

	<b>Unit ID: 1043</b>
<b>Domain</b>	<b>ROAD CONSTRUCTION AND MAINTENANCE - CORE</b>
<b>Title:</b>	<b>Extinguish fire by means of basic fire fighting equipment</b>
<b>Level: 1</b>	<b>Credits: 4</b>

### Purpose

This unit standard has been developed in close collaboration with the City Police and Emergency Management Department of the City of Windhoek and other Fire Brigades in Namibia. It is intended for those engaged in paid employment, other forms of work and/or vocational education and training, hence not limited to Road Construction and Maintenance only. People holding credit for this unit standard are able to: Demonstrate basic knowledge of fire prevention procedures; use a portable fire extinguisher, a fire hose reel or a fire blanket to extinguish a simulated fire.

### Special Notes

1. Assessment evidence may be collected from a real workplace, a simulated workplace or an appropriately simulated environment.
2. *'Simulated fire'* refers to a pretend make believe fire and/or a small, controlled fire in a controlled environment.
3. Glossary of terms:
  - *'OHS'* means Occupational Health and Safety
  - *'CO<sub>2</sub>'* refers to Carbon Dioxide
  - *'DCP'* means Dry Chemical Powder
  - *'Fire Tetrahedron'* refers to the four factors necessary for fire
  - *'Relevant OHS standards'* may include but are not limited to working safely around electrical wiring, cables and overhead powerlines, working safely around tools and equipment, working safely on ladders and raised platforms, risk and hazard recognition, risk identification at the workplace and emergency procedures, awareness of electrical hazards, following confined spaces procedures, first aid, utilising personal protective equipment including safety glasses and goggles, safety boots or shoes, hard hat, ear muffs or plugs, assessing the work site for hazards and risks prior to preparing the work site for the work procedure, displaying signs and/or utilising barriers in the work area.
4. Regulations and legislation relevant to this unit standard may include but are not limited to the following:
  - Local Authorities Fire Brigade Services Act, No. 5 of 2006, Section 20 1(c)
  - Community Protections against fire – SANS Code: 10090
  - National Fire Protection Association (NFPA) requirements
  - Ministry of Health & Social Services requirements
  - Ministry of Labour & Social Welfare requirements
  - Ministry of Trade and Industry requirements
  - International Safety Organisation requirements
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](http://www.nta.com.na).

## **Elements and Performance Criteria**

### **Element 1: Demonstrate knowledge of basic fire prevention procedures**

#### **Range**

General workplace requirements may include but are not limited to free access to fire fighting equipment; and means to avoid fire spreading by conduction, convection, radiation and direct burning.

#### **Performance Criteria**

- 1.1 The prevention of fire in relation to general workplace requirements is interpreted.
- 1.2 Relevant OHS standards are interpreted and applied in accordance with workplace specific requirements.
- 1.3 The theory of fire including the *Fire Tetrahedron* is described.

### **Element 2: Use a portable fire extinguisher to extinguish a simulated fire**

#### **Range**

Fire types may include but are not limited to ordinary combustibles; flammable and combustible liquids; flammable gases; energised electrical equipment; combustible metals; and cooking oils and fats.

Appropriate fire extinguishers may include but are not limited to water; foam; DCP; and CO<sub>2</sub>.

#### **Performance Criteria**

- 2.1 The type of fire encountered is classified.
- 2.2 Appropriate fire extinguisher to combat the fire is identified and selected.
- 2.3 The safe use of the fire extinguisher and applied procedures for extinguishing the fire are demonstrated according to manufacturers' instructions, and in accordance with relevant OHS standards, workplace policies and procedures.
- 2.4 Periodic checks on fire extinguishers within the scope of responsibility are demonstrated in accordance with manufacturers' instructions, relevant OHS standards, workplace policies and procedures.

### **Element 3: Use a fire hose reel to extinguish a simulated fire**

#### **Range**

Assessment evidence for the use of any one (1) fire hose reel type is required.

Fire hose reel types may be wall mounted, swing-hinged and vehicle-mounted.

#### **Performance Criteria**

- 3.1 The safe use of the fire hose reel and applied procedures for extinguishing the fire are demonstrated according to manufacturers' instructions, and in accordance with relevant OHS standards, workplace policies and procedures.
- 3.2 Water is turned off in the approved sequence and the hose reel checked for leaks.
- 3.3 Hose reel is correctly rewound after use.
- 3.4 Periodic checks on fire hose reels within the scope of responsibility are demonstrated in accordance with manufacturers' instructions, relevant OHS standards, workplace policies and procedures.

### **Element 4: Use a fire blanket to extinguish a simulated fire**

#### **Performance Criteria**

- 4.1 The effect of using a fire blanket is described in terms of the components of the *Fire Tetrahedron*.
- 4.2 The safe use of the fire blanket and applied procedures for extinguishing the fire are demonstrated according to manufacturers' instructions, and in accordance with relevant OHS standards, workplace policies and procedures.

### **Registration Data**

<b>Subfield:</b>	Road Construction and Maintenance
<b>Date first registered:</b>	
<b>Date this version registered:</b>	
<b>Anticipated review:</b>	2015
<b>Body responsible for review:</b>	Namibia Training Authority