



Australian Government

Department of Education, Employment and Workplace Relations

TLIB3040A Inspect poles and associated hardware

Release: 1

TLIB3040A Inspect poles and associated hardware

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to inspect poles and associated hardware in accordance with safeworking and regulatory requirements and workplace procedures, including planning and preparing for the inspection, conducting the inspection of the poles and associated hardware, and completing the inspection in accordance with workplace requirements. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Persons achieving competence in this unit will need to fulfil the applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures to the inspection of poles and associated hardware as part of workplace activities across a variety of operational contexts within the Australian rail system.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Plan and prepare for inspection	1.1 Inspection program or works order is received/ accessed, analysed and confirmed, if necessary by site inspection 1.2 Resources required for the job are identified and scheduled 1.3 Liaison and communication issues are resolved 1.4 Personnel participating in task, including plant operators and contractors, are fully briefed
2 Conduct inspection of poles and associated hardware	2.1 Worksite requirements are confirmed and hazards identified by site inspection 2.2 Road signs, barriers and warning devices are positioned, and worksite protection is provided 2.3 Safeworking practices are observed on or about the running line/track 2.4 Pole structures, including foundations and hardware, are inspected by test or examination against approved specifications
3 Complete the inspection	3.1 Worksite is rehabilitated, and work is completed in an agreed time and with minimum waste 3.2 Inspection reports are completed and pole records are updated according to workplace procedures

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- Relevant OH&S and environmental procedures and regulations, including OH&S instructions related to pole erection, site safety and rescue techniques
- Workplace procedures for the inspection of poles and associated hardware
- Problems that may occur during the inspection of poles and associated hardware, and action that can be taken to report or resolve the problems
- Hazards that may exist when inspecting poles and associated hardware and ways of controlling the risks involved
- Workplace and commercial technical manuals, publications and instructions which relate to pole quality and chemical treatment

REQUIRED KNOWLEDGE AND SKILLS

- Characteristics, capabilities, uses, limitations and location standards of the types of poles
- Mechanical principles related to structures
- Pole maintenance techniques and processes
- Soil types and stabilisation processes
- Diagnostic and fault finding techniques relevant to the inspection of poles and associated hardware
- Regulatory and workplace requirements for rigging, traffic control and guidance signals for planned operations
- Workplace documentation and records systems related to pole management
- Procedures for the use of relevant support plant and equipment

Required skills:

- Communicate effectively with others when inspecting poles and associated hardware
- Communicate plans, intentions and safety criteria to others
- Read and interpret technical instructions and manuals, procedures, information and signs relevant to the inspection of poles and associated hardware
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the inspection of poles and associated hardware
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when inspecting poles and associated hardware
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions when inspecting poles and associated hardware in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events when inspecting poles and associated hardware
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Adapt to differences in equipment in accordance with standard operating procedures
- Select and use appropriate pole testing equipment
- Select and use required personal protective equipment conforming to industry and OH&S standards

Required skills:

- Use hand tools
- Operate relevant minor plant and equipment

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation,

EVIDENCE GUIDE

and/or

- in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

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| Operations may be conducted: | <ul style="list-style-type: none">• by day or night• in all relevant weather conditions |
| Work may be conducted in: | <ul style="list-style-type: none">• restricted spaces or exposed conditions• controlled or open environments |
| Work may involve exposure to: | <ul style="list-style-type: none">• chemicals, dangerous or hazardous substances• movements of equipment, materials and vehicles |
| Pole types may include: | <ul style="list-style-type: none">• wood• concrete• steel• composite |
| Associated hardware may include: | <ul style="list-style-type: none">• insulators• crossarms• stays• earth down leads and bond wires• crossarm braces• pole steps• shackle straps• associated bolts and clamps |
| Maintenance requirements may be obtained from: | <ul style="list-style-type: none">• site inspection• works orders• workplace personnel• client requests |
| Inspection/testing devices may include: | <ul style="list-style-type: none">• electronic data capture devices• computers• sonic testing devices• shigometer• X-ray• CAT-scanner• proof load tester |

RANGE STATEMENT

- Works orders may include:
 - drills
 - drawings
 - plans
 - resource and materials lists.
 - materials lists
- Resources may include:
 - personnel
 - plant
 - equipment
 - transport
- Liaison may involve:
 - clients
 - authorities
 - landowners
 - personnel
- Communication equipment may include:
 - two-way radios
 - telephones
- Information may be provided:
 - electronically
 - in writing, via forms/documents
 - orally, via face-to-face communications
- Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:
 - company procedures
 - enterprise procedures
 - organisational procedures
 - established procedures
- Safety and protective equipment may include:
 - high visibility clothing
 - hearing protection
 - gloves
 - sunscreen
 - sunglasses
 - safety glasses
 - insect repellent
 - safety headwear
 - safety footwear
 - portable radios
 - hand lamps
 - flags
 - safety devices
- Information/documents may include:
 - applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines

RANGE STATEMENT

Applicable regulations and legislation may include:

- relevant log or record book
- maintenance notices, records and requests
- local instructions
- manufacturers or workplace equipment operation manuals
- operational instructions, policies and workplace procedures
- emergency procedure manuals
- two-way radio operation procedures
- conditions of service, legislation and industrial agreements including workplace agreements and awards
- applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- relevant Australian Standards and related requirements
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field

B - Equipment Checking and Maintenance