## Demonstrate knowledge of, and provide support at, urban search and rescue operations

level: 3

credit: 3

planned review date: March 2006

sub-field: Specialist Rescue

**purpose:** This unit standard is for people involved in a support role at

urban structural collapse incidents.

People credited with this unit standard are able to demonstrate knowledge of: urban search and rescue response structures, and safety and incident management;

hazards associated with urban search and rescue

operations; building construction methods and associated structural collapse patterns; and apply surface search and rescue techniques at urban search and rescue incidents.

**entry information:** Open.

**accreditation option:** Evaluation of documentation and visit by NZQA and industry.

moderation option: A national moderation system of moderation networks has

been established by the Fire and Rescue Services Industry

Training Organisation.

special notes:

1 Assessment of this unit standard may be conducted in

a risk-managed simulated urban search and rescue

incident.

2 Performance criteria of the elements in this unit

standard must comply with the Ministry of Civil Defence & Emergency Management USAR Awareness Student Manual and USAR General Rescue Student Manual. Copies of the above resources are available from:

Ministry of Civil Defence & Emergency Management

PO Box 5010 Wellington;

or from http://www.usar.govt.nz - go USAR Training and

then to USAR Training Resources.

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- Assessment sites may include: sea cliff area, rocky bush land, concrete recycling yard, quarries, tip areas, rubble piles, demolition areas, building sites.
- The legislation relevant to this unit standard comprises of the following: Civil Defence Emergency Management Act 2002, Fire Service Act 1975, Police Act 1958, Health and Safety in Employment Act 1992, and their subsequent amendments or replacements.

### **Elements and Performance Criteria**

#### element 1

Demonstrate knowledge of urban search and rescue response structures, and safety and incident management.

#### performance criteria

1.1 Urban search and rescue training roles are defined in terms of functions and responsibilities.

Range: awareness, responder, technician, manager.

1.2 Specialist resources are explained in terms of their type, role, and application.

Range: heavy, medium, rescue, support, medical, communications,

shoring, animals, services.

1.3 The minimum equipment requirements of personal protection for responding personnel are described.

Range: helmet, whistle, full length heavy duty clothing, headlamp, hand

torch, safety goggles, dust mask, gloves, first aid kit, knife or utility

scissors, safety boots, ear plugs, knee pads, elbow pads.

1.4 Personal health and hygiene issues and management strategies are identified.

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Range: dehydration, fatigue, body substance isolation, stress,

claustrophobia, anxiety, panic.

1.5 Initial action strategies and incident command systems are explained.

1.6 Logistical and planning considerations are explained.

#### element 2

Demonstrate knowledge of hazards associated with urban search and rescue operations.

#### performance criteria

2.1 Situational and environmental hazards and respective hazard management techniques are identified.

Range: structural instability, below-debris hazards, surface hazards,

overhead hazards, hazardous materials, utilities.

2.2 Safe working practices used in urban search and rescue activities are identified.

Range: personal, planning, general.

#### element 3

Demonstrate knowledge of building construction methods, and associated structural collapse patterns.

### performance criteria

3.1 Methods of building construction, and associated hazards when collapsed, are described.

Range: light timber, reinforced masonry, unreinforced masonry, concrete

tilt up, reinforced concrete and steel.

3.2 Structural collapse patterns and potential victim locations are identified.

Range: curtain fall wall, inward or outward, lean over, lean to floor, angle

wall, 'V' collapse pattern.

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3.3 Indicators of secondary structural collapse are identified.

Range: movement in structure, visual indicators, audible indicators.

#### element 4

Demonstrate knowledge of, and apply surface search and rescue techniques at urban search and rescue incidents.

#### performance criteria

4.1 Knowledge of structural collapse response plan is demonstrated.

Range: reconnaissance, elimination of utilities, primary surface search and

rescue, exploration of voids, access by selected debris removal,

terminate by general debris removal.

4.2 Search activities are planned systematically to cover all of the search area.

Range: sectoring search areas, geographical identification.

4.3 International marking systems are interpreted and applied.

Range: search assessment, victim marking.

4.4 Urban search and rescue techniques are practically and safely demonstrated.

Range: line and hail search, rubble crawl, stretcher walk, terminology,

personal protective equipment, silence, team communication,

signals, debris removal, international warning signals.

#### Comments on this unit standard

Please contact the Fire and Rescue Services Industry Training Organisation info@frsito.org.nz if you wish to suggest changes to the content of this unit standard.

#### **Please Note**

## Demonstrate knowledge of, and provide support at, urban search and rescue operations

Providers must be accredited by the Qualifications Authority or a delegated interinstitutional body before they can register credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for providers wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

This unit standard is covered by AMAP 0039 which can be accessed at http://www.nzqa.govt.nz/site/framework/search.html.