



Australian Government

Department of Education, Employment and Workplace Relations

SIFTVM003A Operate a backhoe, front-end loader or excavator

Revision Number: 1

SIFTVM003A Operate a backhoe, front-end loader or excavator

Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This unit describes the performance outcomes, skills and knowledge required to operate a backhoe or front-end loader safely to excavate, level and spread soil, remove and fit relevant attachments and carry out machinery maintenance.

Application of the Unit

Application of the unit

This unit applies to cemetery and crematorium staff involved in burial works activities.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units

- SIFOHS007A
Identify hazards and assess risks in a cemetery or crematorium

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. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or 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 work.	<p>1.1 Evaluate <i>work activity</i> and determine most productive operating techniques.</p> <p>1.2 Obtain permits and licences where required according to <i>workplace policies and procedures</i>, and <i>relevant legislation</i>.</p> <p>1.3 Adjust, change and inflate tracks or tyres according to manufacturer instructions and site conditions.</p> <p>1.4 Carry out start-up park, shut-down and communications procedures according to manufacturer instructions and site-specific requirements.</p> <p>1.5 Check <i>backhoe or loader controls and functions</i> and report faults according to workplace policies and procedures.</p>
2 Read and interpret site drawings and plans.	<p>2.1 Devise work schedules and methods consistent with job requirements.</p> <p>2.2 Interpret information written on survey pegs and establish depth and grade to site plans.</p> <p>2.3 Identify, verify and mark location of services according to</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>plans and drawings.</p> <p>2.4 Identify <i>features</i> from site drawings or plans.</p> <p>2.5 Identify and clarify levels on survey pegs according to workplace policies and procedures.</p>
3 Operate backhoe, front-end loader or excavator.	<p>3.1 Drive machine according to traffic regulations, OHS procedures, site plans and <i>operating conditions</i>.</p> <p>3.2 Select appropriate machines and fit appropriate attachments according to job requirements, soil and rock types, and <i>soil conditions</i>.</p> <p>3.3 Maintain safe grip and productivity according to operating conditions.</p> <p>3.4 Strip topsoil according to job specifications.</p> <p>3.5 Carry out excavation boxing according to job specifications.</p> <p>3.6 Carry out excavations around existing underground services according to job specifications.</p> <p>3.7 Mix <i>materials</i> according to job specifications.</p> <p>3.8 Carry out backfilling, levelling, spreading and landfilling or landscaping according to job specifications and tolerances.</p>
4 Attach, secure, lift, carry and place materials.	<p>4.1 Establish weight of load and select and attach appropriate slings and gear.</p> <p>4.2 Secure and check slings and attachments.</p> <p>4.3 Carry out slinging, lifting, carrying and placing of materials according to job specifications, relevant legislation and manufacturer instructions.</p> <p>4.4 Handle loads safely and identify and avoid <i>on-site hazards</i>.</p> <p>4.5 Observe <i>communication protocols</i> to ensure safety of operator and other personnel according to workplace policies and procedures.</p> <p>4.6 Position machine according to type of haul vehicle and job specifications.</p> <p>4.7 Load trucks and wagons according to job specifications and workplace policies and procedures.</p>

ELEMENT	PERFORMANCE CRITERIA
5 Maintain backhoe, front-end loader or excavator.	<ul style="list-style-type: none">5.1 Carry out routine operational servicing, lubrication and housekeeping tasks according to manufacturer instructions and workplace policies and procedures.5.2 Carry out minor maintenance according to manufacturer instructions and workplace policies and procedures.5.3 Remove and replace worn or defective parts according to manufacturer instructions and workplace policies and procedures.5.4 Provide support for major vehicle maintenance tasks according to workplace policies and procedures.5.5 Record maintenance work according to workplace policies and procedures.5.6 Clean and store machine attachments according to manufacturer instructions and workplace policies and procedures.
6 Shut down and clean up.	<ul style="list-style-type: none">6.1 Clean, maintain and store tools and equipment according to manufacturer instructions and workplace policies and procedures.6.2 Dispose of waste material according to relevant legislation and workplace policies and procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills, including clear and direct communication and active listening and questioning techniques, to identify, confirm and conduct all work requirements
- problem-solving skills to identify and address on-site hazards
- literacy and numeracy skills to read and interpret plans and site drawings, complete maintenance reports and calculate load requirements
- organisational skills to determine and assemble appropriate tools, equipment and machine attachments.

