Unit ID: 1026

Domain ROAD CONSTRUCTION AND

MAINTENANCE – MACHINE OPERATIONS

Title: Start, relocate and shut down an

excavator

Level: 3 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 an excavator; start and shut down excavator; operate excavator; and prepare excavator for transport to and from site.

Being credited with this unit standard does not enable a person to drive the vehicle on an open, public road. This unit standard assumes that the person gaining credit has done so in a controlled environment associated with a road construction and maintenance work site. Obtaining credits for this unit standard does not mean that the person has demonstrated all the knowledge and skills required by the relevant Namibian driving license. However, holding a valid and current driving licence relevant to this vehicle type could be useful evidence of ability to drive such a vehicle to be presented to an assessor in a Recognition of Prior Learning situation.

Being credited with this unit standard does not indicate that the person is able to carry out specific road construction and maintenance activities using the vehicle. Such abilities are covered by other unit standards in this Domain. However, knowledge of and use of the various controls on the vehicle are required in order to shift the vehicle around for maintenance, relocation, or storage purpose and/or to load a vehicle onto a low-bed transporter (or similar vehicle) for transport to another site.

## **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. Expected worksite production target are to be met.
- 3. Equipment, tools and materials may include but are not limited to machine attachments, personal protective equipment, safety signs diesel and specified oil and lubricants, and accessory tools.
- 4. Maintenance may include but is not limited to 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.
- 5. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures, and compliance with emergency procedures.

- 6. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.
- 7. Regulations and legislation relevant to this unit standard may include but are not limited to the following:
  - Labour Act, No. 11 of 2007
  - Occupational Health and Safety Regulations No. 18, 1997 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 on <a href="https://www.nta.com.na">www.nta.com.na</a>.

# **Elements and Performance Criteria**

## Element 1: Plan and prepare for work

## Performance Criteria

- 1.1 Work instructions 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 and workplace policies and procedures, and applied to the allocated task.
- 1.3 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.

### Element 2: Demonstrate knowledge of the functions of an excavator

# Performance Criteria

- 2.1 The main functions of excavators are explained in terms of road construction and maintenance processes.
- 2.2 The operation of all major components is explained in terms of their functions.
- 2.3 Safety features and warning devices on the excavator are identified, and their purposes explained in accordance with manufacturers' specifications.
- 2.4 The maximum operating capacities and efficiencies are explained in terms of the specific excavator capabilities in accordance with manufacturers' specifications.

- 2.5 Warnings from excavator indicators and gauges are explained according to manufacturers' specifications.
- 2.6 Corrective actions are described or demonstrated in terms of responses to warnings received.

# **Element 3: Start and shut down excavator**

#### **Performance Criteria**

- 3.1 Pre-operational checks are carried out according to appropriate checklist and workplace procedures.
- 3.2 Daily and weekly operator maintenance is performed according to appropriate checklist and workplace procedures.
- 3.3 Start-up and shutdown procedures are followed according to manufacturer's specifications.
- 3.4 Excavator hours are recorded, if required, in accordance with workplace requirements.
- 3.5 Excavator maintenance and faults are reported in accordance with workplace requirements.

# Element 4: Operate excavator

#### **Performance Criteria**

- 4.1 Functions of the various controls are demonstrated in accordance with manufacturer's specifications.
- 4.2 Temporary safety signs are explained in relation to their use and placement and are used as required.
- 4.3 The excavator is relocated without endangering people, other vehicles and/or buildings or facilities.
- 4.4 Excavator performance is monitored and corrective action is taken when necessary, in accordance with manufacturer's specifications.

### **Element 5: Prepare excavator for transport to and from site**

#### Performance criteria

- 5.1 Methods of loading an excavator for transport are demonstrated according to safety requirements, manufacturer's specifications and transport configuration.
- 5.2 Methods for securing an excavator for transport are demonstrated in relation to lashing points and safety requirements.

# **Registration Data**

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