



Australian Government

Department of Education, Employment and Workplace Relations

TLIB3407B Maintain poles and associated hardware

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit involves the skills and knowledge required to maintain poles and associated hardware in accordance with safeworking and regulatory requirements and workplace procedures, including planning for the maintenance of poles and associated hardware, preparing the worksite, conducting the maintenance of poles and associated hardware, and completing all of the work requirements.

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 maintenance of poles and associated hardware as part of workplace activities across a variety of operational contexts within the Australian rail system.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this competency is packaged will assist in identifying employability skill requirements.

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

Elements and Performance Criteria

Element	Performance Criteria
1 Plan for maintenance of poles and associated hardware	1.1 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 Replacement or additional poles, associated hardware and plant/equipment are transported to the worksite 1.4 Liaison and communication issues are resolved
2 Prepare the worksite	2.1 Personnel participating in task, including plant operators and contractors, are fully briefed 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 Replacement or additional poles and associated hardware are placed in planned assembly and/or pre-lift location 2.5 Excavation/foundation is inspected and confirmed as being in accordance with the works order or specification
3 Conduct maintenance of poles and associated hardware	3.1 Actual maintenance requirement is confirmed by site inspection 3.2 Pole and associated hardware to be maintained is stabilised if necessary 3.3 Maintenance of pole and associated hardware is carried out in accordance with the work order and workplace standing requirements
4 Complete the work	4.1 Worksite is rehabilitated, and work is completed in an agreed time and with minimum waste 4.2 System data 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 maintenance of poles and associated hardware

Hazards that may exist when maintaining poles and associated hardware and ways of controlling the risks involved

Mechanical principles related to structures

Pole maintenance techniques and processes

Characteristics, capabilities, uses, limitations and location standards of the types of poles

Switching or de-energising procedures during maintenance operations

Workplace technical manuals and instructions which relate to the assembly, erection and lift/transfer of poles and associated hardware

Pole treatment chemicals and HAZCHEM requirements

Soil types and stabilisation processes

Responsibilities in relation to other authorities, clients and land-owners

Regulations for rigging, traffic control and guidance signals

Documentation and records systems related to pole management

Procedures for identifying and using support plant and equipment

Required skills:

Communicate effectively with others when maintaining poles and associated hardware

Read and interpret instructions, procedures, information and signs relevant to the maintenance of poles and associated hardware

Interpret and follow operational instructions and prioritise work

Complete documentation related to work activities

Operate electronic communication equipment to required protocol

Work collaboratively with others when maintaining 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 that may occur when maintaining poles and associated hardware in accordance with regulatory requirements and workplace procedures

Implement contingency plans for unplanned events

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 tools and equipment in accordance with standard operating procedures

Select and use required personal protective equipment conforming to industry and OH&S standards

Perform basic welding and oxy cutting

Guide, by convention and signals, operators of plant/equipment during lift/transfer operations

Work at heights or in confined spaces

Operate minor plant and equipment

Use hand tools

Rig/sling loads for lifting

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 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/or equipment, and/or
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 appropriately simulated activities at the registered training organisation, 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.

Operations may be conducted:	by day or night in all relevant weather conditions
Work may be conducted:	in restricted spaces or exposed conditions in controlled or open environments
Work may involve exposure to:	chemicals dangerous or hazardous substances movements of equipment, materials and vehicles
Pole types may include:	wood concrete steel composite
Associated hardware may include:	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:	site inspection works orders workplace personnel client requests
Maintenance may include:	removal, repair and replacement of poles welding chemical treatment pole staking and rebutting repair and cleaning of associated hardware servicing reinstatement
Pole stabilisation techniques may include:	back-fill consolidation concreting baulking reinforcement nailing

approved steel reinforcing
temporary and permanent staywires

Methods of erection may include:	crane auger/erector winch A frame
Works orders may include:	drawings plans resource and materials lists
Resources may include:	personnel plant equipment transport
Liaison may involve:	clients authorities landowners personnel
Communication equipment may include:	two-way radio, and/or telephones
Information may be provided:	electronically in writing, via forms/documents orally, via face-to-face communications
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
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	company procedures enterprise procedures organisational procedures established procedures
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

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
emergency procedures manuals
conditions of service, legislation and
industrial agreements including workplace
agreements and awards

Applicable regulations and legislation 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
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

B - Equipment Checking&Maintenance