

Title	Operate light portable pumps in a vegetation fire environment		
Level	2	Credits	2

Purpose	People credited with this unit standard are able to: <ul style="list-style-type: none"> - prepare a pump site; - set up a light portable pump; - operate a light portable pump in a vegetation fire situation; - recommission a light portable pump after use; and - restore a pump site.
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Classification	Fire and Rescue Services > Fire and Rescue Services - Vegetation
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Available grade	Achieved
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Guidance Information

- 1 Compliance with the fire and emergency agency's Health and Safety policy and procedures is mandatory.
- 2 Definition
Fire and emergency agency's requirements refer to policies, procedures and supporting documentation on safety and operations set down by each fire and emergency agency employer or host organisation.
- 3 Assessment against this unit standard must take place under real or simulated conditions.
- 4 Assessment against all outcomes must be in accordance with the fire and emergency agency's requirements.

Outcomes and performance criteria

Outcome 1

Prepare a pump site.

Performance criteria

- 1.1 Pump site is selected.
- 1.2 Pump site are prepared.

Range allows access to water supply, secure working area for pump, water supply is sufficient for the fire situation.

1.3 Techniques to ensure continuity of water supply are demonstrated.

Range vortex, digging or damming stream, portable or improvised dam, blockage of suction inlet.

Outcome 2

Set up a light portable pump.

Performance criteria

2.1 Pump that allows the required volume and pressure of water to be delivered from water source to the required location is selected.

2.2 Equipment and additives are selected in accordance with the requirements of the fire situation.

Range suction strainer, basket, suction hose, hand primer or foot valve, controlled dividing breaching, return hose/bypass, reactionless nozzle, or adapter, hydroblender or foam-making equipment, firefighting hose, nozzles.

2.3 Suction inlet is situated to minimise damage to pump, or restriction to the water flow from inducted material.

Range may include but not limited to – stone, wees, silt, sand.

Outcome 3

Operate a light portable pump in a vegetation fire situation.

Performance criteria

3.1 Pump is primed, started, operated, and shut down in accordance with the manufacturer's specifications.

Range priming – normal and emergency;
start – manual and electrical (where fitted);
fuel type, additive (where required).

3.2 Safe working practices are demonstrated.

Range personal protective equipment (PPE), pump operation, site safety, working around water, carbon monoxide, refuelling operations, water hammer, jet reaction, communication.

3.3 Principles of relay pumping are demonstrated.

Range open and closed relays.

- 3.4 Communication is maintained between the pump operator and relevant personnel.
Range may include – hand signals, radio, runner.
- 3.5 Fuel, oil, additives, and water supplies are monitored to maintain continuous operation in accordance with manufacturer’s specifications.
- 3.6 Fault-finding and resolution of any faults in the pumping operations are demonstrated in accordance with manufacturer’s specifications.

Outcome 4

Recommission a light portable pump after use.

Performance criteria

- 4.1 Pump is prepared for immediate use in accordance with manufacturer’s specifications.
Range drained, cleaned, refuelled, tested.
- 4.2 Documentation is completed.

Outcome 5

Restore a pump site.

Performance criteria

- 5.1 The pump site is restored to ensure minimal environmental damage.
- 5.2 Water supply is restored to original condition.
- 5.3 Any damage to operational equipment is reported.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 February 2005	N/A
Review	2	20 November 2009	N/A
Revision and Rollover	3	30 September 2021	N/A

Consent and Moderation Requirements (CMR) reference	0039
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.