Required knowledge

- manufacturer instructions for machine operation and maintenance
- broad working knowledge of relevant federal, state or territory, and local government legislation and regulations relating to OHS and required permits and licences for operating excavation machinery
- workplace policies and procedures relevant to safe and efficient operations
- local soil types and conditions and their relevance to machine operations.

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.

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

Evidence of the following is essential:

- ability to safely operate and maintain a backhoe, front-end loader or excavator inclusive of all attachments, tools and equipment
- knowledge of relevant legislation, workplace policies and procedures for the safe operation of all tools, equipment and machinery

EVIDENCE GUIDE

- operating a backhoe, front-end loader or excavator on multiple occasions to ensure consistency of performance and ability to respond to different situations.

Context of and specific resources for assessment

Assessment must ensure:

- demonstration of skills in a facility where a backhoe, front-end loader or excavator can be operated safely
- access to relevant documentation, such as site plans
- access to a backhoe, front-end loader or excavator and attachments.

Methods of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of candidate preparing, operating and maintaining a backhoe, front-end loader or excavator for a range of different job specifications
- review of completed maintenance schedules for backhoe, front-end loader or excavator
- written or verbal questioning to assess knowledge and understanding of workplace policies and procedures, and relevant legislation
- review of portfolios of evidence and third-party workplace reports of on-the-job performance by the candidate.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- SIFBCR023A Dig a grave using machinery.

Employability skills embedded in this unit should be assessed holistically with other relevant units that make up the skill set or qualification and in the context of the job 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.

Work activity may include:

- loading dump trucks, wagons, hoppers, grizzlies and chutes
- stockpiling
- mixing materials
- stripping and spreading topsoil
- laser levelling
- backfilling
- excavating trenches
- lifting materials
- laying pipes.

Workplace policies and procedures may include:

- standard operating policies and procedures
- standards and certification requirements
- quality assurance procedures
- maintenance and reporting schedules
- communication procedures
- OHS procedures
- waste disposal
- emergency procedures, including fire and accident procedures.

RANGE STATEMENT

Relevant legislation and regulations may include:

- OHS
- workers' compensation
- cemetery Acts and by-laws
- Public Safety Acts
- Crematorium Acts
- local government regulations
- Lands Act
- Public Health Act
- Environment Protection Act
- Australian standards
- Worksafe Australia certification and standards
- licensing requirements.

Backhoe or loader controls and functions may include:

- bucket
- brakes
- manoeuvrability
- serviceability.

Features may include:

- structures
- designated parking areas
- haul roads
- unstable ground.

Operating conditions may include:

- day and night visibility
- prevailing winds
- dust
- rain.

Soil conditions may include:

- soil types
- rock types
- soil compaction
- moisture content.

RANGE STATEMENT

Materials may include:

- clay
- silt
- stone
- gravel
- mud
- sand
- topsoil
- concrete
- bituminous mixes
- steel, plastic or concrete pipes.

On-site hazards may include:

- uneven or unstable terrain
- trees
- overhead service lines
- bridges
- surrounding buildings
- obstructions
- structures
- facilities
- dangerous materials
- recently filled trenches
- unauthorised movement.

Communication protocols may include:

- two-way radios
- reporting defects either verbally or in writing
- hand signals
- site-specific instructions
- mobile phones.

Unit Sector(s)

Sector

Funeral Services

Competency field

Competency field

Tools, Vehicles and Machinery