

	Unit ID: 1041
Domain	ROAD CONSTRUCTION AND MAINTENANCE – MACHINE OPERATIONS
Title:	Carry out road marking operations using a mechanical road painting machine
Level: 3	Credits: 16

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; carry out operator checks and maintenance; carry out road marking operations; prepare mechanical road painting machine for transport to and from site; and clean up work area.

Being credited with this unit standard does not enable a person to drive a self-propelled 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. Expected worksite production target are to be met.

4. 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.

5. *'Mechanical road painting machine'* refers to hand-pushed machines and self-propelled, ride on plants.

6. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures, and compliance with emergency procedures.

7. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.

8. Regulations and legislation relevant to this unit standard include but are not limited to the following:

- Labour Act, No. 11 of 2007
- 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.
- 1.5 Material quantities to carry out the tasks are calculated and procured.
- 1.6 Environmental protection requirements are identified from the project environmental management plan and applied to the allocated task.

Element 2: Carry out operator checks and maintenance

Performance Criteria

- 2.1 Fuel, oil, hydraulic fluid filters and water levels are checked and adjusted according to manufacturer's specifications.
- 2.2 Bolts, nuts and attachment couplings are tightened and maintained to manufacturer's specifications.
- 2.3 Functions of controls and gauges are checked and adjusted where necessary in accordance with manufacturer's specifications.

- 2.4 Standard start up and shut down procedures are conducted in accordance with the operators' manual.
- 2.5 Periodic maintenance is carried out according to operators' manual.
- 2.6 Road painting machine and equipment are safely located when not in immediate use.

Element 3: Carry out road marking operations

Performance Criteria

- 3.1 Site hazards are identified for use of mechanical road painting machine.
- 3.2 Set out control points are identified and confirmed according to workplace procedures.
- 3.3 Lines are configured to specifications.
- 3.4 New lines are applied to the new or resurfaced area providing an even coverage according to workplace procedures and job requirements.
- 3.5 New lines are superimposed over old lines on existing surfaces providing an even coverage according to workplace procedures and job requirements.
- 3.6 Line cut on/cut off device is operated according to the job specification.
- 3.7 Completed work is assessed to comply with job specification, recorded and reported.

Element 4: Prepare mechanical road painting machine for transport to and from site

Performance criteria

- 4.1 Methods of loading a road painting machine for transport are demonstrated according to safety requirements, manufacturer's specifications and transport configuration.
- 4.2 Methods for securing a road painting machine for transport are demonstrated in relation to lashing points and safety requirements.

Element 5: Clean up work area

Performance Criteria

- 5.1 Work area is cleared and materials disposed of or recycled in accordance with project environmental management plan.
- 5.2 Surplus fuel, lubricants, paints and beads are returned to storage according to workplace procedures.

- 5.3 Plant, tools and equipment are cleaned, checked, maintained and stored according to manufacturers' recommendations and workplace procedures.

Registration Data

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