MARF011 Manage firefighting and fire prevention activities on board a vessel

Release: 1

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Modification History

Release 1. New unit of competency.

Application

his unit involves the skills and knowledge required to manage firefighting and fire prevention activities on board a vessel.

This unit applies to deck and engine officers who are required by Marine Order 3 to be in charge of firefighting activities on board a vessel.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

F – Operational Quality and Safety

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
1 Manage fire prevention activities	1.1	Hazards including dangerous goods on board a vessel are identified and appropriate action is implemented as determined by industry standard documentation
	1.2	Legislative requirements and current industry standards relating to the maintenance and operation of fire detection, firefighting equipment and systems on board are met and complied with
	1.3	Inductions or other educational activities are organised to ensure awareness of causal factors of on-board fires, prevention methods and standard operating procedures when fire alarms are activated

2	**Plan for fire emergencies**	2.1	Vessel fire control plan is consulted to review and develop appropriate response to any fire
		2.2	Contingencies are anticipated, planned for and practised
		2.3	Evacuations are prepared for and practised according to regulatory requirements
		2.4	Roles/functions of command and firefighting team members, as related to fire prevention and suppression, are established and reviewed according to regulatory and organisational requirements
		2.5	Firefighting training exercises are developed and implemented according to regulatory and organisational requirements
		2.6	Training exercises are prepared, practised and debriefed according to regulatory and organisational requirements, to ensure readiness for any fire emergency
3	**Coordinate tactical firefighting activities in response to a fire emergency**	3.1	Gathering of full and accurate information on the nature and extent of the fire by the command team is overseen
		3.2	Order of priority and sequence of actions appropriate to the requirements of the incident is determined and communicated to the responding crew clearly and accurately
		3.3	Evacuation of personnel, if appropriate, is conducted according to regulatory requirements
		3.4	Search and rescue operations are conducted using established marine firefighting best practice
		3.5	Controlled ventilation techniques are correctly applied during fire suppression and rescue operations
		3.6	Treatment of injured personnel is timely and according to current best casualty management practice
		3.7	Operational tactics are monitored for their effectiveness and adjusted when required to ensure best outcomes
		3.8	Operational tactics are monitored to ensure vessel stability and integrity is maintained
		3.9	All shore-side involvement in an on-board fire emergency is coordinated and monitored effectively

4	**Manage post fire activities**	4.1	Fire watch is coordinated to prevent re-ignition
		4.2	Fire affected area is secured prior to investigation according to regulatory and organisational requirements
		4.3	Equipment is restored to operational condition where applicable
		4.4	Cause of the fire is investigated and determined according to regulatory and organisational requirements
		4.5	Incident reports are completed according to regulatory and organisational requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Hazards must include:	• contents of adjacent spaces
	• dangerous goods
	• electricity and wiring systems
	• flammable or explosive atmospheres
	• oxygen deficiency or enrichment
	• physical obstructions
	• poor visibility
	• restricted access
	• toxic liquids, solids, gases, vapours and dusts

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Fire detection, firefighting equipment and systems include one or more of the following:	• common on board suppression systems • hoses and nozzles • pumps • rescue equipment • self contained breathing apparatus (SCBA) • thermal and smoke detectors
Fire control plan must include:	• applications of the BC Code • applications of the International Maritime Dangerous Goods (IMDG) Code • communication strategy • contingency plans for fires involving hazardous materials • evacuation plan • handling and treatment of injured personnel • hazard control strategies • search and rescue operations • strategies for liaison with shore-based agencies (such as environmental protection agencies, fire services, medical teams, port authorities) • strategies for shipboard firefighting management in port • tactical methods for fighting fires involving hazardous materials • tactical plan of action
Contingencies include one or more of the following:	• change in fire behaviour or extent • equipment failure or unavailability • unexpected personnel involvement
Restored must include:	• after use, maintaining SCBA to industry standards • cleaning • recharging extinguishers according to Australian Standards • re-stowing • servicing

Unit Mapping Information

This is a new unit. This unit is equivalent to MARF4001A Manage firefighting and fire prevention activities on board a vessel.

Links

Companion Volume implementation guides are found in VETNet -
https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2