



Australian Government

Department of Education, Employment and Workplace Relations

FPIHAR3216A Conduct forestry operations using crawler tractor

Release: 2

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Modification History

Revision 2

Updated formatting of Performance Criteria 2.7. No content change.

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to conduct forestry operations using crawler tractor including planning and preparation for work, conducting operational checks, the safe and effective operation of the crawler for a range of mandatory tasks, use of attachments and operator maintenance activities

Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

This unit replaces FPIHAR3203B Conduct crawler operations

Application of the Unit

Application of the unit

The unit involves conducting forestry operations using crawler tractor in a forest environment

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for <i>crawler</i> operation	1.1. Applicable <i>Occupational Health and Safety</i> (OHS), <i>environmental, legislative</i> and <i>organisational requirements</i> relevant to conducting <i>forestry operations using crawler tractor</i> are identified and followed 1.2. Site <i>environmental protection measures</i> are adhered to in line with relevant legislation and regulations 1.3. <i>Work order</i> is reviewed and checked with <i>appropriate personnel</i> 1.4. Type and quantity of material to be moved with a crawler is assessed and prepared 1.5. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations 1.6. Crawler operations are planned in line with site procedures and site <i>environmental and heritage concerns</i> 1.7. <i>Communication</i> with others is established and maintained in line with OHS requirements
2. Operate crawler	2.1. All work is conducted in line with work order, environmental and OHS requirements 2.2. Equipment <i>pre start-up checks</i> are carried out in line with manufacturer's recommendations and site requirements 2.3. Crawler controls and functions, including implements or other attachments, brakes and manoeuvrability are checked for serviceability and any faults are rectified or reported 2.4. Site <i>hazards</i> associated with crawler operations are detected and safe operating techniques are used to minimise risk 2.5. Operating techniques for the crawler are applied to achieve optimum efficiency in line with manufacturer's design specifications 2.6. Crawler is operated to work instructions in line with site operating procedures 2.7. <i>Emergency plan</i> procedures are followed in line with OHS, environmental, legal and site requirements
3. Carry out machine	3.1. Crawler is safely parked, shut-down and prepared

ELEMENT	PERFORMANCE CRITERIA
operator maintenance	for maintenance in line with manufacturer's manual and organisational requirements 3.2. Visual inspection and fault finding processes are conducted in line with manufacturer's recommendations and organisational requirements 3.3. Defective parts are removed and replaced safely and effectively in line with manufacturer's manual and organisational requirements 3.4. Regular programmed maintenance tasks are carried out in line with manufacturer's and organisational requirements 3.5. Work area is cleared and waste materials are disposed of or recycled in line with site environmental management plan 3.6. Plant, tools and equipment are cleaned, checked, maintained and stored in line with manufacturer's recommendations and standard work practices 3.7. Crawler operational records and reports are completed accurately and processed in line with site procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment and efficiently and safely conduct forestry operations using crawler tractor
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately record and report workplace information, and maintain documentation
- Numeracy skills sufficient to estimate, measure and calculate time required to complete a task
- Problem solving skills sufficient to identify problems and equipment faults and demonstrate appropriate response procedures

Required knowledge

REQUIRED SKILLS AND KNOWLEDGE

- Applicable Commonwealth, State or Territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for conducting forestry operations using crawler tractor
- Environmental protection requirements, including the safe disposal of waste material and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for conducting forestry operations using crawler tractor
- Crawler operation techniques and capabilities
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their safe use and maintenance including equipment safety requirements
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace records and information

Evidence Guide

EVIDENCE GUIDE

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

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently conduct forestry operations using crawler tractor in line with organisational requirements

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 of this unit and include demonstration of:

- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to conducting forestry operations using crawler tractor
- following organisational policies and procedures relevant to conducting forestry operations using crawler tractor
- communicating effectively and working safely with others in the work area
- conducting crawler operations in line with site requirements

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and

EVIDENCE GUIDE

accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

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. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Crawler

is a self-propelled tracked or wheeled purpose designed machine with an attachment mounted at

RANGE STATEMENT

the front end

OHS requirements:

are to be in with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying

Environmental requirements may include:

- legislation
- organisational policies and procedures
- workplace practices

Legislative requirements:

are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care
- heritage and traditional land owner issues

Organisational requirements may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance

RANGE STATEMENT

- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use and maintenance and storage requirements
- environmental management requirements (waste disposal, recycling and re-use guidelines)

Environmental protection measures

may include action to limit the impact to:

- ground growth and canopy
- soil and water

may include action to limit the impact of:

- general forest lean
- wind speed and direction
- fallen trees
- density of trees
- ground slope
- ground hazards
- obstacles

Work order is to include:

- instructions for the operation of a crawler and its respective tasks

and may include:

- instructions for the environmental monitoring of work and procedures
- environmental care requirements relevant to the work

Appropriate personnel may include:

- supervisors
- suppliers
- clients
- colleagues
- managers

Equipment is to include:

- crawlers and relevant maintenance equipment
- procedures for equipment lock-out such as protecting operators and co-workers from accidental injury by isolating the machine

Environmental and heritage

- dust

RANGE STATEMENT**concerns** may include:

- noise
- water
- flora and fauna
- heritage legislation
- culturally sensitive sites and artefacts
- plantations
- native forest

Communication may include:

- verbal and non-verbal language
- hand or other agreed signals
- eye contact with other operators or personnel
- active listening
- questioning to clarify and confirm understanding
- use of electronic communication devices

Pre start-up checks

are conducted to:

- ensure the equipment has been set-up correctly
- plant operating to optimum performance

Hazards may include:

- uneven/unstable terrain
- trees
- fires
- overhead and underground services
- bridges
- buildings
- excavations
- traffic
- embankment
- cuttings
- structures and hazardous materials

Emergency plan may include:

- notification of authorities
- evacuation procedures
- isolation procedures
- equipment shut-down procedures
- clean up
- first aid
- use of personal protective equipment and clothing
- guarding
- access and exit

Tasks may include:

- tree removal

RANGE STATEMENT

- stripping
- spreading materials
- stockpiling
- bulk excavation
- land clearing
- track rolling
- ripping
- push loading
- scrapers
- grapple operations for logging
- towing equipment
- working in tandem
- winching
- boxing
- constructing fire breaks
- end of shift documentation
- work log

Records and reports may include:

and may be:

- manual
- using a computer-based system or another appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field Harvesting and Haulage