

	Unit ID: 819
Domain	ROAD CONSTRUCTION AND MAINTENANCE – MACHINE OPERATIONS
Title:	Carry out road construction and maintenance activities using a mowing tractor
Level: 2	Credits: 10

Purpose

This unit standard is intended for those who work in road construction and maintenance operations. People holding credit for this unit standard are able to: Plan and prepare for work; demonstrate knowledge of the functions of the mowing tractor; start and shut down the tractor; inspect area to be mowed and execute remedial action; mow in a cost effective and safe manner; complete work related documents; and clean up after work.

Being credited with this unit standard does not enable a person to drive the vehicle on an open, public road. In order to do so, a person must be in possession of a valid and current driving licence relevant to this vehicle type.

Special Notes

1. Entry information:

Prerequisite

- Unit 712 - *Comply with health, safety and environmental rules and regulations in road construction and maintenance work operations.*

2. Quality in this unit standard means adherence to contract requirements and workplace instructions.
3. Evidence is required for a boom or rotary slasher.
4. The credit allocated for this unit standard assumes that the candidate has the required drivers licence.
5. Expected worksite production target are to be met.
6. Assessment evidence may be collected from a real workplace, a simulated workplace or an appropriately simulated environment in which road construction and maintenance operations are carried out.
7. Equipment, tools, attachments and materials include but are not limited to a mowing tractor fitted with a boom or rotary slasher accessory, accessory tools, diesel and specified oil and lubricants.
8. Maintenance includes cleaning, authorised servicing and the monitoring, recording and reporting of faults. It may also include the conduct of authorised minor replacements and the provision of assistance to maintenance and repair activities.

9. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures and compliance with workplace procedures.
10. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.
11. Regulations and legislation relevant to this unit standard include but are not limited to the following:
 - Labour Act, No. 11 of 2007 as amended
 - Occupational Health and Safety Regulations No. 18, 1997
 - Road Traffic and Transport Regulations No. 52, 1999 and Government Notice No 53 Road Traffic and Transport Regulations
 - Road Ordinance 1972 and other relevant legislations and all subsequent amendments.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na.

Elements and Performance Criteria

Element 1: Plan and prepare for work

Performance Criteria

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, explained, clarified and applied to the allocated task.
- 1.2 Safety requirements, including personal protective clothing and equipment are obtained from the site safety plan, workplace policies and procedures, and applied to the allocated task.
- 1.3 Traffic control requirements are obtained and implemented according to workplace requirements.
- 1.4 Plant, tools, fuel, lubricants, equipment, attachments and accessories selected to carry out tasks are checked for consistency with the requirements of the job, their usability and any faults rectified or reported prior to commencement of work.
- 1.5 Environmental protection requirements are identified from the project environmental management plan and applied to the allocated task.

Element 2: Demonstrate knowledge of the functions of the mowing tractor

Performance Criteria

- 2.1 The main applications of mowing tractor are explained.
- 2.2 The operation of the major components is explained in terms of their functions.
- 2.3 Safety features and warning devices on the mowing tractor are identified, and their purposes explained in accordance with manufacturers' specifications.
- 2.4 The maximum operating capacities are explained in terms of the specific mowing tractor capabilities.
- 2.5 Warnings from mowing tractor indicators and gauges are explained according to manufacturers' specifications.
- 2.6 The functioning of the flashing light on the mower tractor is verified during travelling and operation is checked.
- 2.7 Corrective actions are described or demonstrated in terms of responses to warnings received.

Element 3: Start and shut down the tractor

Performance Criteria

- 3.1 Pre-operational checks are carried out according to manufacturers' and company requirements.
- 3.2 Checklists are completed according to worksite procedures and corrective action is taken, if required, to ensure compliance with manufacturers' specifications.
- 3.3 Start-up and shutdown procedures are followed according to manufacturers' specifications.
- 3.4 Mowing tractor is parked according to manufacturers' and company requirements.

Element 4: Inspect area to be mowed and execute remedial action

Performance Criteria

- 4.1 Hazards are identified.
- 4.2 Hazards are removed to ensure safety during mowing.

Element 5: Mow in a cost effective and safe manner

Performance Criteria

- 5.1 Programme of work is obtained and confirmed in line with workplace procedures.

- 5.2 Quality control of work is carried out to ensure work complies with project specification.
- 5.3 Productivity control is carried out to ensure compliance to targets.
- 5.4 Deficiencies are identified in terms of meeting program.
- 5.5 Remedial action recommended to supervisor.
- 5.6 Mower and mowing accessory are used in accordance with manufacturers' specifications.
- 5.7 Mower and mowing accessory inspection and maintenance are carried out in accordance with manufacturers' specifications.
- 5.8 Work is measured and recorded as far as production output is concern as per company procedure.

Element 6: Complete work related documents

Performance Criteria

- 6.1 Work related documents are completed in accordance with contract and workplace requirements.
- 6.2 Maintenance and service related documents are completed in accordance with manufacturer and workplace requirements.
- 6.3 Documents related to accidents or other incidents are completed in accordance with workplace requirements.

Element 7: Clean up after work

Performance Criteria

- 7.1 Adjacent areas are cleared and materials disposed of or recycled in accordance with project environment management plan.
- 7.2 Tools and equipments are cleaned, checked, maintained, serviced and stored in accordance with manufacturers' recommendations and standard work practices.
- 7.3 Unused materials are safely stored and stacked for future use.

Registration Data

Subfield:	Road Construction and Maintenance
Date first registered:	
Date this version registered:	
Anticipated review:	
Body responsible for review:	Namibia Training Authority