Title	Service special hazards fixed fire protection systems		
Level	4	Credits	11

Purpose	This unit standard is for personnel employed in the fire protection industry and covers the servicing of special hazards fixed fire protection systems.
	People credited with this unit standard are able to: prepare to service special hazards fixed fire protection systems; service special hazards fixed fire protection systems, and thereafter reinstate the systems to operational status; complete documentation after servicing special hazards fixed fire protection systems.

Classification	Mechanical Engineering > Fixed Fire Protection Systems	

Available grade	Achieved
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Guidance Information

1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

Building Act 2004,

Building (Forms) Regulations 2004,

Ministry of Business, Innovation and Employment (MBIE) Acceptable Solutions (AS) and Verification Methods (VM),

MBIE New Zealand Building Code Handbook,

AS 1851:2012, Routine service of fire protection systems and equipment,

AS 4214:2018, Gaseous fire extinguishing systems,

AS 4587:2020, Water mist fire protection systems - System design, installation, and commissioning,

National Fire Protection Association, NFPA 15:2022, Water spray fixed systems for fire protection.

NFPA 16:2019, Installation of foam-water sprinkler and foam-water spray systems,

NFPA 17:2024, Dry chemical extinguishing systems,

NFPA 17A:2021, Wet chemical extinguishing systems,

NFPA 750:2023, Water mist fire protection systems,

NFPA 2001:2022, Clean agent fire extinguishing systems.

2 Definitions

Fixed fire protection system refers to engineered sets of components that work together to detect fires, alert occupants, and extinguish fires, and may include fixed or automatic systems, such as those described by the standards listed in the references, used for controlling or putting out fires.

Plan in this unit standard means the procedures developed to enable the work to be carried out in a logical and safe manner.

Servicing refers to fault finding and repair of special hazards fixed fire protection systems.

Special hazards fixed fire protection systems refer to systems designed and installed to AS 4214:2018, AS 4587:2020, NFPA 15:2022, NFPA 16:2019, NFPA 17:2024, NFPA 17A:2021, NFPA 750:2023, or NFPA 2001:2022 standards. They may include but are not limited to – carbon, inert gas; dry chemical; wet chemical; foam, foam-water, water mist; and explosion suppression types of systems.

Standards refer to AS 4214:2018, AS 4587:2020, NFPA 15:2022, NFPA 16:2019, NFPA 17:2024, NFPA 17A:2021, NFPA 750:2023, or NFPA 2001:2022 standards. Systems documentation refers to the documentation required to be maintained by the relevant special hazards fixed fire protection system standards, including logbook, test reports, equipment details and drawings, specifications, contract agreement, additions and alterations, fire reports, building consents standards, codes of practice, installation instructions, test and commissioning procedures, test and maintenance records.

Workplace procedures refer to the documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, housekeeping standards, charging of time and materials, management of drawings and documentation, procedures to comply with legislative and local body requirements.

3 Assessment information

- All activities must comply with relevant legislative and/or regulatory requirements and recognised codes of practice.
- b. All activities must demonstrate safe working practices.
- c. All activities must be completed and reported within agreed timeframes.
- d. All activities must be done in accordance with applicable plans, relevant standards, systems documentation and workplace procedures.

4 Range

For assessment purposes, competence must be demonstrated on at least three systems.

Outcomes and performance criteria

Outcome 1

Prepare to service special hazards fixed fire protection systems.

Performance criteria

- 1.1 The systems to be serviced are described.
- 1.2 Servicing requirements and procedures for the systems are identified.
- 1.3 Safety requirements for the systems to be serviced are identified and referenced to the systems documentation.

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1.4 Plans for servicing the systems are prepared.

Outcome 2

Service special hazards fixed fire protection systems, and thereafter reinstate the systems to operational status.

Performance criteria

- 2.1 System isolations are completed.
- 2.2 System faults are diagnosed.
- 2.3 Systems are serviced.
- 2.4 Systems are tested and operational integrity is confirmed.
- 2.5 Systems are restored to normal operating condition.
- 2.6 Safety requirements are complied with during inspections.
- 2.7 Premises are cleared of all surplus introduced materials and equipment and left in a clean and tidy condition.

Outcome 3

Complete documentation after servicing special hazards fixed fire protection systems.

Performance criteria

- 3.1 Systems faults and improvements are identified and recorded.
- 3.2 Documentation for servicing are completed, and distributed.
- 3.3 Personnel at site are notified of completion of tests.

Replacement information This unit sta standard 93	ndard replaced unit standard 9373 and unit 74.
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Planned review date	31 December 2029

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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 March 2007	31 December 2017
Review	2	15 October 2015	31 December 2026
Review	3	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference	0013
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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 Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.