work is carried out in accordance with company policies and procedures, licensing requirements, legislative requirements, codes of practice and industrial awards and agreements. Codes of practice include the Sugar Milling Operations Industry Code of Practice and sugar industry codes of practice related to cane railway and transport operations
- Workplace information can include drawings and plans, Standard Operating Procedures (SOPs) and manufacturer's specifications
- Cane railway network features and their characteristics may include main and branch lines, yards, sidings, loops, dump points and pads; and road transport delivery points (where relevant)
- Information systems may be print or screen based
- Equipment and materials may include track laying equipment and related attachments, hand tools, pneumatic tools, base plates, fish plates, clips, dog spikes, anchors, screws, insulating biscuits and camber plates
- Confirming equipment status involves conducting relevant pre-start checks, confirming that all safety guards and equipment is ready and safe to operate
- Work may require the ability to work within a team environment
- Communication methods may include use of two-way radios
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## **Unit Sector(s)**

Not applicable.