

LANTw74 - SQA Unit Code H2NB 04

Assist with forest and moorland fire fighting



Overview

This standard is about assisting with forest and moorland fire fighting. It is aimed at those who work in forestry, farming, game or environmental conservation on either a full-time or part-time basis

You will be able to carry out the following activities:

- use fire fighting tools in an appropriate and competent manner
- follow organisational fire procedures
- operate safely on the fireground
- support others operating on the fireground
- react appropriately, within company working practices and industry good practice, to a fire incident

Performance criteria

You must be able to:

- P1 maintain the health and safety of yourself and others at all times in accordance with current relevant legislation
- P2 assess the risks associated with the work
- P3 identify hazards likely to be found on the fireground
- P4 identify own role and organisations role within fire procedures
- P5 prepare, maintain and use tools and equipment for fire fighting
- P6 prepare, check condition of, and use appropriate personal protective equipment
- P7 confirm your objectives with the relevant person and provide them with timely reports
- P8 assess fire situation on arrival at fireground, and communicate key fire information to an appropriate person
- P9 extinguish fires within your remit using appropriate tactics, tools and equipment
- P10 **continuously assess**, report and take appropriate action to minimise risk to yourself and others
- P11 use appropriate methods to ensure access for fire brigade and other agencies
- P12 maintain effective communications with appropriate people throughout the fire fighting activities
- P13 return and secure resources to their correct location and report any defects or deficiencies

Knowledge and understanding

You need to know and understand:

- K1 how to identify hazards and assess risks
- K2 how to interpret risk assessments
- K3 the personal protective equipment required for forest and moorland fire fighting
- K4 why nylon, elastic or other synthetic clothing must not be worn
- K5 your responsibilities under current environmental, health and safety legislation and codes of practice
- K6 the forest or estate fire plan, fire maps, symbols and other company working practices and industry good practice
- K7 your own role within company working practices and industry good practice in fire fighting
- K8 the role of the fire brigade and how to identify and communicate with the incident commander
- K9 lines and methods of communication and reporting during the fire fighting
- K10 the elements (heat, fuel, oxygen) that are required for fire to exist
- K11 the phases of combustion (pre-heating, gas combustion and charcoal combustion)
- K12 how weather, topography and fuels affect fire behaviour, including rate of spread and fire intensity
- K13 fuel types and loads and the characteristics of grass, heather, forests and peat fires
- K14 the tools used and the limitations of each tool when used on different fire types
- K15 the role of helicopters in fighting forest and moorland fires
- K16 the purpose and value of firebreaks
- K17 the potential impact of forest and moorland fire fighting activities on the environment
- K18 the operations likely to occur in the three phases of forest and moorland fire fighting operations: knockdown, containment, mop up and patrol
- K19 the three main fire fighting strategies: direct, indirect and flanking attack
- K20 how to control the following types of fires including: heather or shrub fire, grass fire, lop and top fire, forest fire

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Scope related to performance criteria

Continuously assess:

- 1 size of fire
- 2 wind direction and speed
- 3 vegetation type/height
- 4 people/assets threatened
- 5 rate of spread at head of fire
- 6 flame height
- 7 escape routes
- 8 water sources
- 9 weather conditions
- 10 for any problems

Glossary

Fire behaviour: the manner in which fire reacts to the variables of fuel, weather and topography described in terms of fire intensity and rate of spread

Fuels: the type, quantity, arrangement, distribution, and moisture content of the vegetation. Can be: ground (peat), surface (heather and litter layer) or aerial (trees) fuels

Fire type: ground fire, surface fire or crown fire, most common type is surface fire

Fire intensity: the pulse or rate of energy release, that travels upwards from the fire

Flank: the sides of the fire

Direct attack: fire fighting activity directly on the fire

Indirect attack: fire fighting activity away from the fire edge, e.g. backburning

Flanking attack: most common direct attack strategy, that starts fire fighting activity from rear of the fire to the sides and front of the fire

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